



Community Empowerment through a Basketball Program to Enhance Social Interaction and Health

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Abstract.

Background

Limited physical activity and weak social interaction remain common challenges in many communities, contributing to declining health and social cohesion. Community-based sports programs, particularly basketball, offer a practical approach to addressing both physical and social issues simultaneously.

Objectives

This study aims to analyze the effectiveness of a community empowerment program through basketball in improving social interaction and health among community members.

Methods

This study employed a participatory action research approach involving community members aged 15–45 years. The program consisted of structured basketball training sessions conducted over several weeks. Data were collected using health questionnaires, social interaction scales, physical fitness assessments, and direct observation. Data were analyzed using descriptive statistics and pre–post comparison analysis.

Results

The findings showed improvements in participants' physical fitness, perceived health status, and frequency of positive social interactions. Participants demonstrated enhanced teamwork, communication skills, and community engagement throughout the program.

Conclusion

The results indicate that a community-based basketball program is an effective empowerment strategy for enhancing social interaction and health. Such programs can be integrated into community development and public health initiatives to promote sustainable well-being.

Keywords: Community Empowerment, Basketball Program, Social Interaction, Health.

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INTRODUCTION

In daily life, many communities experience decreasing levels of physical activity and limited social interaction. People tend to spend more time with digital devices, work routines, and individual activities, which reduces opportunities for direct social engagement and collective physical exercise. According to the World Health Organization (WHO, 2018), physical inactivity is one of the leading risk factors for global mortality and contributes to various non-communicable diseases. In addition, Putnam (2000) explained that the decline in social interaction and community participation weakens social capital, which is essential for maintaining community well-being. These everyday conditions indicate the need for practical community-based interventions that promote both physical health and social interaction simultaneously.

Previous studies have shown that sport-based activities play an important role in improving physical and psychosocial outcomes. Coalter (2013) emphasized that sports, when implemented in a community empowerment framework, can enhance social inclusion, cooperation, and collective responsibility. Basketball, as a team sport, has been proven to improve cardiovascular fitness, agility, and muscular endurance (McInnes et al., 1995). Moreover, participation in team sports contributes to the development of communication skills, teamwork, and a sense of belonging among participants (Carron, Hausenblas, & Eys, 2005). Eime et al. (2013) further highlighted that regular involvement in community sports is associated with better mental health, stronger social networks, and healthier lifestyles.

Although the benefits of basketball and other team sports have been widely documented, most existing studies focus on competitive performance, school-based athletes, or elite sport contexts. Limited research has examined basketball as a structured community empowerment program aimed at improving social interaction and health among the general community. In everyday community settings, such as neighborhoods or informal sports groups, basketball is often played without clear objectives related to health promotion or social development. This lack of structured community-focused

research creates a gap between theoretical benefits of sports and their practical application in community empowerment programs. Considering the increasing prevalence of sedentary lifestyles and weakening social ties observed in daily community life, basketball offers a practical and accessible solution. Basketball courts are commonly available in many communities, and the sport can be played by individuals of different ages and backgrounds. As stated by Bailey (2005), sports-based programs are most effective when they are enjoyable, inclusive, and socially engaging. Therefore, examining basketball within a community empowerment framework is important to understand how routine sports activities can be transformed into purposeful programs that enhance health and social interaction.

The purpose of this study is to analyze the effectiveness of a community-based basketball program in improving social interaction and health among community members. It is hypothesized that participation in a structured basketball program will lead to improved physical health indicators and increased positive social interaction, including teamwork, communication, and community engagement. The findings of this study are expected to provide evidence-based support for the use of basketball as a sustainable strategy for community empowerment and public health promotion.

METHOD

Participants

The participants of this study consisted of 120 community members who voluntarily took part in the community-based basketball empowerment program. Participants were recruited from several neighborhood communities and local basketball groups in the study area. The age of participants ranged from 15 to 50 years, representing adolescents, young adults, and adults. Both male and female participants were included to reflect the diversity of the community. The inclusion criteria were individuals who (1) resided in the target community, (2) were physically capable of participating in moderate-intensity physical activity, (3) had no medical contraindications for sports participation, and (4) were willing to follow the program schedule from beginning to completion. Participants who had acute injuries or medical conditions that restricted physical activity were excluded from the study.

All participants received a clear explanation of the program objectives and procedures prior to participation. Informed consent was obtained from all participants, and for participants under 18 years of age, consent was also obtained from parents or legal guardians. Throughout the program, participant attendance and engagement were monitored to ensure data completeness and program adherence. The relatively large number of participants allowed for a more comprehensive evaluation of the basketball program's impact on social interaction and health, while also reflecting real-life community conditions commonly encountered in sport-based empowerment programs.

Research Design

This study employed a community-based participatory research design with an observational pre-post approach. The design was chosen to evaluate changes in social interaction and health outcomes among community members following participation in a structured basketball program. By involving participants directly in the program activities, this design allowed the study to capture real-life conditions commonly found in community empowerment initiatives.

The basketball program functioned as the main intervention, consisting of regular training sessions and team-based games. Measurements were conducted before the program (pre-test) and after program completion (post-test) to assess changes in participants' social interaction and health indicators. This design did not include a control group, as the primary focus was on evaluating the practical impact of the program within the community setting rather than establishing causal relationships under experimental conditions.

