

## Development of Digital Flipbook Media for Smart Fathers, Parenting

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### Abstract

*This research aims to develop and test the feasibility of learning media based on flipbook digital with the theme "Smart Fathers Raising Children". The development model used is ADDIE, which consists of five stages: (1) Analysis, analyzing fathers' needs in child care and family literacy problems; (2) Design, designing material structure, illustrations, and features flipbook digital according to user needs; (3) Development, developing media using software Heyzine to produce a product ready for testing; (4) Implementation, testing the media on a limited basis with fathers as the main users; and (5) Evaluation, evaluate the father's response and make revisions to improve the media. Mediaflipbook digital. This program presents informative content, interactive visuals, and easy-to-understand narratives to improve fathers' understanding and parenting literacy. Tests with fathers showed a 90.8% response rate, which is considered very strong and positive. Therefore, the flipbook digital "Smart Fathers Raise Children" is declared very suitable for use as a family learning medium to support the role of fathers in raising children.*

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## 1. INTRODUCTION

The National Coalition for Holistic and Integrative Early Childhood Education (PAUD HI) is a cross-sector collaboration involving various stakeholders, from the government, civil society organizations, academics, and development partner institutions. This collaboration was established as a strategic effort to strengthen integrated, sustainable early childhood education services that are oriented towards fulfilling children's rights comprehensively. The holistic and integrative approach to PAUD services emphasizes the importance of synergy between aspects of education, health, nutrition, protection, and family care. This approach is believed to be able to create an optimal growth and development environment for children from an early age. Various studies have shown that the quality of integrated PAUD services has a significant influence on children's readiness to learn and long-term well-being (Britto et al., 2017; Yoshikawa et al., 2018). In the Indonesian context, the implementation of PAUD HI is also part of the national strategy to improve the quality of human resources from the early stages of life. Therefore, strengthening the role of the family as the first educational environment is one of the main focuses in the development of the PAUD HI program. Families have a strategic role in forming the foundation for children's cognitive, social, emotional, and moral development from an early age.

One important aspect of strengthening families is improving parental caregiving capacity. Quality care has been shown to significantly contribute to the overall development of early childhood. Research shows that responsive and stimulating parenting practices can

improve children's language development, social skills, and emotional regulation skills (Jeong et al., 2016). Furthermore, the quality of interactions between parents and children also influences the formation of healthy emotional attachments. Positive interactions between parents and children can create a sense of security and increase children's confidence in exploring their environment. In the context of early childhood education, the family serves not only as a place to meet basic needs but also as a child's first learning environment. Therefore, improving parental knowledge and skills is crucial in supporting optimal child growth and development. Efforts to strengthen parenting capacity require support from various parties, including the provision of educational media that is easily accessible to families.

In practice, childcare is often handled more by mothers than by fathers. This is influenced by social constructs that still view parenting as the primary responsibility of mothers in the family. However, various studies show that fathers' involvement in parenting contributes significantly to child development. Paternal involvement has been shown to influence children's cognitive, social, and mental health development (Sarkadi et al., 2018). Fathers who are actively involved in parenting can provide different stimulation and complement the mother's role in supporting child development. A father's presence in daily interactions can also increase a child's sense of security and self-confidence. Therefore, fathers' involvement in parenting needs to be encouraged as part of balanced parenting practices within the family. Efforts to increase father involvement require an appropriate approach that is relevant to their characteristics and needs.

The role of fathers in early childhood care is not only related to meeting the family's economic needs. Fathers also play a crucial role in providing emotional support, developmental stimulation, and shaping children's values and character. Recent research shows that active father involvement in parenting contributes to the development of children's temperament and social skills (Suciawati et al., 2024). Paternal involvement can also improve the quality of family relationships and strengthen the emotional bond between father and child. Furthermore, fathers play a role in building a positive and supportive family environment for children's growth and development. The presence of a responsive father can help children develop emotional regulation and social skills. This suggests that paternal involvement is a crucial factor in supporting children's holistic development. Therefore, increasing fathers' awareness and capacity in parenting is becoming increasingly important in the context of modern families.

