

Need Analysis of Parenting Application Based on Riau Malay Culture

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Abstract. The role of parents in children's lives has always been significant, but in today's changing world, parents face new challenges brought about by shifts in society and technology. This study aims to analyze parents' specific needs for parenting information delivered through technology. The research utilized survey methods and gathered data from 62 parents with children aged 0-6 years in three districts of Riau Province: Pekanbaru, Kampar, and Indragiri Hilir. The analysis of the collected data reveals that most parents prefer digital resources for obtaining parenting information, with Android being the most commonly used platform. The most sought-after information by parents includes positive parenting strategies, interaction skills, and effective communication techniques. Furthermore, parents show a preference for visual and video content when receiving parenting information. It is noteworthy that 51.5% of parents have already utilized parenting applications, but a significant majority (82.3%) remain unaware of any parenting applications based on Riau Malay culture. Parents express the desire for Malay cultural values, which are closely associated with Islam, to be integrated into parenting practices, as it is believed that this approach can effectively instill Islamic values in children.

1 Introduction

The role of parents requires sincerity and lifelong learning to effectively educate their children. Parents often face challenges and obstacles due to their children's behavior, environmental conditions, and various factors stemming from themselves [1]. A person's ability to successfully fulfill the role of a parent can be influenced by their own upbringing experiences and the parenting knowledge they acquire from various sources. Adequate parenting is generally characterized by positive communication, warmth, attentiveness, and stimulation, all aimed at enhancing child development in various aspects [2].

Parenting can be viewed as a cultural attainment. The interaction between parents and children serves as a means to pass on moral values upheld and embraced by society [3]. Consequently, families bear the responsibility of instilling positive attitudes and thought patterns in their children that align with societal norms and cultural values [4]. Riau Province, located on Sumatra Island in Indonesia, is one of the places where Malay culture thrives and is practiced by the local society. According to Tambak & Sukenti [5], the

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influence of Riau Malay culture as local wisdom significantly shapes the positive character of young children in the realm of education [6].

While enculturation exists in various settings, the family environment is most conducive to achieving optimal results [7]. In the case of children's education, the values and norms of Riau Malay culture can be utilized as local wisdom in parenting, effectively countering unsuitable foreign cultures that may clash with the Malay identity. Thus, young children growing up in the digital era can maintain their identity as Malays who prioritize customs, values, norms, and morality based on Islam.

In the digital age, parenting has become increasingly dynamic and challenging. Parents require easily accessible information to effectively carry out their childcare responsibilities [8]. Technology provides convenient and extensive access to parenting information [9], enabling parents to directly access the necessary support. Digital platforms offer an opportunity to deliver high-quality information to families with quick and easy access, making them invaluable in this regard [10].

Technology-based parenting interventions can be conducted through computers, smartphones, and tablets to support parents' psychological well-being and foster desired behaviors in children [11]. Additionally, the development of parenting intervention applications brings forth new avenues for evidence-based parenting approaches, personalized interventions, and innovative methods in parenting programs [12].

Based on preliminary research, no parenting application has been developed with a focus on culture. However, the Riau Malay community, recognizing the importance of preserving their noble cultural values in the face of globalization, has made various efforts to uphold these values. These efforts include integrating culture into classroom learning, conducting cultural ceremonies and activities, and implementing cultural values in everyday life. In child-rearing, one approach is to combine parenting based on Riau Malay culture with interventions delivered through digital media, which is widely used by most parents today.

The objective of this study is to analyze the need for developing parenting applications that meet parents' expectations. In order to develop such applications, it is essential to identify the prospective users among parents. Thus, the application should align with their perceptions, requirements, and digital skills. The data collected will serve as the foundation for developing a parenting application based on Riau Malay culture.

2 Theoretical Framework

2.1 Parenting

Among all forms of human relationships, the parent-child bond is one of the most significant [13]. Parents play a fundamental role in shaping their child's development, from genetic contributions to the choice of the child's upbringing environment [14]. Responsive parent-child relationships and parental support during the early stages of a child's life are crucial for their development.

Parenting is a broad concept encompassing the stable and enduring behaviors and attitudes of parents throughout the child-rearing process [15]. The purpose of parenting is to prepare children for life's challenges and shape their behavior and identity [16]. Parents play a significant role in guiding children's learning and creative activities, acting as role models for interpersonal relationships and problem-solving [17].

2.2 Parenting Based on Riau Malay Culture

When a child is raised by parents or other influential figures, a process of acculturation occurs, wherein the child learns and adapts to the culture in which they grow up [18]. In the Riau Malay community, Islamic values form the foundation of social life and are inseparable from the local culture. All aspects of life are influenced by the values and norms governing personal life, family, and society. Malay culture, with its emphasis on positive character, manners, cooperation, and simplicity, shapes children's moral values through advice, motivation, reprimands, understanding, role modeling, communication, and support [19].

