Development of Mahabharata teaching materials for Hindu character education in SMAN 3 Denpasar

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Abstract. Character education plays a vital role in shaping students' values, yet many existing materials in Hindu Religious Education fail to integrate moral teachings effectively. The Mahabharata, a classical Hindu epic, offers rich narratives that support value-based learning. This study aims to: (1) assess the need for Mahabharata-based teaching materials that incorporate Hindu character values, (2) develop such materials through a structured process, and (3) evaluate their impact on the quality of learning at SMAN 3 Denpasar. Using a Research and Development (R&D) design adapted from Borg and Gall, the study involved needs analysis, expert review, limited and full-scale trials, and product refinement. Instruments were validated for reliability, and data were analyzed using descriptive statistics and t-tests. Findings indicate that the developed materials improved students' engagement and understanding of dharmic values. The study recommends implementation of these modules in classroom practice and suggests broader integration of culturally rooted texts into the national character education curriculum.

Introduction

Strengthening Character Education (*Penguatan Pendidikan Karakter/PPK*) is a national initiative mandated by the Indonesian government to promote integrity, responsibility, empathy, and cooperation among students. This initiative involves collaboration between schools, families, and communities, as part of the National Mental Revolution Movement (GNRM) (Hendarman et al., 2017). *PPK* is implemented in formal education units, including kindergartens, elementary schools, junior high schools, and senior/vocational high schools. Although *PPK* has been implemented, Indonesia continues to face serious challenges related to moral degradation. Sabunga (2015) noted that widespread practices of collusion, corruption, and nepotism among officials and bureaucrats have negatively impacted social order. Among the younger generation, issues such as promiscuity, bullying, body shaming, theft, fighting, and gang violence have become increasingly common. Student brawls, lack of interest in reading and learning, and declining creativity are also prevalent. Suhardita et al. (2024) stated, character education seeks to instill positive values such as integrity, empathy, responsibility, cooperation, and fairness. In this context, the cognitive, affective, and psychomotor development of students becomes essential. According to Sabunga (2015), one impact of these negative trends is a decline in public trust toward national and local leaders.

These dynamics also affect high school students, as reflected in various media reports. In Denpasar, for example, there were 38 cases involving minors in conflict with the law from January to August 2022, many related to acts of violence, including the case of a high school student found dead in a boarding house (Samudero, 2023). Data from the Central Statistics Agency (BPS, 2022) also, show that cases of moral crimes, particularly physical violence, remain high in various provinces. In Bali alone, 461 such cases were reported in 2022. These realities present significant challenges for educators, especially teachers of Hindu Religious and Character Education. Teaching must go beyond academic content and focus on holistic character development. While some efforts have been made to integrate character values into learning, they remain insufficient.

Addressing this gap requires learning materials that not only deliver religious knowledge but also promote reflective moral development. The Mahabharata, a classical Hindu epic, contains rich narratives of dharma (virtue), loyalty, humility, and justice, making it a valuable source for value-based education. However, current textbooks used in Hindu Religious and Character Education lack meaningful integration of these values. The values contained in the Mahabharata epic have strong relevance in the development of character education, particularly in the context of personality formation based on morality and virtue (Muniandy, 2022). The Mahabharata emphasizes the importance of *dharma* (truth and duty) as the foundation of behavior, which is reflected in the character of Yudhishthira with his exemplary attitude of honesty and consistency in the value of truth. The character of Arjuna embodies discipline, responsibility, and the spirit of learning in the face of challenges. In contrast, Bhima exemplifies loyalty, courage, and the control of power for the right goal. On the other hand, the character of Duryodhana provides contrasting lessons about the dangers of greed, envy, and ego domination in social life. Thus, internalizing the values of the Mahabharata in character education can strengthen the dimensions of integrity, discipline, responsibility, and empathy, so that students not only develop intellectually, but also morally and spiritually in facing the dynamics of life.