Despite this, father involvement in parenting activities still faces various challenges. Many fathers have limited time due to work demands, making it difficult to participate in in-person parenting education activities. Furthermore, access to relevant parenting information for fathers remains relatively limited. Most parenting education materials are still primarily aimed at mothers as the primary caregivers. This situation often leads to fathers feeling they lack the space or opportunity to actively participate in parenting activities. Research shows that one of the main barriers to father involvement is the lack of educational media specifically designed for fathers (Bali & Credo, 2021). Therefore, innovative learning media are needed that can reach fathers more effectively. These media must be designed with a practical, engaging approach and be tailored to fathers' characteristics.

The development of digital technology presents new opportunities for providing educational media for families. Digital learning media allows for more flexible information delivery and easy user access. The use of digital technology in education has been shown to increase learning effectiveness through more visual and interactive presentation of information (Mayer, 2020). Digital media also allows for the integration of various forms of content such as text, images, animations, and videos. This can help improve user

understanding of the material presented. Furthermore, digital media can be accessed anytime and anywhere via electronic devices such as smartphones. This situation is highly relevant to the needs of fathers who have limited time to participate in face-to-face educational activities. Therefore, the development of digital educational media is a potential strategy for improving family parenting capacity.

One form of digital learning media that is increasingly being used is digital flipbooks. Digital flipbooks are technology-based media that present information in an interactive book format with an attractive appearance. This media allows users to read material digitally with a visual experience that resembles a printed book. Digital flipbooks have the advantage of presenting information concisely, systematically, and easily understood by users. Research shows that the use of digital flipbooks can increase learning motivation and reader understanding of the material presented (Adawiah et al., 2022). In addition, digital flipbooks also allow the integration of various multimedia elements such as images, illustrations, and videos. This makes digital flipbooks an effective media in delivering educational information to the public. With an attractive and interactive design, digital flipbooks can increase user involvement in the learning process.

Research by Gifara and Saridewi (2024) shows that digital flipbooks significantly improve user comprehension compared to conventional media. This is due to the combination of text, visuals, and interactivity, which makes the material easier to understand. Digital flipbooks also provide a more engaging and less monotonous learning experience for users. Furthermore, this medium can be tailored to the needs and characteristics of different users. In the context of family parenting education, digital flipbooks can be an effective means of conveying information in a practical and easy-to-understand manner. This medium can help parents acquire parenting knowledge without having to attend in-person training. Thus, digital flipbooks have great potential for use as a medium for family parenting education. This potential can be utilized to increase father involvement in early childhood care practices.

Based on this need, the National Coalition for Early Childhood Education (PAUD HI) developed a digital flipbook titled "Smart Fathers Raise Children." This media is designed as a parenting education tool specifically for fathers and male caregivers. The development of this media aims to increase fathers' awareness and capacity in carrying out their parenting roles. The flipbook's content is structured with a simple, visual, and easy-to-understand approach. The material presented is not based on lengthy text but is packaged in the form of illustrations and examples of parenting practices. This approach was chosen to make the material more easily understood by fathers from various educational backgrounds. Furthermore, this media is designed for flexible access through digital devices. This way, fathers can study parenting materials at any time according to their own schedule.

The content in this digital flipbook is compiled based on the EMAS Toddler Family Development Module (BKB) developed by the National Population and Family Planning Board (BKKBN). The module contains various important materials related to early childhood care within the family. The material covers eight family functions as a foundation for building a quality family. Furthermore, the flipbook also includes information on the role of fathers in a child's First 1,000 Days of Life (HPK). The first 1,000 HPK is a critical period that significantly determines the quality of a child's future growth and development. Other materials cover the physical and mental health of mothers and children, clean and healthy living behaviors, and child development stimulation. This content is presented with a practical approach that can be directly applied in everyday life. Thus, this digital flipbook is expected to serve as a practical guide for fathers in carrying out their parenting role.

In addition to presenting parenting material, this flipbook also displays examples of parenting practices through a role modeling approach. This approach aims to provide a realistic picture of how fathers can be involved in childcare. Role modeling is an effective learning strategy in increasing user understanding and motivation (Bandura, 2018). In this flipbook, examples of parenting practices are presented through easy-to-understand visual illustrations. Furthermore, this media also has the potential to be developed by integrating video testimonials from fathers. These videos can strengthen the educational message and increase the relevance of the material to real-life contexts. This approach is expected to increase users' emotional engagement with the material presented. Thus, this media not only conveys information but also inspires fathers in their parenting practices.

