



DETERMINANT FACTORS IN EDUCATION

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ABSTRACT

Research Objectives - This study aims to analyze the systemic relationships among determinant factors in education in improving the quality of learning and fostering human development.

Method - This research employs a qualitative approach with a case study design. Data analysis was conducted through thematic analysis, encompassing transcription, coding, categorization, and interactive interpretation of themes.

Research Findings - The findings indicate that educational quality is determined by holistic relationships among educators, learners, educational objectives, educational instruments, and the educational environment. Dialogical interactions between teachers and learners strengthen learning motivation and value internalization. In addition, the utilization of technology demonstrates adaptive partial relations; however, its effectiveness remains dependent on systemic support from the social and institutional environment.

Theory and Practical Implications - Theoretically, these findings affirm the importance of an open-systems approach in understanding educational determinants. From a policy perspective, collaborative and integrative strategies among stakeholders are required to build a sustainable educational ecosystem.

Novelty - The novelty of this study lies in the conceptual formulation of holistic and partial relations as an integrative analytical model for explaining the determinants of education.

INTRODUCTION

The development of education in the twenty-first century is characterized by digital transformation, the demand for global competencies, and the urgency of developing adaptive and value-oriented human resources. The OECD report through the *Future of Education and Skills 2030* framework emphasizes the importance of integrating cognitive, socio-emotional, and value-based competencies in shaping the learner profile of the future (OECD, 2018). In line with this, UNESCO in *Reimagining Our Futures Together* underscores that education must be positioned as a collaborative ecosystem involving schools, families, communities, and public policy (UNESCO, 2021). A number of reputable Scopus-indexed studies indicate that students' learning outcomes are significantly influenced by socioeconomic background (Sirin, 2005), teacher quality (Hattie, 2009), and family as well as school support (Epstein, 2011). In this context, education is no longer understood merely as a process of knowledge transmission, but as a complex system shaped by the interaction of multiple multidimensional and systemic determinant factors.

Although various studies have identified factors influencing educational quality, most research tends to examine these factors separately and partially. For instance, research on teacher effectiveness largely focuses on pedagogical aspects and instructional strategies without thoroughly linking them to social and policy dimensions (Hattie, 2009). Similarly, studies on socioeconomic background often remain at the level of correlational analysis without constructing an integrative conceptual framework (Sirin, 2005). Theoretically, however, education may be understood as an open system, as

emphasized in Parsons' (1951) social systems theory, in which each component—educators, learners, objectives, instruments, and environment—maintains reciprocal and interdependent relationships. The absence of a systemic approach has resulted in a reductionist and less comprehensive understanding of educational determinant factors.

Furthermore, from the perspective of educational philosophy, Freire's (1970) concept of dialogical education criticizes the "banking" model of education that positions learners as passive objects. In practice, however, many empirical studies have not fully integrated this humanistic and emancipatory dimension into the analysis of educational determinants. On the other hand, the social capital approach proposed by Coleman (1988) and Bourdieu (1986) highlights the importance of social relations and cultural capital in academic success, yet it has not been extensively elaborated within a holistic relational framework between internal and external educational factors. Thus, a research gap emerges in the need for a conceptual model that not only identifies determinant factors of education but also explains the systemic—both holistic and partial—relationships among these factors in fostering human beings as pedagogical subjects.

The novelty of this study lies in the conceptual formulation of the systemic relationships among educational determinant factors, understood simultaneously in two dimensions: holistic relations and partial relations. This research not only maps the roles of educators, learners, educational objectives, educational instruments, and the educational environment as separate variables, but also analyzes their dynamic interconnections within the framework of human development grounded in philosophical and contextual approaches. Accordingly, this study offers a synthesis of systemic, humanistic, and sociological perspectives in explaining educational determinants, thereby contributing theoretically to the development of an integrative and contextual educational model.