While recent scholarship has examined the Mahabharata as a literary and ethical reference (Chakraborty et al., 2025; Ni Nengah Ayu Suartini, 2023), few studies have developed and tested its content as structured, curriculum-aligned teaching modules in school settings. This study seeks to fill that gap by designing Mahabharata-based teaching materials aimed at strengthening Hindu character education in SMAN 3 Denpasar, a public senior high school located in the capital city of Bali Province, Indonesia.

The Pancasila Student Profile Strengthening Project (P5) is an important strategy in developing character education in schools, as it is designed to foster noble values relevant to the needs of the 21st century (Widana et al., 2023). Through P5, students are directed to internalize six main dimensions, namely faith and devotion to God Almighty and noble character, global diversity, cooperation, independence, critical thinking, and creativity. The implementation of P5 is carried out through project-based learning that provides space for students to experience directly the process of collaboration, reflection, problem-solving, and the creation of works that benefit the surrounding environment (Citrawan et al., 2024). Thus, P5 not only emphasizes the achievement of cognitive aspects, but also builds a complete character, which is reflected in the attitudes, behavior, and social skills of students as the future golden generation of the nation.

The research is grounded in Lawrence Kohlberg's theory of moral development. (Kohlberg, 1969), supported eclectically by Thorndike's behaviorism (Thorndike, 2017), Vygotsky's constructivism (Kozulin, 2004), and Tyler's theory of educational evaluation (Stone, 1990). These four theories together provide a solid foundation for analyzing the issues under study. The development of these teaching materials is designed to match the literacy levels of students at SMAN 3 Denpasar and to

reflect the noble values of dharma, aiming to strengthen student character through good thoughts, speech, and behavior, making this topic worthy of academic investigation.

This study seeks to answer the following questions: (1) why is it necessary to develop Mahabharata teaching materials containing Hindu character values?, (2) how is the process of developing these teaching materials carried out?, (3) what are the implications of this development for the quality of Hindu religious and character education learning?

Method

This study employed an R&D approach based on the model proposed by Gall et al. (2003), a framework widely adopted in recent educational research. For example, Kabatiah et al. (2024) implemented it to develop digital teaching materials for microteaching courses, achieving high expert validation scores (> 90%). Similarly, Putri et al. (2023) applied the model to design an e-module with a contextual approach, demonstrating its continued relevance and adaptability. The research was conducted at SMAN 3 Denpasar, a public senior high school located in the capital of Bali Province, during the 2023/2024 academic year.

Research design and procedures
The procedural model is descriptive, outlining the stages involved in producing and validating an educational product. As explained by Sugiyono (2013), R&D is a research method used not only to generate a specific product but also to assess its effectiveness. Similarly, Putra (2019) emphasizes that R&D is a deliberate and systematic process intended to discover, refine, develop, or evaluate the efficiency, effectiveness, and practicality of a product, model, or method. The study followed five primary stages of the R&D cycle. 1) Needs analysis: Conducted through classroom observations, interviews with Hindu Religious Education teachers, and student questionnaires to identify gaps in existing character education materials. 2) Product planning and initial development: Development of teaching modules based on selected Mahabharata narratives emphasizing Hindu character values such as dharma (virtue), discipline, loyalty, and compassion. 3) Expert validation: The draft modules were evaluated by two experts in Hindu education and curriculum design. Feedback was used for revisions. 4) Limited trial: Conducted in one class (X-A) to assess readability, structure, and engagement. 5) Field testing and refinement: A broader implementation involving four classes (X-A to X-D) was conducted to measure effectiveness.

Research Subjects and Sampling
A purposive sampling technique was used. Participants included 120 tenth-grade students (X-A to X-D), aged 15–16, enrolled in the Hindu Religious and Character Education subject. Teachers of Hindu studies and school curriculum staff were also involved as informants during the development and validation phases.