The digital flipbook "Smart Fathers and Childcare" is designed for use in various family service contexts. It can be utilized in the EMAS Toddler Family Development (BKB) program as a parenting education tool for parents. Furthermore, it can be used in educational activities at early childhood education (PAUD) units. Public health services such as integrated health posts (Posyandu) can also utilize this media as educational material for families. It is also relevant for use in community-based family mentoring programs. One program that can utilize this media is the More Care for Young Children project, which focuses on strengthening family parenting. With its flexible use, this flipbook can reach more families in various regions. This aligns with the government's efforts to strengthen HI PAUD services sustainably.

The core values of this media platform are inclusivity and ease of access for all groups. It is designed for use by fathers from diverse educational and social backgrounds. The delivery approach is non-patronizing, but rather dialogic and inspiring. This is crucial to creating a comfortable learning experience for users. Furthermore, the content is tailored to local cultural contexts and daily family practices. This culture-based approach is believed to increase the relevance and public acceptance of educational materials (UNICEF, 2021). Therefore, this platform is expected to provide a contextual and easily implemented parenting education tool. Strengthening fathers' capacities through this platform is expected to positively impact child development.

The development of this digital flipbook is novel in several aspects. First, it is specifically designed with the perspective of fathers as the primary users, a practice rarely found in parenting education media. Second, its content integrates the Holistic Integrative Early Childhood Education (PAUD) approach with the BKB EMAS family parenting module. Third, it utilizes an interactive visual approach designed to address the characteristics of fathers as adult learners. Fourth, it has the potential for multimedia integration, such as video testimonials, to enhance the user's learning experience. These novelties make the digital flipbook an innovative parenting education media relevant to the needs of today's families. It also supports efforts to increase father involvement in early childhood care. Therefore, this research contributes to the development of digital technology-based family education media.

Based on this background, this study aims to develop and analyze the effectiveness of the digital flipbook media "Smart Fathers and Child Care" as a parenting education tool for fathers. This study also aims to determine the extent to which this media can improve fathers' understanding of early childhood care practices. Furthermore, this study seeks to identify the potential use of digital flipbooks in various family service programs. The results of this study are expected to contribute to the development of digital technology-based parenting education media. This research is also expected to support the implementation of the Holistic Integrative Early Childhood Education program in Indonesia. By increasing fathers' capacity in parenting, it is expected that the quality of interactions between fathers and children will also improve. Positive interactions between

fathers and children will have a positive impact on children's holistic development. Ultimately, strengthening the role of fathers in parenting will contribute to improving the quality of future generations.

## 2. RESEARCH METHODS

This research uses the method of research *and development*(R&D) with the development model *ADDIE* (*Analysis, Design, Development, Implementation, Evaluation*). This model was chosen because it is systematic and suitable for producing interactive digital-based learning media.

The first stage is analysis, which includes an analysis of fathers' needs in childcare, family literacy limitations, and an analysis of appropriate learning media. Furthermore, a material analysis was conducted to determine relevant content for the theme "Smart Fathers Raising Children."

The second stage is design, namely compiling the content framework of the *flipbook*. Starting from the title, material, illustrations, and evaluation activities in the form of questionnaires. The visual design was created using the application *Canva*, paying attention to typography, color, and attractive illustrations. The composition is also carried out *storyboard* as a systematic flow of material presentation.

The third stage is *development*, namely developing the design into a digital product. Page design created in *Canva*, exported in the form of PDF, then uploaded to the application *Heyzine* to be processed into *flipbook* Interactive. At this stage, features such as navigation buttons, video, and audio were added to make reading and accessing the material easier for users, making reading more enjoyable.

The fourth stage is *implementation*, namely, product trials on groups of fathers as target users. *Flipbook is shared* in the form of a *link* so that it can be easily accessed via a device.