The objective of this research is to analyze in depth the determinant factors in education and to elucidate the patterns of systemic relationships among these factors within the context of human development. It also aims to formulate a conceptual framework that may serve as a reference for the development of more holistic educational policies and practices. Nevertheless, this study is limited by its qualitative case study approach conducted within a specific school context; therefore, the generalization of findings must be undertaken cautiously. Moreover, the focus on conceptual and thematic analysis has not yet fully tested the proposed model through quantitative or mixed-methods approaches, thereby opening opportunities for further research to conduct broader empirical validation.

METHOD

This study employs a qualitative approach with a case study design to gain an in-depth understanding of the systemic relationships among the determinant factors in education, namely educators, learners, educational objectives, educational instruments, and the educational environment. The qualitative approach was selected due to the contextual, complex, and meaning-laden nature of the issues under investigation, which require comprehensive exploration of the perceptions, experiences, and interactions among educational actors. Creswell and Poth (2018) assert that qualitative research is particularly relevant when researchers seek to explore social phenomena holistically within their natural settings. In line with this, Yin (2018) emphasizes that case studies are effective for analyzing a bounded system by considering multiple sources of data through triangulation.

Several internationally reputable, Scopus-indexed studies have likewise employed qualitative approaches to examine the complexity of educational contexts, such as research on school leadership and instructional effectiveness (Leithwood & Jantzi, 2005) and studies on partnerships among schools, families, and communities (Epstein, 2011). The findings of these studies indicate that educational dynamics cannot be fully explained solely through quantitative approaches; rather, they require an in-depth understanding of social and cultural contexts. Therefore, the qualitative approach adopted in this study is considered the most appropriate for analyzing the holistic and partial relationships among educational determinant factors in fostering human beings as pedagogical subjects.

Data were collected through in-depth interviews, participant observation, and document analysis. Semi-structured interviews enabled the researcher to explore participants' perspectives flexibly while remaining aligned with the research focus (Kvale & Brinkmann, 2009). Observation was employed to obtain empirical data concerning interactions among educational actors within the natural school context, thereby strengthening the validity of the findings through the researcher's direct engagement in the field (Merriam & Tisdell, 2016). Meanwhile, document analysis of curricula, school policies, and administrative records was conducted to understand the normative framework underpinning educational practices. The use of these multiple techniques is consistent with the principle of triangulation as recommended by Denzin (1978) to enhance the credibility and trustworthiness of qualitative research data. Accordingly, the integration of these three techniques enabled the researcher to obtain comprehensive and in-depth data regarding the determinant factors of education.

The data analysis in this study employed thematic analysis as developed by Braun and Clarke (2006), encompassing the stages of data transcription, coding, categorization, theme identification, and interpretation of meaning. The analytical process was conducted concurrently with data collection through an interactive model proposed by Miles, Huberman, and Saldaña (2014), which involves data reduction, data display, and conclusion drawing. Operationally, the study maps the relationships among educational determinant factors into two principal dimensions: holistic relations, which reflect the comprehensive interconnectedness of educational components within an integrated system, and partial relations, which indicate the relative and context-specific functioning of certain components within particular educational circumstances.