Instruments and Validation
Three sets of instruments were used: 1) A needs analysis questionnaire, consisting of 10 items on a Likert scale, to capture student perceptions of existing learning materials. 2) A teaching material validation rubric, used by experts to assess relevance, content accuracy, instructional design, and cultural integration. 3) A learning outcome test, consisting of 20 multiple-choice items covering dharmic values. Gustiani (2019) also reinforces this view, stating that R&D involves a series of processes or steps designed to develop a new product or improve an existing one in a way that can be scientifically justified. In this context, the R&D method is particularly relevant for addressing the need to integrate Hindu character values into teaching materials, ensuring that the final product is both educationally sound and practically applicable in the school environment.

Results and Discussion

This section elaborates on the research findings in direct response to the three core objectives of the study. First, it examines empirical evidence on the limitations of existing character education materials and the rationale for incorporating Mahabharata narratives. Second, it details the systematic development and expert validation process of the proposed teaching modules. Third, it presents the outcomes of classroom trials to assess the modules' pedagogical impact on students' understanding and internalization of Hindu character values within the framework of Hindu Religious and Character Education at the senior high school level.

The Need to Develop Mahabharata-Based Teaching Materials Containing Hindu Character Values

A needs analysis was conducted to examine the relevance, structure, and effectiveness of existing teaching materials used in Hindu Religious and Character Education. The study involved 31 students from Class X-A at SMAN 3 Denpasar using a questionnaire containing 18 items.

Table 1 presents the results of the validity test for the needs analysis instrument. It is important to note that Table 1 does not represent the students' responses themselves, but rather the statistical validation of the instrument used to collect those responses. Based on r-count and r-table comparison, 17 out of 18 items were declared valid. One item (Item 5) was found invalid and was excluded. The instrument's overall reliability, measured using Cronbach's Alpha, was 0.888, indicating high internal consistency.

Table 1. Validity Test Results of the Needs Analysis Instrument

No.	r-count	r-table (N=31; 5%)	Remarks
1.	0.475	0.355	Valid
2.	0.533	0.355	Valid
3.	0.830	0.355	Valid
4.	0.830	0.355	Valid
5.	0.186	0.355	Invalid
6.	0.822	0.355	Valid
7.	0.801	0.355	Valid
8.	0.576	0.355	Valid
9.	0.493	0.355	Valid
10.	0.830	0.355	Valid
11.	0.720	0.355	Valid
12.	0.822	0.355	Valid
13.	0.516	0.355	Valid
14.	0.475	0.355	Valid
15.	0.482	0.355	Valid
16.	0.575	0.355	Valid
17.	0.451	0.355	Valid
18.	0.435	0.355	Valid

Only Item 5 was found invalid ($r = 0.186 < 0.355$) and excluded from data collection. The remaining 17 items were used. The reliability coefficient (Cronbach's Alpha) was 0.888, indicating high reliability ($0.70 \leq \alpha < 0.90$).

A descriptive analysis of students' responses to the needs assessment instrument revealed several significant findings regarding the current Mahabharata-based teaching materials. In terms of alignment with the curriculum, particularly learning objectives, the materials were considered

appropriate, receiving a score of 4. However, the structural aspects, including the organization of the introduction, content, and conclusion, were rated as incomplete (score: 2), indicating a need for better sequencing and clarity. The coherence between sections was also seen as lacking, with a score of 3. At the same time, the depth of content was similarly rated as insufficient (score: 3), suggesting that the materials do not explore the subject matter in adequate detail. The results of this study align with the research findings of Purnadewi & Widana (2023), which suggest that local wisdom is a highly suitable approach for cultivating character values.

Students also noted that the readability of the text was low (score: 2), and the language used was not fully communicative or engaging (score: 3), both of which could hinder comprehension and interest. On a more positive note, the visual design including the cover, illustrations, and use of color was rated attractive (score: 4), although the physical size of the book was considered inappropriate (score: 2). Furthermore, the clarity of explanations and presentation of material received a moderate score (3), indicating that some concepts were not well described.

