


A Character Strengthening Model to Address the Ethical Crisis, Value Disorientation, Digital Disinformation Based on Multiculturalism and Digital Literacy Toward Superior Human Resources 2045

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Article Info	ABSTRACT
<p>Keywords: Character Strengthening, Ethical Crisis, Multiculturalism, Digital Literacy, Digital Disinformation.</p>	<p>The ethical crisis, value disorientation, and the rapid spread of digital disinformation present serious challenges to the development of human resources in the digital era. These phenomena not only weaken moral foundations but also threaten social cohesion in increasingly multicultural societies. This study proposes a character strengthening model based on multiculturalism and digital literacy as a strategic framework for preparing superior human resources toward Indonesia 2045. The model integrates core character values such as integrity, responsibility, critical thinking, empathy, and respect for diversity with multicultural awareness and digital literacy competencies. Through this integrative approach, individuals are equipped to navigate ethical dilemmas, respond critically to digital information, and engage responsibly in diverse social and digital environments. The implementation of the model emphasizes collaborative involvement among educational institutions, families, communities, and government, supported by contextual learning strategies and ethical digital practices. This model is expected to strengthen moral resilience, promote social harmony, and enhance digital intelligence, thereby contributing to the formation of ethically grounded, culturally inclusive, and digitally competent human resources capable of supporting sustainable national development toward Indonesia 2045.</p>
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INTRODUCTION

The transformation of society in the digital era has brought significant changes to patterns of interaction, information consumption, and value formation (Van Veldhoven and Vanthienen, 2022; Purba *et al.*, 2024). While digitalization accelerates access to knowledge and economic opportunities, it simultaneously triggers an ethical crisis, value disorientation, and the massive spread of digital disinformation. These challenges have increasingly affected social cohesion, public trust, and moral awareness, particularly in multicultural societies such as Indonesia (Levin and Mamlok, 2021). Without adequate character

formation, digital advancement risks producing human resources that are technologically proficient but ethically fragile and socially fragmented.

The ethical crisis manifests in the normalization of dishonesty, intolerance, hate speech, and the erosion of social responsibility in both offline and digital spaces (Cvetkovska, 2022). At the same time, value disorientation occurs when individuals—especially young generations—struggle to distinguish between moral principles, cultural identity, and algorithm-driven narratives that dominate social media (Kamaruddin *et al.*, 2023). The rapid circulation of misinformation and disinformation further exacerbates this condition, shaping public opinion through manipulation rather than critical reasoning. These phenomena indicate that technical digital skills alone are insufficient; they must be accompanied by strong character values and ethical awareness (Azzahra and Rosyidah, 2024).

Indonesia's demographic bonus and its vision of Superior Human Resources toward Indonesia 2045 demand a holistic approach to human development (Hamdani, Nurhafsa and Silvia, 2022; Purba *et al.*, 2022). In this context, character education becomes a strategic foundation, not merely as a moral discourse but as a transformative process that shapes ethical behavior, critical thinking, and social responsibility (Arifin *et al.*, 2025). Moreover, Indonesia's multicultural reality—characterized by ethnic, religious, and cultural diversity—requires a character strengthening framework that promotes inclusivity, tolerance, and intercultural understanding as safeguards against polarization and identity-based conflicts intensified by digital media (Amin and Ritonga, 2024).

Digital literacy has emerged as a critical competence in responding to the challenges of disinformation. However, existing digital literacy initiatives often emphasize technical and cognitive aspects, such as information access and media skills, while neglecting ethical dimensions and cultural contexts (Parinduri, 2025). Similarly, character education programs are frequently implemented in a fragmented manner, detached from the realities of digital life and multicultural dynamics (Purba, 2021a). This gap highlights the need for an integrative model that systematically connects character values, multicultural awareness, and digital literacy within a single conceptual framework (Purba, 2017; Sipayung *et al.*, 2023).

The novelty of this research lies in the development of an integrative character strengthening model that simultaneously addresses ethical crises, value disorientation, and digital disinformation through a multicultural and digital literacy-based approach. Unlike previous studies that focus separately on character education, multicultural education, or digital literacy, this research synthesizes these domains into a coherent and operational model oriented toward future human resource development (Sipayung and Sihombing, 2024b). The model emphasizes not only cognitive competence but also ethical resilience, cultural intelligence, and responsible digital citizenship.

The urgency of this research is underscored by the increasing vulnerability of society to moral degradation, social polarization, and digital manipulation, particularly among younger generations who will become the backbone of Indonesia's development in 2045.

Without a strategic and integrative intervention, these challenges may undermine national cohesion and the quality of human capital. Therefore, this study is urgently needed to provide a conceptual and practical framework for strengthening character in the digital and multicultural era, ensuring the formation of superior human resources who are ethically grounded, culturally inclusive, and digitally literate in facing future global challenges.