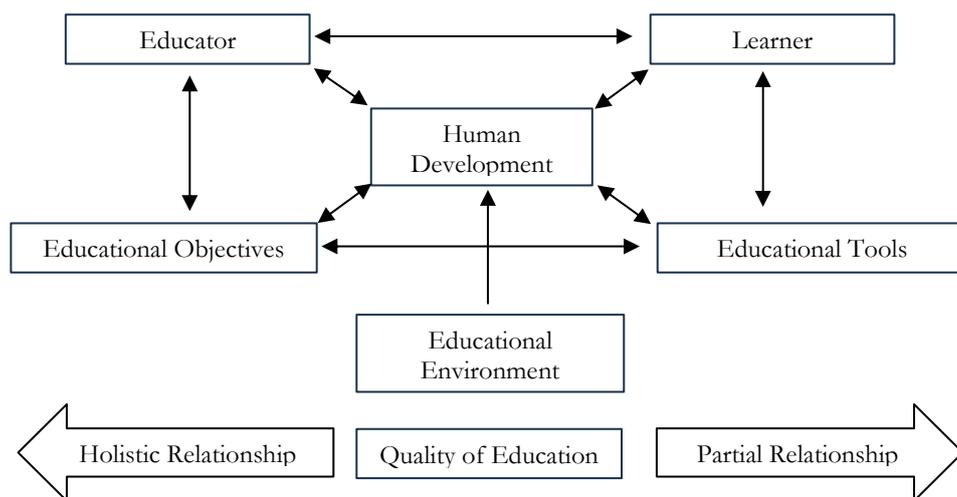


Figure 1 Conceptual Framework

Theoretically, this framework positions the human being as the central subject of educational development, influenced by five primary determinant factors—educators, learners, educational objectives, educational instruments, and the educational environment—which interact within an open system. These interactions were analyzed through a thematic approach to identify patterns of systemic relationships that explain how these factors operate integratively in enhancing educational quality.

RESULTS AND DISCUSSION

Holistic Relations of Determinant Factors in the Educational System. Based on thematic analysis of interviews, observations, and document studies, the findings indicate that educators, learners, educational objectives, educational instruments, and the educational environment do not function independently; rather, they form holistic relationships. The coding and thematic categorization processes reveal that the quality of interaction between educators and learners constitutes the central axis that mobilizes the other factors. Teachers function not merely as

facilitators of knowledge transfer but also as drivers of values and learning culture that shape the academic climate of the school. This finding aligns with Hattie (2009), who emphasizes that teacher effectiveness significantly influences learning outcomes, particularly when supported by high expectations and positive interpersonal relationships. However, within the context of this study, teacher effectiveness does not stand alone; it is reinforced by the alignment of educational objectives and the support of the school and family environment. Thus, holistic relations are reflected in the integration of institutional vision, pedagogical practices, and the social culture sustaining the learning process.

The Role of Learners as Dialogical Subjects in the Educational Process. Data analysis demonstrates a paradigm shift from teacher-centered instruction toward a more participatory dialogical approach. Learners are positioned as active subjects engaged in discussion, reflection, and meaning-making. Observational findings indicate that when dialogical spaces are opened, intrinsic motivation and learning engagement increase significantly. This finding reinforces Freire's (1970) concept of emancipatory dialogical education and is consistent with the notion of student agency in contemporary education (OECD, 2018). Nevertheless, the study also reveals that dialogical practices have not yet been fully institutionalized systemically, as they remain influenced by hierarchical academic culture. Therefore, within a holistic framework, the relationship between educators and learners requires support from school policies that explicitly promote active participation and critical reflection.

Educational Objectives and Value Orientation in Human Development. Another emerging theme from the analysis concerns the importance of educational objectives as the guiding force of all learning activities. Documentary data indicate that the school's vision emphasizes character formation and twenty-first-century competencies; however, implementation remains predominantly focused on cognitive academic achievement. This imbalance reflects a gap between the normative and practical dimensions of education. Theoretically, this may be explained through Parsons' (1951) social systems approach, which posits that every system requires value integration to function stably. In the educational context, objectives that are not operationally internalized risk creating disintegration between the written curriculum and classroom practices. The findings suggest that educational success is optimized when cognitive, affective, and psychomotor objectives are integrated simultaneously, as emphasized in the character education framework (Ministry of National Education, 2010).

Educational Instruments and Digital Transformation in Partial Relations. The analysis also identifies forms of partial relations among determinant factors, particularly in the use of educational technology. In certain cases, learners were able to access learning materials and resources independently through digital media without direct interaction with educators. This phenomenon indicates that educational instruments may function relatively independently under specific circumstances. This finding is consistent with UNESCO (2021), which highlights digital transformation as an accelerator of learning while simultaneously presenting challenges related to access disparities and digital literacy. However, the study reveals that the effectiveness of technology use remains influenced by the quality of pedagogical design and social environmental support. In other words, partial relations are not entirely autonomous but remain embedded within a broader systemic network.