This test ensures the credibility of data used to justify the need for new teaching materials. The actual analysis revealed several deficits in the current resources: weak structure (mean score = 2), shallow content (3), poor coherence (3), and low readability (2). While visual appeal was rated fairly (4), moral integration received only moderate scores (2–3).

These results support the first research question by demonstrating that current materials do not adequately embed Hindu character values. Therefore, developing a new resource based on the Mahabharata, a text rich in dharmic principles, is a logical and evidence-based response to these shortcomings.

To further validate the teaching materials, the researcher developed a second instrument focusing on readability and acceptability, consisting of 20 items in three categories: language, spelling, and character value content. Table 2 presents the validity test results of the readability instrument.

Table 2. Validity Test Results of the Readability Instrument

No.	r-count	r-table (N=31; 5%)	Remarks
1.	0.480	0.355	Valid
2.	0.567	0.355	Valid
3.	0.539	0.355	Valid
4.	0.456	0.355	Valid
5.	0.877	0.355	Valid
6.	0.136	0.355	Invalid
7.	0.649	0.355	Valid
8.	0.657	0.355	Valid
9.	0.657	0.355	Valid
10.	0.647	0.355	Valid
11.	0.520	0.355	Valid
12.	0.608	0.355	Valid
13.	0.554	0.355	Valid
14.	0.523	0.355	Valid
15.	0.035	0.355	Invalid
16.	0.450	0.355	Valid
17.	0.540	0.355	Valid
18.	0.449	0.355	Valid
19.	0.678	0.355	Valid
20.	0.590	0.355	Valid

Items 6 and 15 were declared invalid and excluded. The final readability instrument consisted of 18 valid items. The reliability test resulted in an alpha coefficient of 0.867, which also falls within the high reliability category.

In general, students found the revised materials readable and acceptable. The strong alignment of content with intended character values supports the effectiveness of these materials in promoting value-based learning. This initiative aligns with Indonesia's Nawacita development agenda, particularly Point 8 on national character revolution, and is supported by moral and cognitive development theories proposed by Piaget (Cerovac & Keane, 2025) and the moral development theory by Kohlberg (Meifang, 2024).

These findings provide strong empirical support for the need to develop new, more relevant, and morally grounded teaching materials. Specifically, the low scores in value integration and accessibility highlight a gap between curriculum goals and classroom realities. Given the Mahabharata's richness in dharmic teachings, its integration into structured modules offers a promising solution to address these shortcomings.

Development Process of Mahabharata-Based Teaching Materials with Hindu Character Values at SMAN 3 Denpasar
The development followed Borg and Gall's well-established R&D framework, focusing on stages 3 through 9: drafting, initial trials, revisions, broader trials, and final product refinement (Suyasa et al., 2025). The process began with a needs assessment, which yielded an average score of 2.73 (categorized as "sufficient"), indicating an explicit requirement to create new materials. Responding to this need, the researcher designed a comprehensive volume, Asta Dasa Parwa Mahabharata Collection, to fill the gap left by existing fragmented parwa texts.

The drafting phase involved five systematic steps: identifying relevant Mahabharata sources, reviewing each Parwa's content, constructing the book's framework, summarizing each section, and integrating Hindu character teachings based on moral and spiritual narratives found in the epic. During the sixth stage, concise and meaningful titles were assigned to each Parwa to reflect their core messages and facilitate student comprehension. Examples include Adi Parwa: "Sadripu in the Heart of the Kurawa" and Karna Parwa: "Karna's Loyalty."

Stage seven focused on selecting illustrations that support pedagogy through visual engagement and more precise comprehension of narrative content, a practice supported by studies on the impact of culturally resonant teaching aids. Subsequent stages (8 and 9) included preliminary and main field trials, followed by iterative revisions, in line with Borg and Gall's iterative validation model (Tahapary & Anaktototy, 2025). These steps ensure the product's educational effectiveness and alignment with both curriculum standards and character-building goals.