The last stage is *evaluation*. The evaluation was conducted by involving fathers as respondents to the questionnaire. Fathers were asked to provide assessments through the questionnaire regarding content, appearance, ease of use, and usefulness of the *flipbook digital* as a learning medium. The results of this evaluation serve as the basis for product improvement and refinement.

## 3. RESULTS AND DISCUSSION

### 3.1. Research Results

Based on all stages of development and evaluation results, it can be concluded that the "Smart Fathers Raise Children" Gable Card media is an innovative parenting education media that is suitable for use. This media functions not only as a game, but also as a means of reflection on parenting experiences for fathers. The use of traditional games in parenting education also provides a more contextual approach for the community. The results of this study indicate that integrating games into family education can increase participant engagement. Furthermore, this media is also easy to use in various community activities. With a very high level of feasibility, this media has the potential for wider development. Therefore, this educational gable card media can be an alternative media in family parenting education programs.

This research resulted in a digital learning media product in the form of a flipbook entitled "Smart Fathers Raising Children," designed as a parenting education tool for fathers. This media was developed to help fathers understand their important role in supporting the optimal growth and development of early childhood. This digital flipbook utilizes interactive multimedia technology that combines text, illustrative images, animation, video, audio, and interactive links. The combination of these

elements aims to increase visual appeal while facilitating user understanding of the parenting material. This media is designed to be accessible via digital devices such as smartphones, tablets, and computers. This way, fathers can access parenting materials flexibly anytime and anywhere. The media design is simple yet informative, making it easy to use by fathers from various educational backgrounds. The development of this media is expected to be a practical solution in improving parenting literacy at the family level.

The Smart Father and Child Care digital flipbook is structured systematically to facilitate user comprehension. It consists of three main sections: an introduction, a core section, and a conclusion. The introduction includes a foreword, a user manual, a table of contents, and an introduction to the topics to be studied. This section serves as an initial guide for users to understand how to access and optimally utilize the tool. The core section then presents the main material on early childhood care. The material is presented concisely and visually, avoiding excessive reliance on lengthy text. Each topic is accompanied by visual illustrations and examples of everyday parenting practices. This structure is designed to facilitate users' gradual and contextual understanding of the material.

The core section of the digital flipbook contains several key topics related to early childhood care within the family. The first topic discusses the role of fathers in implementing the eight family functions as a foundation for developing children's character. Furthermore, the material covers the importance of maintaining the physical and mental health of mothers and children as part of quality parenting. The flipbook also includes material on fostering clean and healthy living habits within the family environment. Furthermore, it discusses the importance of fathers' roles in a child's first 1,000 days of life (HPK). This period is a critical period that significantly determines the quality of a child's future development. Other material presented discusses the involvement of fathers, along with other family members, in supporting childcare. The final topic in the core section discusses the concept of parenting that is responsive to children's needs.

The closing section of the digital flipbook contains additional information that supports broader use of the media. This section includes a bibliography listing the reference sources used in compiling the material. Furthermore, the closing section includes a summary of the material as a reminder to users of key points in parenting. This summary is presented in a simple visual format for easy understanding. The final page also includes information regarding family emergency contacts. This information includes family counseling services and child protection agencies that can be contacted in the event of a family emergency. This information provides added practical value for users. Thus, this digital flipbook is not only educational but also provides practical support for families.

Media development was conducted using a Research and Development (R&D) approach using the ADDIE model, which consists of five main stages. The first stage is analysis, which is the process of identifying user needs and problems faced by fathers in childcare. The second stage is design, which is designing the media structure, visual appearance, and content that will be included in the digital flipbook. The third stage is development, which is the process of creating digital media using interactive flipbook development software. The fourth stage is implementation, which is the media trial stage with fathers as target users. At this stage, respondents are asked to use the media and provide an assessment of the product's feasibility. The final stage is evaluation, which is the process of analyzing the trial results and revising the product

based on user input. This development process ensures that the resulting media meets user needs.

To determine the media's suitability from a user perspective, researchers conducted a pilot study with several fathers as respondents. Respondents were asked to complete an assessment questionnaire covering several key aspects. These aspects included the suitability of the content, visual appearance, ease of use, and the media's usefulness for users. The assessment was conducted using a percentage scale, which was then converted into media suitability categories. The analysis results showed that the digital flipbook obtained a suitability score of 90.8%. This score falls into the very suitable category based on the range of media suitability interpretations. This indicates that the developed media meet the suitability standards as a learning medium. These results indicate that the digital flipbook can be used as a parenting education tool for fathers. The results of the media suitability assessment by respondents can be seen in Table 1 below.