To ensure methodological rigor and transparency, this study followed the STROBE guidelines for observational studies. The use of an observational design was considered appropriate due to ethical considerations, voluntary participation, and the naturalistic implementation of the program. This approach supports the applicability of the findings to real-world community contexts and provides valuable insights for sport-based community empowerment practices.

Data Analysis

Data analysis was conducted to evaluate changes in social interaction and health outcomes among participants before and after involvement in the community-based basketball program. All collected data were first checked for completeness and consistency prior to analysis. Descriptive statistics were used to summarize participant characteristics and research variables. These included frequencies, percentages, means, and standard deviations to describe demographic data, social interaction scores, and health indicators. This step aimed to provide an overview of participants' baseline conditions and post-program outcomes.

To examine the effect of the basketball program, a pre-post comparison analysis was applied. Mean scores of social interaction and health variables before and after the intervention were compared to identify changes following program participation. The analysis focused on improvements in communication, teamwork, social engagement, perceived health

status, and physical fitness indicators. Observation data collected during the basketball sessions were analyzed descriptively to support quantitative findings. Behavioral indicators such as participant participation, cooperation, and interaction during training and games were summarized to provide contextual understanding of the program's impact.

All statistical analyses used ordinary statistical methods appropriate for community-based observational studies. The results were presented in tables and narrative form to facilitate interpretation and discussion of findings related to community empowerment through basketball activities.

RESULTS AND DISCUSSION

Results

The results of this study present quantitative changes in social interaction and health outcomes among participants after completing the community-based basketball program. A total of 120 participants completed both the pre-test and post-test assessments and were included in the analysis. Descriptive analysis showed significant improvements in participants' physical health indicators. The mean perceived health score increased from 3.12 ± 0.54 before the program to 3.89 ± 0.47 after the program. Cardiovascular endurance, measured through basic fitness assessments, improved by an average of 18.6%, while agility performance increased by 15.2% compared to baseline measurements. These findings indicate positive physical adaptations following regular participation in basketball activities.

Social interaction outcomes also demonstrated notable improvements. The mean social interaction score increased from 3.05 ± 0.60 at pre-test to 4.01 ± 0.51 at post-test. Improvements were observed across all measured dimensions, including communication (+0.92), teamwork (+1.04), and cooperation (+0.88). Observation data supported these results, showing that 82% of participants actively engaged in team communication during sessions, compared to 56% observed during the initial weeks of the program.

Attendance records indicated strong participant engagement, with an average attendance rate of 87% across all sessions. Overall, the quantitative findings suggest that the community-based basketball program contributed positively to improving both health and social interaction among community members.

Discussion

The findings of this study have important implications for community development and public health initiatives. The positive improvements in social interaction and health outcomes indicate that community-based basketball programs can be utilized as a practical strategy to promote active lifestyles and strengthen social cohesion. Local governments, community organizations, and educational institutions may consider integrating structured basketball activities into regular community programs to encourage physical activity while fostering teamwork and communication among community members.

This study contributes to the existing literature by providing empirical evidence on the role of basketball as a community empowerment tool rather than solely a competitive sport. Unlike previous studies that primarily focus on elite athletes or performance outcomes, this research highlights the social and health benefits of basketball in everyday community settings. The findings support the application of sport-based empowerment models and extend knowledge on how team sports can enhance social interaction and well-being at the community level.

Despite its contributions, this study has several limitations. The absence of a control group limits the ability to establish causal relationships between the basketball program and observed outcomes. In addition, the study was conducted within a single community setting and over a relatively short intervention period, which may restrict the generalizability of the findings. The reliance on self-reported health measures may also introduce response bias.

Future research is recommended to involve larger and more diverse populations across different community settings. The inclusion of a control group and longer intervention periods would strengthen the robustness of the findings. Further studies may also incorporate qualitative approaches, such as interviews or focus group discussions, to gain deeper insights into participants' experiences and perceptions. Additionally, integrating basketball programs with health education or injury prevention components could enhance their effectiveness as comprehensive community empowerment interventions.

CONCLUSION

This study set out to examine the effectiveness of a community-based basketball program in enhancing social interaction and health among community members, as outlined in the Introduction. The findings presented in the Results and Discussion chapters demonstrate that the program successfully met these expectations. Participation in structured basketball activities was associated with improvements in physical health indicators, perceived health status, and various aspects of social interaction, including communication, teamwork, and cooperation.

The compatibility between the study objectives and the outcomes indicates that basketball can function not only as a recreational sport but also as an effective community empowerment tool. The results confirm that regular and well-organized basketball programs provide meaningful opportunities for physical activity while simultaneously strengthening social relationships within the community.

Looking forward, the findings of this study offer prospects for further development and broader application. Community-based basketball programs can be expanded to different populations, age groups, and settings, and integrated with health education, injury prevention, or psychosocial support initiatives. Future studies are encouraged to adopt longer intervention periods, comparative designs, and mixed-method approaches to deepen understanding of the long-term impact and sustainability of sport-based community empowerment programs.

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AUTHOR CONTRIBUTION STATEMENT

VIPS contributed to the research conception and design, program implementation, data collection, and manuscript drafting. ZAK was responsible for instrument development, data analysis, and interpretation of the results. DKZ assisted in field coordination, data collection, and manuscript revision. All authors reviewed and approved the final version of the manuscript.

CONFLICT OF INTEREST AND FUNDING

The authors declare that there is no conflict of interest regarding the publication of this article.

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