By rigorously following this R&D model, the researcher not only produced a pedagogically sound teaching tool but also established an evidence-based process for enhancing cultural and moral literacy in students. The integration of Hindu character values within Mahabharata-based materials thus stands on a strong methodological and theoretical foundation that aligns with both best practices in educational development and national policy priorities on character education. Image 2 illustrates several parts of the Parwa in the Mahabharata teaching materials, including: a) Adi Parwa, b) Sabha Parwa, c) Wana Parwa, up to d) Mahaprasthanika Parwa, and e) Swarga Rohana Parwa.
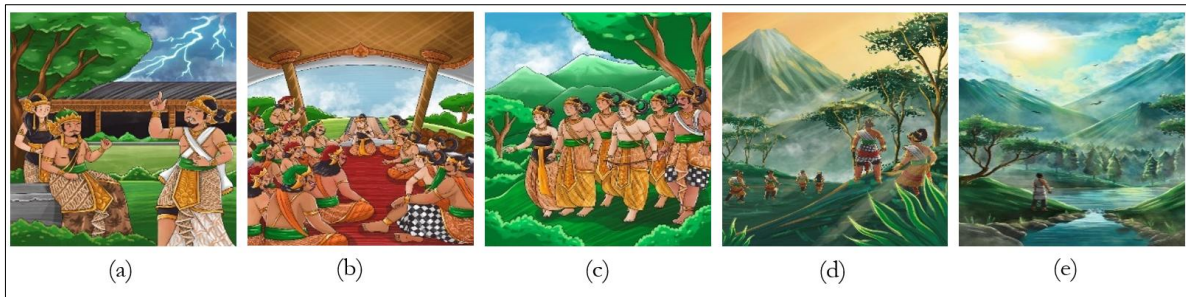
Image 1. Several parts of the parwa in Mahabharata teaching materials: a) Adi Parwa, b) Sabha Parwa, c) Wana Parwa, up to d) Mahaprasthanika Parwa, and e) Swarga Rohana Parwa.
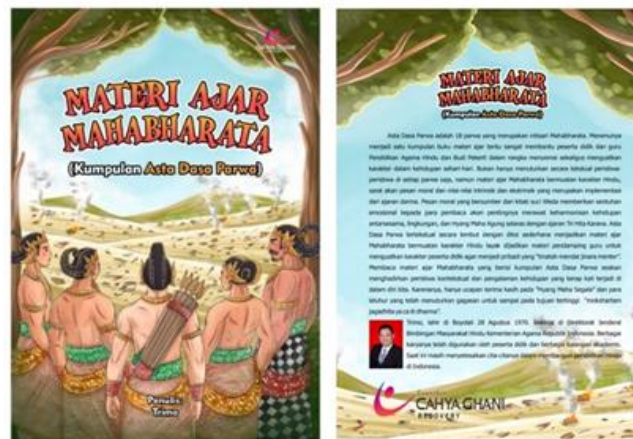
Image 2. The cover of the Mahabharata teaching materials book.

Image 2 shows the cover of the Mahabharata teaching materials book. Once the illustrations and cover were finalized, the next step, Stage 8, involved creating a teacher guidebook. This guide serves as a manual for educators teaching Hindu Religious and Character Education, including sections on (1) objectives; (2) character values; (3) key concepts; (4) teaching resources and media; and (5) learning activities. The cover of this guidebook is shown in Image 2.