Educational Environment and Social Capital in Supporting Learning Quality. Interviews with parents and school administrators demonstrate that family and community support significantly contribute to the consistency of students' learning. A conducive social environment reinforces values of discipline, responsibility, and learning motivation. These findings are consistent with Coleman's (1988) social capital theory, which underscores the importance of relational networks and trust in enhancing educational success. However, the study also identifies variations in support based on socioeconomic background, affecting access to supplementary learning resources. Thus, the educational environment functions not merely as an external context but as a determinant factor that directly interacts with the internal components of the educational system.

Overall, the integration of thematic analysis results indicates that educational quality is determined by systemic relational patterns among determinant factors in two principal forms: (1) holistic relations, which require the integration of all components within a unified vision of human development; and (2) partial relations, which provide adaptive flexibility in response to learning dynamics. This synthesis reinforces the argument that education constitutes a dynamic open system in which changes in one component influence the others. Therefore, strategies for improving educational quality must be designed collaboratively and systemically to respond sustainably to contemporary challenges.

CONCLUSION

This study concludes that the determinant factors in education—educators, learners, educational objectives, educational instruments, and the educational environment—operate within systemic relationships that are both holistic and partial in nature. Holistically, these five factors are integratively interconnected in forming an educational ecosystem that determines the quality of learning and the development of human beings as pedagogical subjects. The effectiveness of educators, active participation of learners, clarity of educational objectives, support of instructional tools, and a conducive social environment are proven to reciprocally influence one another. Partially, the study also finds that in certain contexts, such as the utilization of digital technology, some factors may function relatively independently, although they remain embedded within a broader systemic network. Thus, the research question concerning how these determinant factors interact in enhancing educational quality is addressed through the finding that educational quality is not determined by a single variable, but by dynamic relational patterns among components within the educational system.

Compared to previous studies that tend to examine factors such as teacher effectiveness (Hattie, 2009), social capital (Coleman, 1988), or dialogical education (Freire, 1970) in isolation, this study offers a novel contribution in the form of a conceptual synthesis integrating pedagogical, sociological, and philosophical dimensions within a unified systemic relational framework. Whereas earlier research primarily emphasized the individual influence of specific variables on learning outcomes, this study asserts that educational quality emerges from the integration of factors within mutually reinforcing relationships. The novelty of this research lies in the conceptual formulation of holistic and partial relations as an analytical model for comprehensively understanding educational determinants. Accordingly, this study enriches the body of educational scholarship by proposing an integrative perspective that may serve as a foundation for developing more collaborative, contextual, and sustainable educational policies and practices.

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REFERENCES

- Bourdieu, P. (1986). *The forms of capital*. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94(Supplement), S95–S120. <https://doi.org/10.1086/228943>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. McGraw-Hill.
- Epstein, J. L. (2011). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Westview Press.
- Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.

- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Kementerian Pendidikan Nasional. (2010). *Desain induk pendidikan karakter*. Kementerian Pendidikan Nasional.
- Kvale, S., & Brinkmann, S. (2009). *InterViews: Learning the craft of qualitative research interviewing* (2nd ed.). Sage Publications.
- Leithwood, K., & Jantzi, D. (2005). Transformational leadership. *Educational Administration Quarterly*, 41(5), 750–782.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage Publications.
- OECD. (2018). *The future of education and skills 2030*. OECD Publishing.
- Parsons, T. (1951). *The social system*. Free Press.
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417–453.
<https://doi.org/10.3102/00346543075003417>
- UNESCO. (2021). *Reimagining our futures together: A new social contract for education*. UNESCO Publishing.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage Publications.