Table 1. Results of the Feasibility Assessment of the Digital Flipbook “Smart Fathers Raising Children”

<b>Evaluation Aspects</b>	<b>Percentage (%)</b>	<b>Category</b>
Content Suitability	91,5	Very Worthy
Visual Display	92,3	Very Worthy
Ease of Use	89,4	Very Worthy
Benefits of Media	90,1	Very Worthy
Rate-rate	90,8	Very Worthy

Based on the table, all assessment aspects scored above 85 percent, indicating a very good rating. The highest score was for visual appearance, indicating that the media design was considered appealing by users. Meanwhile, the ease-of-use aspect also received a high score, indicating that the media was easily accessible to fathers. These results demonstrate that the media design aligns with the characteristics of the target users.

The high percentage of suitability indicates that this digital flipbook has good user appeal. This medium is considered capable of presenting parenting information in an engaging and easy-to-understand manner. The combination of text, images, animation, and video helps enhance user comprehension of the material. This also demonstrates that digital media can be an effective alternative in family parenting education. For fathers with limited time, digital media offers flexibility in accessing information. Fathers can study the material independently without having to attend in-person training. This is a key advantage of digital-based media. Therefore, this digital flipbook has the potential to be an effective parenting education medium.

During the media trial, researchers also received feedback from respondents regarding the use of digital flipbooks. One respondent expressed difficulty reading due to limited literacy. This feedback was an important consideration in the product evaluation and revision process. Based on these findings, researchers added an audio text-reading feature to each page of the digital flipbook. This feature allows users to listen to the content without having to read it directly. With the audio feature, the media becomes more inclusive for users with limited literacy. This feature also helps fathers who have limited time to read. This way, information can still be easily accessed through listening.

In addition to the audio feature, another revision included the addition of emergency family contact information to the media's cover. These emergency contacts

include family counseling services and child protection agencies that families can contact. This added information aims to provide practical support for users in dealing with certain situations. Fathers gain not only theoretical knowledge about parenting but also practical guidance that can be used in emergencies. This demonstrates that the media serves not only as an educational tool but also as a source of practical information. With this information, users can feel more supported in dealing with various family situations. This approach strengthens the media's relevance in everyday family life.

Overall, the research results indicate that the Smart Fathers and Children Care digital flipbook has a very high level of suitability as a parenting education medium. This medium is able to present parenting information in an engaging, practical, and easily accessible manner for fathers. Trial results indicate that users responded positively to the media's design and content. The development of additional features, such as audio and family emergency contacts, also increased the media's inclusiveness. This indicates that the media has been designed with diverse user needs in mind. With a suitability level of 90.8 percent, this digital flipbook is considered highly suitable for wider use. This medium has the potential to be used in various family education programs such as PAUD (Early Childhood Education), BKB (Nursing and Child Development Center), and Posyandu (Integrated Service Post). Thus, this digital flipbook can be an innovative parenting education medium that supports increased father involvement in early childhood care.

### 3.2 Discussion

The results of the study show that the digital flipbook **Smart Father Raising Children** achieved a feasibility rating of 90.8%, which is categorized as very feasible. This percentage indicates that the developed media meets the requirements of content quality, appearance, ease of use, and user benefits. These findings indicate that digital media can be an effective means of conveying parenting information to parents, especially fathers. The use of technology-based media allows for more flexible and easily accessible information presentation. This is important because fathers often have limited time to participate in in-person educational activities. Digital media allows fathers to learn parenting materials at any time according to their availability. These findings align with research by Mayer (2020), which states that the use of interactive multimedia can improve user understanding of learning materials. Furthermore, digital media has also been shown to increase user engagement in the learning process (Adawiah et al., 2022).