Image 3. Cover of the Guidebook

The project then proceeded to develop teaching modules aligned with the independent curriculum. Each module includes general information such as module identity, students, infrastructure, competencies, teaching models, and core components like learning objectives, meaningful understanding, guiding questions, lesson procedures, reflection, assessment, and enrichment activities. Nine modules were created: 1) Module 1 covers Parwas 1–2 (Adi and Sabha), 2) Module 2 includes Parwas 3–4 (Wana and Virata), 3) Module 3 covers Parwas 5–6 (Udyoga and Bisma), 4) Module 4 covers Parwas 7–8 (Drona and Karna), 5) Module 5 includes Parwas 9–10 (Salya and Sauptika), 6) Module 6 covers Parwas 11–12 (Stri and Santi), 7) Module 7 includes Parwas 13–14 (Anusasana and Aswamedha), 8) Module 8 covers Parwas 15–16 (Asramavasika and Mausala), 9) Module 9 completes the series with Parwas 17–18 (Mahaprasthanika and Swargarohana).

In Stage 4 (limited field testing), 20 students from Class X-C piloted Module 1's content (Adi and Sabha) and provided feedback on readability and acceptability. In Stage 5 (initial product revision), four experts from local universities reviewed the draft: Prof. Yudha Triguna, Prof. I Nyoman Suarka, Prof. I Ketut Subagiasta, and Prof. MG Rini Kristiantari. Their feedback was incorporated, and then, in Stage 6 (main field testing), 31 students in Class X-D used Modules 2 and 3 (Parwas 3–6) and completed online evaluations.

Based on these trials, Stage 7 (operational product revision) introduced refinements: textual clarity, illustration quality, and design consistency. In Stage 8 (operational field implementation), 66 students from Classes X-E and X-F engaged with Modules 4 and 5 (Parwas 7–10) and completed online assessments.

Descriptive results indicate high satisfaction: averages ranged from 4 ("good") to 5 ("very good") across aspects such as clarity, coherence, word choice, punctuation, quotation formatting, font properties, storyline understanding, and character value presence. Notably, 27 Hindu character values and moral messages were perceived. Average readability and acceptability scores for Modules 1–2 were 4.36 and 4.41, respectively, affirming their suitability for classroom use at SMAN 3 Denpasar.

Expert validation yielded strong results: Prof. Yudha Triguna (3.4), Prof. Suarka (3.82), Prof. Subagiasta (4.00), and Prof. Kristiantari (3.82), averaging 3.76 ("very good"). Suggested improvements included adopting an academic language tone, standardizing terms using the Indonesian Spelling Guidelines (PUEBI), enhancing module interactivity, and refining core activity orientation toward active student participation.

Finally, revisions were made to ensure spelling consistency (e.g., "Duryodhana," "Bisma," "Kurawa"), paragraph unity, and illustration detail, under PUEBI standards. The development process demonstrates a practical application of Thorndike's behaviorism, where well-designed stimuli (the teaching material) trigger desired learning responses and reinforce Hindu character values.

In summary, the implementation of the Mahabharata-based teaching materials led to significant improvements in students' understanding of Hindu character values, as indicated by the statistically significant gains in both experimental classes. Qualitative data from student reflections and teacher observations further showed enhanced moral awareness, increased empathy, and improved classroom participation. These findings answer the three research questions: (1) there is a clear need for character-based materials grounded in the Mahabharata; (2) the materials can be systematically developed and validated using an R&D model; and (3) the modules are effective in improving both cognitive and affective dimensions of Hindu Religious and Character Education.

Following the limited trial, and in preparation for the broader field testing phase, the research team developed a learning outcome instrument consisting of 20 multiple-choice questions designed to assess students' understanding of Hindu character values presented in the modules. This test was constructed based on the content of the nine developed modules and aligned with the intended learning outcomes. The instrument underwent content validation by experts in Hindu education and was tested for reliability through a pilot study, resulting in a Cronbach's Alpha coefficient above 0.80, indicating high internal consistency. This instrument was then administered to students in both the pre-test and post-test phases of the field implementation. Since the data generated were interval-level scores with a sample size greater than 30 in each group, and were assessed for normality and homogeneity, they fulfilled the assumptions required for inferential statistical tests, including paired-sample t-tests and N-Gain analysis, which are further discussed in Subsection 5.3