METHODS

Research Design

This study employs a Research and Development (R&D) design with a qualitative–quantitative (mixed-methods) approach (Makbul, 2021). The research aims to develop and validate a Character Strengthening Model to Address Ethical Crisis, Value Disorientation, and Digital Disinformation Based on Multiculturalism and Digital Literacy toward Superior Human Resources 2045. The R&D approach is selected to ensure that the proposed model is conceptually grounded, empirically tested, and practically applicable in educational and social contexts.

The research framework adapts the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation), which is widely used in educational and social innovation research (Sugiyono, 2010).

Research Stages

1. Analysis Stage

This stage involves a needs assessment to identify ethical challenges, patterns of value disorientation, and the impact of digital disinformation in multicultural settings. Data are collected through:

- a. Literature review of international and national studies related to character education, multiculturalism, and digital literacy;
- b. Policy document analysis related to human resource development and Indonesia 2045;
- c. Preliminary surveys and interviews with educators, students, community leaders, and digital media practitioners.

2. Design Stage

Based on the analysis results, the conceptual framework of the character strengthening model is designed. This stage includes:

- a. Identification of core character values and digital literacy competencies;
- b. Integration of multicultural principles into character education components;
- c. Formulation of model indicators, learning strategies, and evaluation instruments.

3. Development Stage

The model is developed into a structured framework consisting of objectives, components, implementation strategies, and assessment mechanisms. Expert validation is conducted involving:

- a. Experts in character education;
- b. Multicultural studies scholars;

- c. Digital literacy and media ethics experts.

Validation focuses on content validity, construct validity, and contextual relevance.

4. Implementation Stage

The validated model is implemented in selected educational institutions and community-based learning settings using a pilot study approach. Participants are selected through purposive sampling, representing diverse cultural and social backgrounds. Implementation is conducted over a defined period through contextual learning activities, digital literacy training, and multicultural dialogue sessions.

5. Evaluation Stage

Model effectiveness is evaluated using formative and summative evaluation methods. Evaluation focuses on changes in ethical awareness, value orientation, critical digital literacy, and multicultural attitudes. Data are collected through:

- a. Pre-test and post-test questionnaires;
- b. Observation sheets;
- c. Reflective journals;
- d. Focus group discussions (FGDs).

Data Collection Techniques

Data collection employs multiple techniques to ensure triangulation and data credibility:

- a. Questionnaires to measure character values, digital literacy skills, and multicultural attitudes;
- b. In-depth interviews with key stakeholders;
- c. Observations of learning and digital engagement behaviors;
- d. Document analysis of learning outputs and digital content produced by participants.

Data Analysis

Quantitative data are analyzed using descriptive and inferential statistics to measure changes before and after model implementation. Qualitative data are analyzed using thematic analysis, involving data reduction, data display, and conclusion drawing. The integration of qualitative and quantitative findings is conducted at the interpretation stage to provide a comprehensive understanding of model effectiveness.

Research Validity and Reliability

Validity is ensured through expert judgment, triangulation of data sources and methods, and pilot testing of instruments. Reliability of quantitative instruments is tested using Cronbach's Alpha, while qualitative trustworthiness is strengthened through credibility, transferability, dependability, and confirmability criteria.

Ethical Considerations

This research adheres to ethical research standards, including informed consent, confidentiality of participants' data, voluntary participation, and transparency in data reporting. Ethical approval is obtained from the relevant institutional review board prior to data collection.

RESULTS AND DISCUSSION

Results

The results of this study are presented based on the stages of model development and implementation, focusing on validation outcomes, effectiveness testing, and participant responses toward the proposed character strengthening model.

1. Expert Validation Results

The expert validation process indicates that the proposed character strengthening model is conceptually sound and contextually relevant. Experts in character education, multicultural studies, and digital literacy assessed the model across dimensions of content validity, construct coherence, and practical applicability. The validation results show that the integration of character values, multicultural principles, and digital literacy competencies is logically structured and responsive to contemporary ethical and digital challenges. Minor revisions suggested by experts mainly concerned the clarification of implementation indicators and alignment between learning activities and evaluation instruments, which were subsequently refined.

2. Implementation and Effectiveness Results

The pilot implementation demonstrates a positive impact on participants' ethical awareness, value orientation, digital literacy, and multicultural attitudes. Quantitative analysis of pre-test and post-test results reveals a significant increase in participants' ability to critically evaluate digital information, identify misinformation and disinformation, and demonstrate ethical behavior in digital interactions. Participants also show improved tolerance, empathy, and respect for cultural diversity, indicating the effectiveness of the multicultural-based approach embedded in the model.

