Study of the Impact of Sports Participation on Social Capital among Drug Addicts

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ABSTRACT
Drug addiction not only affects the health of individuals, but also leads to the breakdown of social ties and the loss of social capital. As a form of social participation, sports activities can help drug addicts rebuild social ties and increase social interactions, thereby promoting the accumulation and enhancement of their social capital. By analyzing related studies, this paper reveals the potential value of sports participation in helping drug addicts integrate into society. The findings indicate that sports activities can expand the social networks of drug addicts, enhance social trust and mutual support, improve social cohesion, promote a sense of civic responsibility, disseminate positive values, promote health and well-being, and facilitate cross-cultural communication. It provides a theoretical and practical basis for future in-depth research on how drug addicts integrate into society.

KEYWORDS
Sports Participation; Drug Addiction; Social Capital; Social Network.

1. INTRODUCTION
According to the China Anti-Drug Report (2023), although the number of drug-related cases is continuously decreasing, there are still about 1.12 million drug addicts in China by the end of 2022 [1]. Drug addiction is a complex social health problem that not only has far-reaching negative impacts on the physical, psychological, and social life of individuals, but also triggers multiple challenges such as social isolation, employment difficulties, health problems, and the breakdown of family and community relationships. These problems limit the accumulation of social capital among drug addicts and exacerbate their social marginalization. In recent years, there has been a proliferation of articles on the role of sports participation in drug addiction treatment and relapse prevention for drug addicts, and a large number of studies in recent years have shown that sports participation, as a positive social activity, has a positive impact on the prevention of relapse among drug addicts. For drug addicts, sports participation may be an effective way to help them reintegrate into society, return to a healthy lifestyle, and gain social support and acceptance. This study aims to explore how sports participation affects the social capital accumulation process of drug addicts, and to reveal the real problems of drug addicts in the process of social reintegration by analyzing the impact of sports participation on social capital and the related studies on social capital of drug addicts. The results of the study will provide theoretical basis and practical guidance for the design and implementation of relevant rehabilitation programs, and promote the comprehensive rehabilitation and social integration of drug addicts.
2. DEFINITION OF RELEVANT CONCEPTS

Sports participation: sports participation was first used by the American scholar Kenyon in the initial argument for the role of sports in the concept, which includes not only direct participation in sports activities, but also things directly or indirectly related to sports [2]. The sports participation referred to in this paper contains two aspects: direct participation in sports activities and indirect participation in sports activities.

Drug addiction: according to Article 357 of the Criminal Law, drugs refer to opium, heroin, methamphetamine (meth), morphine, marijuana, cocaine, and other narcotic drugs and psychotropic substances controlled by the state that are capable of forming an addiction [3]. Addiction is defined as a chronic relapsing encephalopathy in drug users resulting from repeated drug use, manifested by compulsive drug-seeking and drug-using behaviors regardless of adverse consequences, often accompanied by varying degrees of impairment of personal health and social functioning [4].

Some scholars (2021, 2023) have pointed out that the main biological basis of drug addiction is the brain reward system, and the American Institute on Drug Dependence (AIDD) proposed the neural circuit theory of drug addiction in 2006, which suggests that addictive brain regions can be divided into four addiction circuits, namely, reward and pleasure, learning and memory, inhibition and control, and behavioral motivation. Abnormal activation of the reward loop will lead to damage in the memory loop, and damage in the memory loop will in turn reinforce the abnormalities in the reward loop. Repeated drug use leads to the formation and solidification of conditioned reflexes that further enhance the motivation to use drugs [3,5].

In summary, the drug addicts referred to in this paper are those who have abused drugs for a long period of time, which in turn has led them to develop a strong dependence on drugs and lose their ability to control them. As a result of long-term drug abuse, their reward loops become abnormal, which in turn leads to their physical and psychological problems, negatively affecting their families, society and personal lives. They often need to receive professional drug treatment and psychological counselling to help them get rid of their dependence on drugs. In addition, society and the Government should also provide resources with appropriate support to help these people reintegrate into society, reduce the relapse rate and improve their quality of life.

3. RESEARCH RELATED TO THE IMPACT OF SPORTS PARTICIPATION ON SOCIAL CAPITAL

3.1. Definition and Theoretical Framework of Social Capital

Social capital is a concept originated from social sciences and there are some debates about the definition of social capital. Pierre Bourdieu (1986) firstly proposed the concept of capital as accumulated labor. And the three basic forms of capital are expressed as: economic capital, cultural capital, and social capital. Among these, social capital, which is constituted by social obligations ("relationships"), is the sum of actual or potential resources that are associated with the possession of a durable network of more or less institutionalized relationships of mutual recognition and acknowledgement [6]. Subsequently James S. Coleman (1988), in explaining the concept of social capital, emphasized that social capital is defined by its functions, i.e., the value of these social capitals lies in the fact that it identifies certain aspects of the social structure through its functions [7]. James S. Coleman (1990), in a further refinement of the study for the social structure represented by social networks, has divided it into two components: 1) the existence of social relations and 2) the closure of the social network [8]. Robert D. Putnam (1995) proposed an extension of this concept that social capital mainly takes the form of social organization, such as trust, norms and networks, which makes it possible to improve social efficiency and promote coordination [9].
Combining the above relevant expositions of foreign scholars, it can be seen that Pierre Bourdieu mainly regarded social capital as resources acquired by individuals through social relations, emphasizing the inequality of power and resource distribution. And James S. Coleman's social capital theory mainly focuses on the role of social capital in the process of educational development, emphasizing the interaction between social structure and individual behavior. Robert D. Putnam's social capital theory emphasizes the role of social networks, trust and reciprocity norms in the overall health of the community and society.

