

## Research on a Digital Basketball Sports Game (DBSG) Framework Based on the Female Perspective

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**Abstract :** Context: The context of this study is the field of Digital Basketball Sports Games (DBSG). The existing DBSGs often prioritize competitiveness and confrontation, neglecting the narrative and progressive expression, especially from a female standpoint. This study aims to address this gap by analyzing existing DBSGs and proposing a comprehensive framework tailored to meet the needs and desires of women in basketball. Research Aim: The aim of this research is to examine the narrative perspectives of women in basketball and understand their desires and expectations within the sport. It also seeks to investigate methods to seamlessly integrate women's basketball stories into gameplay, addressing their specific needs and expectations. Additionally, the study aims to develop a digital basketball sports game framework that combines narrative richness and entertainment, with a focus on the female audience. Methodology: The study utilizes affective-arousal theories as a psychological framework to explore how emotional arousal influences player engagement and responses in the digital basketball sports game. It employs in-depth case studies to examine specific instances and gain insights into the implementation and impact of narrative elements and educational features in existing DBSGs. Comparative studies are conducted to analyze different DBSGs, identifying effective strategies and shortcomings. Findings: The research findings contribute to the development of a digital basketball game framework from a female perspective. This framework enhances the completeness, diversity, and inclusivity of digital basketball sports games. By addressing the specific needs of women in basketball, including fundamental knowledge, sports skills, safety awareness, and rehabilitation training methods, the framework provides a foundational reservoir for a broader range of basketball participation. It enriches the gaming experience by enhancing enjoyment, narrative, and diversity. It also acts as a catalyst to encourage more women to engage with basketball stories, participate in the sport, persevere, and derive greater enjoyment while benefiting their physical fitness and health. Theoretical Importance: The study contributes to the existing literature by incorporating game motivation psychology theories and proposing a comprehensive framework that caters to the specific needs of women in basketball. It emphasizes the importance of considering the narrative and progressive expression in DBSGs, especially from a female perspective. The research explores affective-arousal theories and provides insights into how emotional arousal can influence player engagement and responses in digital basketball sports games. Data Collection and Analysis Procedures: The study collects data through in-depth case studies of existing DBSGs, examining specific instances to uncover insights into the implementation and impact of narrative elements and educational features. Comparative studies are conducted to contrast and analyze various DBSGs, identifying effective strategies and shortcomings. The analysis procedures involve identifying commonalities, differences, strengths, and weaknesses among the DBSGs, guiding the development of a female-centric perspective in the proposed framework. Questions Addressed: The study addresses the following questions: What are the narrative perspectives of women in basketball? How can women's basketball stories be seamlessly integrated into gameplay? What are the specific needs and expectations of women in basketball? What effective strategies and shortcomings exist in current DBSGs? How can a digital basketball game framework be developed to cater to the female audience? Conclusion: In conclusion, this study contributes to the field of DBSGs by proposing a comprehensive digital basketball game framework from a female perspective. The framework enhances the inclusivity, diversity, and enjoyment of DBSGs by addressing the specific needs and desires of women in basketball. It provides a foundation for a broader range of basketball participation, enriching the gaming experience and benefiting women's physical fitness and health. The research, using affective-arousal theories and in-depth case studies, provides valuable insights into the implementation and impact of narrative elements and educational features in existing DBSGs, guiding the development of the proposed female-centric framework.

**Keywords :** digital basketball game, game framework, female perspective, game narratives

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