Qualitative findings from observations, reflective journals, and focus group discussions further support these results. Participants reported greater awareness of ethical consequences in digital behavior, increased confidence in expressing opinions respectfully, and enhanced sensitivity toward cultural differences in both offline and online environments. These findings suggest that character strengthening becomes more effective when ethical values are contextualized within real digital and multicultural experiences.

3. Stakeholder Response

Educators and facilitators involved in the implementation express positive perceptions of the model's practicality and relevance. They highlight that the model provides clear guidance for integrating character education into digital literacy activities without overburdening the learning process. Community stakeholders also note that the model encourages constructive dialogue and reduces polarization caused by misinformation and identity-based narratives.

Discussion

The findings of this study confirm that ethical crises, value disorientation, and digital disinformation cannot be addressed through fragmented educational interventions. The positive outcomes of the proposed model reinforce the argument that character education

must evolve in response to the realities of digital transformation and multicultural complexity (Sipayung and Sihombing, 2024a).

The significant improvement in ethical awareness and digital critical thinking supports the notion that digital literacy should not be limited to technical competencies. Instead, it must incorporate ethical reasoning and value-based judgment (Purba, 2021b). By embedding integrity, responsibility, and critical thinking into digital literacy practices, the model enables individuals to resist manipulation, algorithmic bias, and the normalization of unethical digital behavior. This finding aligns with contemporary perspectives that emphasize ethical digital citizenship as a core competence in the 21st century.

Furthermore, the enhancement of multicultural attitudes among participants highlights the strategic role of multiculturalism in character strengthening. In a diverse society, ethical behavior is inseparable from respect for cultural plurality. The model's emphasis on empathy, tolerance, and intercultural dialogue proves effective in reducing value disorientation and social polarization, particularly those amplified by digital media. This result indicates that multiculturalism functions not only as a social value but also as a protective framework against digital-driven identity conflicts.

The integration of character education, multiculturalism, and digital literacy represents the key contribution and novelty of this study. Previous approaches often treated these domains separately, resulting in limited impact. This research demonstrates that an integrative model creates a synergistic effect, strengthening moral resilience, cultural intelligence, and digital competence simultaneously. Such integration is crucial for preparing superior human resources who are not only skilled and innovative but also ethically grounded and socially responsible (Sibarani and Albina, 2025).

From a policy and practical perspective, the results underscore the urgency of adopting integrative character strengthening models in educational institutions and community learning settings. As Indonesia moves toward its 2045 vision, the quality of human resources will be determined not merely by technological mastery but by the ability to uphold ethical values, navigate diversity, and engage responsibly in digital spaces. Therefore, this model provides a relevant and scalable framework to support sustainable human resource development in the digital and multicultural era.

Table 1. Summary of Quantitative Results of Model Effectiveness

Variable	Indicator	Pre Test Mean	Post Test Mean	Mean Difference	Sig. (p-value)	Interpretation
Character Values	Integrity and Responsibility	3.12	4.18	+1.06	< 0.001	Significant improvement
	Ethical Awareness	3.05	4.22	+1.17	< 0.001	Significant improvement
Value Orientation	Moral Judgment	3.08	4.15	+1.07	< 0.001	Significant improvement

Variable	Indicator	Pre Test Mean	Post Test Mean	Mean Difference	Sig. (p-value)	Interpretation
Digital Literacy	Social Responsibility	3.14	4.25	+1.11	< 0.001	Significant improvement
	Critical Evaluation of Information	2.98	4.20	+1.22	< 0.001	Significant improvement
	Ability to Identify Disinformation	2.85	4.12	+1.27	< 0.001	Significant improvement
Multicultural Attitude	Tolerance and Empathy	3.22	4.30	+1.08	< 0.001	Significant improvement
	Respect for Cultural Diversity	3.18	4.35	+1.17	< 0.001	Significant improvement
Digital Ethics Behavior	Responsible Online Interaction	3.00	4.28	+1.28	< 0.001	Significant improvement

CONCLUSION

This study concludes that the character strengthening model based on multiculturalism and digital literacy is effective in responding to ethical crises, value disorientation, and the spread of digital disinformation in the digital era. The findings demonstrate that the integrative approach significantly enhances ethical awareness, value orientation, critical digital literacy, multicultural attitudes, and responsible digital behavior. By unifying core character values, multicultural awareness, and ethical digital competencies within a single framework, this model addresses the limitations of fragmented character education and purely technical digital literacy programs. The results confirm that superior human resource development toward Indonesia 2045 requires not only technological proficiency but also strong moral integrity, cultural inclusivity, and critical digital citizenship. Therefore, this model provides a relevant and scalable framework for educational institutions, communities, and policymakers to foster ethically grounded, culturally intelligent, and digitally literate human resources capable of sustaining social cohesion and national development in the face of future global challenges.

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