Implications of Mahabharata Teaching Materials on the Quality of Learning Hindu Religious and Character Education at SMAN 3 Denpasar

The final research stage, dissemination and implementation, was conducted among 67 students, comprising 33 students in class X-G and 34 in class X-H at SMAN 3 Denpasar. These sessions covered the following content: Stri Parwa (Parwa 11) and Santi Parwa (Parwa 12) in Module 6; Anusasana Parwa and Aswamedha Parwa (Parwa 13–14) in Module 7; Asramavasika and Mausala Parwa (Parwa 15–16) in Module 8; and Mahaprasthanika and Swargarohana Parwa (Parwa 17–18) in Module 9. Instruction was led by Mr. I. Ngurah Sedewa Sudiarsa, observed by Mr. I. Wayan Phala Suwara and Mrs. Ida Ayu Putu Surya Cahyani, over several sessions on June 3, 5, 10, and 13, 2024, scheduled after final exams to avoid clashes with regular class time. More details are presented in Table 3.

Table 3. Teacher Learning Process

No.	Date	Class (no. of students)	Materials	Observer
1.	June 3, 2024	X-G (33)	Stri Parwa (11th parwa) and Santi Parwa (12th parwa) in Module 6	IW Phala Suwara
2.	June 5, 2024,	X-H (34)	Asramavasika Parwa (15th parwa) and Mausala Parwa (16th parwa) in Module 8	IAP Surya Cahyani
3.	June 10, 2024	X-G (33)	Anusasana Parwa (13th parwa) and Aswamedha Parwa (14th parwa) in Module 7	IAP Surya Cahyani
4.	June 12, 2024	X-G (34)	Mahaprasthanika Parwa (17th parwa) and Swargarohana Parwa (18th parwa)	IW Phala Suwara

Implementation revealed positive implications across multiple levels: students, teachers, school, and the broader community. Students demonstrated marked maturation in their personalities, showing a deeper understanding of dharmic values, truth, non-violence, and reverence for all life. Religious learning facilitated a stronger identity, cultural appreciation, and pride in ancestral heritage, thereby reinforcing students' positive character traits.

In-class assessments using SPSS v25 showed statistically significant improvements in student performance following the Mahabharata lessons. For class X-G (n = 33), the t-test for the first session yielded t = 3.830, p = 0.001; for the second, t = 7.878, p < 0.001, both exceeding the critical t-table value of 2.042 at $\alpha = 0.05$. These findings confirm the effectiveness of Modules 6 and 7

(Parwa 11–14). Similarly, class X-H (n = 34) achieved t = 6.185, p < 0.001, and t = 6.533, p < 0.001, well above the threshold. Therefore, Modules 8 and 9 (Parwa 15–18) are also validated as practical teaching tools. Teacher observation data reinforce these outcomes: class X-G received an average score of 90 ("very good") and class X-H scored 96.25 ("very good"), confirming that teaching quality remained high and that the Mahabharata materials effectively supported curricular goals.

Observed student behavior demonstrated the material's impact on character development. Themes of religiosity, cooperation, integrity, independence, responsibility, diligence, and empathy were evident in actions and discussions. The inclusion of moral exemplars and reflective group work encouraged communication, cooperation, and respect among peers. Supporting this, several student interview excerpts reveal the material's emotional and motivational appeal:
"The Asta Dasa Parwa collection is very inspiring; it makes me want to reflect on myself." (Resp1_XG) *"Reading this book has strengthened my sense of responsibility and courage in decision-making."* (Resp2_XG) *"I now recall my past bad habits, like arguing and lacking discipline. This book helped me become aware and want to improve."* (Resp4_XH) *"After school, I hugged my mother and said thank you. I understand her sacrifice and my duties as a child."* (Resp5_XH) *"I'm now more disciplined in doing Tri Sandhyā after multiple readings."* (Resp1_XG)