2.3 Parenting Application

The digital revolution has significantly transformed the world and impacted human lives, leading to digital transformation [20]. Furthermore, digital technology has accelerated the innovation process, propelling the growth of products and services to an advanced level [21]. Digital technology increases access to information, benefiting parents in their personal development. Parents require assistance in their daily parenting endeavors and guidance in child-rearing, accessible whenever they need it. In this regard, mobile applications provide the best option in line with the growth of technology and lifestyle.

Direct parenting interventions support parents with information and facilitate children's development in various aspects. Current research indicates that online parenting interventions have a positive and significant effect on strengthening early parenting behaviors [22]. Moreover, digital parenting interventions can enhance positive behaviors in both children and parents [23]. Digital parenting support is also efficient in assisting parents from diverse backgrounds [24].

These interventions are conducted through digital media such as smartphones and tablets, allowing parents to access the required support, including knowledge, best practices, and emotional support from other parents and professionals [11,25].

3 Methodology

This research utilizes a quantitative approach, which involves describing phenomena using statistics and generating numerical data [26]. The quantitative approach is employed in this study to gather a substantial amount of data regarding parents' opinions and needs for a parenting application.

The participants in this research were 62 Riau Malay parents from three districts in Riau Province: Pekanbaru, Kampar, and Indragiri Hilir. They had children aged 0-6 years. The participants were asked to complete a questionnaire distributed through Google Forms to reach those in relatively remote locations.

The collected data were analysed and explored to gain detailed insights into parents' perceptions and needs regarding parenting based on Riau Malay Culture and the desired features of a parenting application. Descriptive statistics were employed to analyse the data, as this method is commonly used to quantify, explain, and summarize research data logically and meaningfully [27]. The analysis focused on exploring parents' thoughts on parenting values of Riau Malay Culture, preferred media platforms for the application, and their desired mode of information delivery. The findings of this research serve as the basis for developing a parenting application based on Riau Malay culture.

4 Results and Discussion

The initial stage in developing a parenting application is the needs analysis. The data collected provide an overview of parents' needs and expectations, serving as a reference for developing a parenting application that precisely meets those needs.

The need analysis results encompass the preferred platform for the parenting application, sources of parenting information, digital information accessibility, and desired parenting content.

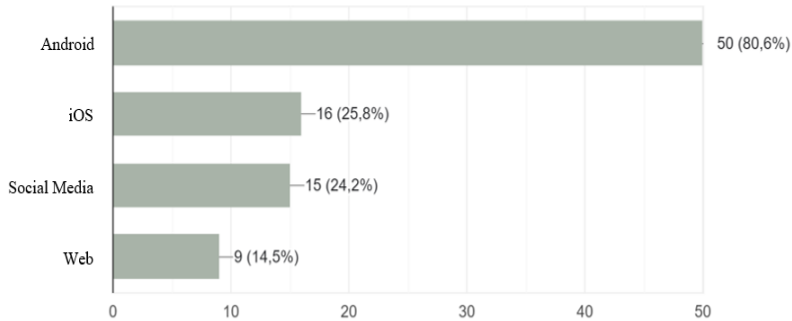


Fig. 1. The Platform for Parenting Application.

Android and iOS are currently the leading operating systems used worldwide [28]. Pic 1 demonstrates that Android is the preferred platform for parenting information among parents (80.6%). This is largely due to the widespread use of Android-based smartphones in Indonesia. As of August 2022, Android users in Indonesia accounted for 89.42%, according to www.statcounter.com.

Smartphones are personal devices that provide communication, entertainment, and access to information [29]. Since its launch, Android has gained popularity among users from various backgrounds. In addition to being available on most smartphones, the platform is user-friendly and easy to navigate [30].

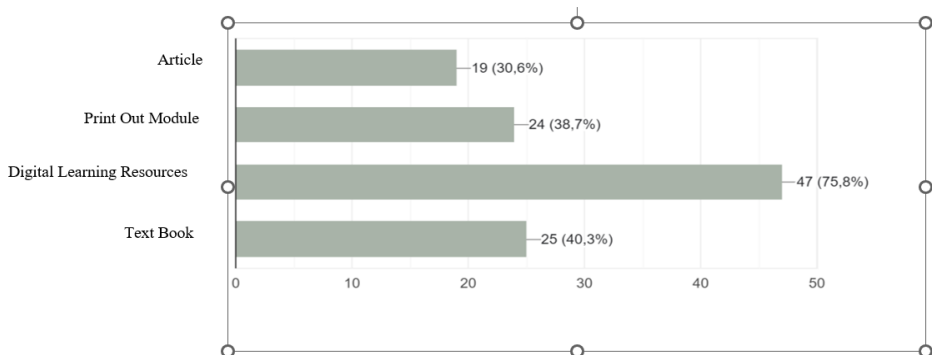


Fig. 2. Source of Parenting Information.