The use of digital flipbooks in this study demonstrated that interactive visual media has a high appeal for users. The display, which combines text, images, and animations, helps users understand the material more easily. This aligns with multimedia learning theory, which states that the combination of visual and verbal information can enhance user comprehension (Mayer, 2020). Previous research also shows that interactive digital learning media can increase user learning motivation (Gifara & Saridewi, 2024). In the context of family parenting education, interactive visual media can help parents understand parenting concepts more concretely. Presenting information in the form of illustrations also makes it easier for users to visualize the application of the material in everyday life. This is crucial in parenting education because adult learning tends to be more effective when accompanied by real-life examples. Therefore, the use of interactive visual media can increase the effectiveness of delivering educational messages to parents.

Paternal involvement in early childhood care is a crucial factor influencing child development. Numerous studies have shown that fathers who are actively involved in caregiving can positively impact children's cognitive, social, and emotional development. Paternal involvement also contributes to increased self-confidence and social skills. Research by Sarkadi et al. (2018) shows that paternal involvement in caregiving is positively correlated with children's psychological well-being. Furthermore, Jeong et al. (2016) found that positive interactions between fathers and children can enhance children's language development and social skills. A father's presence in a child's daily life can also increase a child's sense of security and emotional stability. Therefore, strengthening the father's role in caregiving is an important part of early childhood development programs. Educational media such as digital flipbooks can be a means to raise fathers' awareness of the importance of this role.

The results of this study also show that fathers responded positively to the use of digital media as a learning tool. This suggests that a technological approach can be an effective strategy in reaching fathers as target users. Many fathers do not have time to attend in-person parenting training. Therefore, digital media offers a more flexible and practical learning alternative. Research by the OECD (2019) shows that the use of digital technology in family education can increase access to parenting information. Furthermore, digital media also allows for broader dissemination of information to the public. In the context of family education, technology can be an effective tool for improving parenting literacy. Therefore, the development of digital media such as flipbooks has great potential to support family education programs.

The findings of this study also indicate that simple and practical media design is a crucial factor in increasing user acceptance. Fathers tend to be more attracted to concise and easy-to-understand media. Presenting material in the form of visual illustrations helps users grasp parenting concepts more quickly. This aligns with the principles of instructional design, which emphasize the importance of simplicity in presenting information (Clark & Mayer, 2016). Media that is too complex can reduce user interest in learning the material. Therefore, simple yet informative media design is an effective strategy in developing family educational media. Recent research also shows that engaging visual design can increase user engagement in digital learning (Hsu et al., 2019). This demonstrates that design plays a crucial role in the success of digital learning media.

One of the advantages of digital flipbooks in this study is their ability to integrate various multimedia elements. This media combines text, images, animation, audio, and video in a single learning platform. This multimedia integration helps improve users' understanding of the material presented. Research shows that the use of multimedia in learning can significantly improve information retention (Mayer, 2020). This is because information is processed through more than one cognitive channel. In the context of parenting education, presenting information in various formats can assist users with different learning styles. Some people understand material more easily through text, while others do better through visuals or audio. Therefore, multimedia integration can increase the effectiveness of parenting education media.

The addition of an audio feature to digital flipbooks is a key innovation in the development of this media. This feature was added in response to feedback from respondents who have difficulty reading. The audio feature allows users to listen to the material without having to read the text directly. This demonstrates that the media has been designed with the principle of inclusivity in learning in mind. According to UNESCO (2023), inclusive learning media must be able to reach users with various literacy levels and learning abilities. The addition of the audio feature also helps fathers

who have limited time to read the material thoroughly. By listening to the material, users can still obtain important information about childcare. Therefore, the audio feature is one aspect that increases media accessibility.

In addition to the audio feature, the addition of emergency family contact information also adds value to this media. This information includes family counseling services and child protection agencies that users can contact. This information provides practical benefits for families in dealing with various potential situations. In the context of childcare, access to social support and professional services is crucial. Research shows that families with access to support services are more likely to cope with parenting challenges (Britto et al., 2017). Therefore, providing emergency contact information can help families obtain the necessary assistance. This demonstrates that the media serves not only as an educational tool but also as a source of practical information for families. Thus, this media has broader benefits for users.