These testimonies highlight that students internalized moral lessons and translated them into real behavior change, an outcome described by Vygotsky (Kozulin, 2004) as the result of social interaction and scaffolded learning, enabling internalization of character values. Cooperative and problem-based methods, also identified by Vygotsky, were applied through group discussions and guided reflection. According to Kohlberg (1969, 1994), moral development can reach post-conventional levels when individuals begin to appreciate universal ethical principles. The Mahabharata materials provided a context for such reflection, enabling students to make complex ethical choices and laying the groundwork for higher moral reasoning.

Finally, constructivist theory was employed through experiential learning. Students engaged directly with moral dilemmas from the Mahabharata, reflecting on real-life applications. This hands-on approach helped them bridge narrative lessons with personal and social contexts.

Theoretical and Practical Significance
This study contributes to theory by demonstrating how Vygotsky's sociocultural theory, Kohlberg's moral development model, and Thorndike's behaviorism can be operationalized through literature-based materials. Through guided reflection and peer interaction, students constructed moral reasoning aligned with higher stages of ethical development. Practically, the modules offer a replicable framework for integrating classical texts into formal education. Teachers benefit from a structured, locally relevant resource; students engage with culturally grounded narratives that promote empathy, responsibility, and critical thinking.

Novelty and Contribution
While previous studies have treated the Mahabharata as a literary or moral reference (Suartini, 2023; Muniandy & Muniandy, 2022), this study is among the first to develop, implement, and empirically test structured, curriculum-aligned modules derived from its narratives. The integration of theory, design, and evaluation in a school setting represents both a methodological and practical innovation.

Conclusion

This study demonstrates the urgent need for Mahabharata-based teaching materials to enhance Hindu Religious and Character Education for Grade X students. The needs analysis revealed that

existing textbooks lack structured moral integration, as indicated by an average score of 2.73 ("sufficient" category), signaling significant room for improvement in delivering ethical content to students. This directly answers the first research question, highlighting the gap between existing learning resources and the character development needs of learners.

To address this issue, the study adopted a systematic Research and Development approach. The development process included content selection from the Asta Dasa Parwa, module structuring, language adaptation, integration of reflective tasks, visual design, and expert validation. The modules were tested through a multi-stage process: a limited trial with 20 students, broader classroom implementation in four classes (X-C to X-F), and final effectiveness testing in two experimental classes (X-G and X-H). This responds to the second research question on how such materials can be developed, validated, and refined in school settings. To evaluate effectiveness, quantitative analysis was conducted using validated pre- and post-tests aligned with the module content. The data were analyzed using paired-sample t-tests in SPSS, showing statistically significant improvements ($p < 0.05$) in students' understanding of Hindu character values. N-Gain scores also indicated moderate to high learning gains. These results were supported by qualitative feedback: student reflections showed increased empathy, responsibility, and self-awareness, while teachers observed more meaningful classroom participation. These findings directly answer the third research question by affirming the materials' impact on both cognitive and affective learning outcomes.

The study's theoretical contribution lies in the integration of Mahabharata-based narratives with moral education frameworks. Kohlberg's Moral Development Theory validates the progression of student reasoning through guided moral dilemmas. Vygotsky's sociocultural perspective supports the inclusion of group reflection tasks to construct meaning collaboratively. Thorndike's behaviorist view underpins the reinforcement embedded in student activities, and Tyler's evaluation model underscores the importance of systematic measurement for determining learning success.

In conclusion, this study confirms that the Mahabharata can serve not only as a religious or literary text, but as a pedagogically powerful medium for shaping students' character in a culturally grounded and developmentally appropriate manner. It is recommended that these materials be integrated into Hindu Religious and Character Education curricula more broadly. Further research should explore digital adaptations, teacher professional development, and longitudinal impacts on student moral behavior.

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