Fig. 2 illustrates the sources of parenting information chosen by parents. As depicted, 75.8% of parents opt for digital sources to obtain parenting information. While some parents still prefer traditional sources such as textbooks, printed modules, and articles, digital parenting sources have gained more popularity. The increasing phenomenon of dual-working parents and new and inexperienced parents who seek immediate online parenting resources

has contributed to this trend [31]. Online chat forums organized by professionals have also become a means for parents to seek advice, discuss parenting practices, and seek assistance. Digital technology offers a solution to foster a better family atmosphere through online parenting intervention [32].

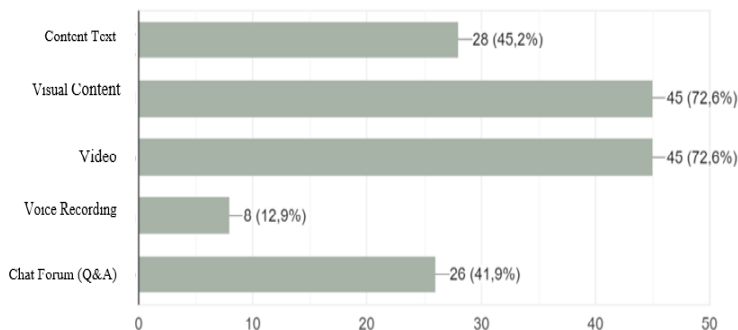


Fig. 3. Sources of Digital Information.

Fig. 3 presents the sources of digital information favoured by parents. Visual content and videos are the preferred choices for most parents. Visual content has a strong impact on individuals as images tend to be more attention-grabbing than text [33]. Visual content, when combined with text or audio, effectively conveys information and facilitates understanding [34]. Videos, on the other hand, combine images, audio, and written information, making them effective in capturing individuals' attention while conveying information [35]. Textual information is also favoured by parents, as chat forums allow them to interact and discuss parenting-related issues.

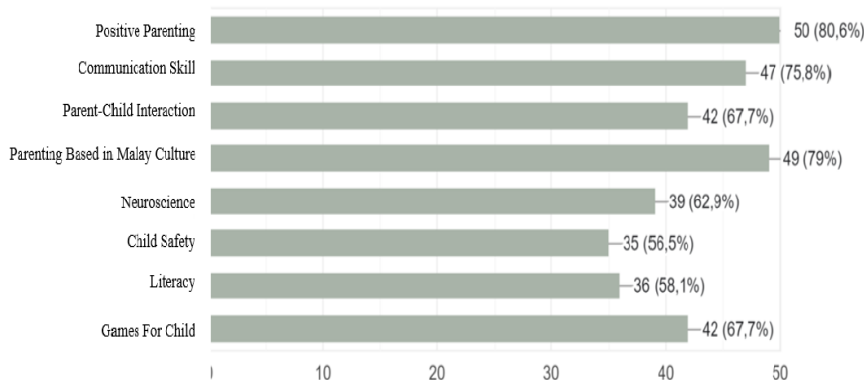


Fig. 4. Parenting Content.

Fig. 4 displays the parenting content that parents deem most necessary. Positive parenting is chosen by 80.6% of parents, followed by communication insights at 79%, and parenting based on Riau Malay culture at 75.8%. Positive parenting plays a crucial role in children's behavior and influences their physical and mental well-being in later life [36]. Both negative and positive parenting have lasting effects on childhood experiences, which can impact physical and mental health in adulthood [37]. Positive parenting is highly valued by parents for its significant contribution to children's development. Communication serves as a gateway to interact with children, and parents' ability to communicate effectively aids in

understanding their needs and enforcing rules [2]. Parenting content based on Riau Malay culture is also sought after by parents. In Riau Province, Malay culture not only represents identity but also encompasses noble values that influence daily life. This culture is passed down to future generations through speech and daily behavior in families, communities, and organizations. In Riau Malay culture, "tunjuk ajar" refers to instructions, mandates, positive character traits, and advice that guide individuals on the right path and promote obedience to Allah in accordance with Islamic teachings [38].

5 Conclusion

In conclusion, this research highlights parents' need for parenting information accessible through digital technology, which aligns with their internet-centric lifestyle. Therefore, the parenting application being developed will be available on Android and iOS platforms, delivering information through visual presentations, videos, and text. The application will provide comprehensive information on positive parenting, parent-child communication, and parenting based on Riau Malay culture.

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