The results of this study also indicate that parenting education media specifically designed for fathers is still relatively rare. Most parenting education programs are still primarily aimed at mothers as the primary caregivers. However, research shows that father involvement has a significant impact on child development. According to Cabrera et al. (2018), fathers who are actively involved in parenting can improve children's cognitive and social development. Furthermore, father involvement also contributes to children's emotional stability within the family. Therefore, developing educational media specifically targeted at fathers is an important step. This media can help raise fathers' awareness of their role in childcare. Therefore, the development of this digital flipbook contributes to strengthening the role of fathers within the family.

The findings of this study also indicate that a family-based approach is an effective strategy for supporting early childhood development. Parenting programs that actively involve families have been shown to improve the quality of stimulation provided to children. Research by Yoshikawa et al. (2018) shows that family-based interventions have a positive impact on early childhood development. This is because the family is the first environment that influences a child's development. Therefore, improving family parenting capacity is a crucial part of early childhood education programs. Educational media such as digital flipbooks can be a means to enhance this capacity. By providing access to practical parenting information, parents can improve the quality of interactions with their children.

Furthermore, this media also supports the implementation of the Holistic Integrative Early Childhood Education (PAUD) concept, which emphasizes the synergy between education, health, nutrition, and family care. The flipbook material covers various aspects related to child development. This demonstrates that this media is designed to support a comprehensive parenting approach. A holistic, integrative approach is believed to create an optimal growth and development environment for children (Britto et al., 2017). By integrating various aspects of parenting, this media can help parents understand their children's needs more comprehensively. This is important because child development is influenced by various interrelated factors. Therefore, a holistic, integrative approach is an important foundation in the development of this media.

The use of digital media in parenting education is also in line with the development of digital transformation in education. Digital technology provides new opportunities for disseminating educational information to the public. Recent research shows that the use of digital technology can increase public access to learning resources (UNESCO, 2023). Digital media also enables faster and broader information dissemination. This is highly relevant to the needs of modern society, which is increasingly dependent on technology. In the context of family education, technology can be an effective tool for

improving parenting literacy. Therefore, the development of digital media such as flipbooks is an innovative step in family education. This innovation can support efforts to improve the quality of parenting in the community.

The results of this study indicate that digital flipbooks have the potential for broader implementation in various family education programs. This medium can be used in educational activities in early childhood education units (PAUD). Furthermore, digital flipbooks can be utilized in the Toddler Family Development (BKB) program and integrated health post (Posyandu) activities. The use of this medium can also be developed in community-based family mentoring programs. With broader utilization, this medium can reach more families in various regions. This can support government efforts to improve the quality of family care. Therefore, the development of this digital medium has the potential to contribute significantly to family education programs in Indonesia. The widespread use of this medium is expected to increase father involvement in childcare.

Overall, the research results indicate that the Smart Father and Child Care digital flipbook is an effective and relevant parenting education media innovation that meets the needs of today's families. This media is able to present parenting information in an engaging, practical, and easily accessible manner for fathers. The high level of user acceptance indicates that this media is well-received by users. The addition of audio features and emergency contact information also increases the media's accessibility and practical benefits. Thus, this media serves not only as a source of information but also as a means of family empowerment. Strengthening the role of fathers in parenting is expected to have a positive impact on child development. Therefore, the development of digital educational media is necessary to continue to support family education. Media innovations such as this can be one strategy in improving the quality of future generations.

#### 4. CONCLUSION

This research produces learning media in the form of *flipbook digital* entitled Smart Father Raising Children, which was developed with a model of *ADDIE. Flipbook digital*. This application contains interactive content in the form of text, images, animations, links, audio, and video, organized into three main sections: introduction, main body, and conclusion. Trial results showed a feasibility level of 90.8%, which falls into the category of very worthy. This confirms that the developed media can be a practical and interactive educational tool for fathers in child rearing. The research findings also show that *flipbook digital*. It is not only useful as a source of information, but also inclusive because it is accessible to fathers from various literacy backgrounds. The addition of audio features for reading text and emergency family contact numbers strengthens its function as a *flipbook digital*, both as an educational medium and a practical guide in everyday life. Thus, digital flipbooks *Smart Father Raising Children* can be used as an innovation in family learning media that supports improving the quality of holistic early childhood care.

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