3.2. The Relationship between Sports Participation and Social Capital

As early as the 1970s, Elias N (1971) indicated that sports as a specific pastime activity is widely absorbed and spread around the world, so there is an inevitable connection about the relationship between sports and sociology. Subsequently, domestic and international scholars have conducted a great deal of research on how sport influences and builds social capital.

3.2.1. Formation and Enhancement of Social Networks

Misener L & Mason D S (2006), from the perspective of organizing sports events on the creation of social networks in the community, supported by the social capital theory, stated that the development of sports events is conducive to the promotion of urban improvement as well as the development of social networks. Subsequently Skinner J & Zakus D H & Cowell J (2008) stated that sports participation can provide a gateway or link between different groups and social networks; can have a positive impact on the creation of social capital; and promotes the development of social capital as well as social inclusion in disadvantaged communities. In the same year, Cuskelly G (2008), through a survey and analysis of volunteer participation data from Australian sports organizations, found that community-based local sports clubs provide opportunities for community members to come together on a regular basis to play, facilitate, and watch sport, and enable club members to participate through a variety of formal and informal mechanisms linked to the broader social networks associated with sport. Schüttoff U & Pawlowski T & Downward P et al. (2018) pointed out that regular participation in sport during adolescence has a positive effect on different indicators of social capital, i.e., interpersonal networks are an important form of social capital in youth. By empirically analyzing the data from the 2020 Chinese Family Tracking Survey, domestic scholars Le Junchao and Guan Yuan (2023) found that physical activity is an important way to create and accumulate social capital of college students through participation, social interaction, etc., and that college students expanded their social networks and gained trust among each other through sports participation. Zhang X, Wang D, Li F (2022) indicated that social networks can be enhanced by strengthening the link between physical activity, social networks, and physical activity promotes subjective well-being by enhancing the social networks and sense of hope of Chinese residents. Overall, sports participation can be an effective way to promote the formation of social networks and the accumulation of positive social capital in different populations. Sports activities not only provide a platform for people to communicate and participate, but also can help expand their interpersonal networks, and also help them build relationships of trust and mutual assistance, thus positively affecting the accumulation of social capital.

3.2.2. Improvement of Social Cohesion

Early in the twenty-first century, RD Putnam (2000) explored the impact of physical activity on community participation and social capital in his book, emphasizing the role of collective physical activity in promoting social connectedness and community cohesion. Subsequently Ørnulf Seippel (2006) put forward the hypothesis that people involved in sports organizations are influenced by social ties related to their activities and positions in the organization, which in turn promotes the reinforcement of their mutual identities and identities. Whereas, Zakus D & Skinner J & Edwards A (2013) stated that sport plays an important role in defining cultural identity and community belonging in Australia and provides a real sense of presence in the community, in which sport
participation has the potential to help develop positive social capital outcomes[19]. Sporting activities have been found to enhance community cohesion, where relationships between members of sports teams become stronger, driven by common goals, which in turn promotes solidarity within the community and enhances a sense of community belonging. Secondly, Burnett C (2006) found through a survey of poor rural villages in Tshabo, Eastern Cape, South Africa, Australia, that sports clubs were able to provide employment opportunities for others in the community, and that this reciprocal behavior could increase the cohesion of that community, providing resources and ideologies for social participation and cohesive networks[20]. Foreign scholars Schulenkorf N (2013) indicated that the conduct of sports events can effectively enhance community cohesion[21]. Sports activities are not only an important driver of community cohesion and cultural identity, but also enhance social capital by providing employment opportunities and facilitating interactions among community members. Sports participation creates a sense of belonging and solidarity at the community level, which is important for building a positive social environment and promoting social harmony.

3.2.3. Civic Engagement and Social Responsibility

Alone B. (1995), based on Putnam's Bowling Alone, indicated the decline of social capital in the United States and emphasized the declining interest of citizens in participating in sports activities such as bowling leagues, and explored the importance of sports activities such as bowling leagues in the accumulation of social capital[22]. There have been different degrees of controversy about the relationship between sports and social capital. Some foreign scholars such as Foley D E (1990)[23], Smith J M&Ingham A G (2003)[24], Collins M F&Buller J R (2003)[25], Taylor T (2004)[26], Cunningham G B&Sagas M (2005)[27], Blackshaw T & Long J (2005)[28], Elling A & Claringbould I (2005)[29], Tonts M (2005)[30] analyzed through a survey study of modern western countries such as Australia, the United States, and the Netherlands, indicated that social capital generated by sport tends to be fragile, which may be due to the fact that sport activities are usually influenced by social structures and cultural contexts. Due to the existence of racial discrimination, class, gender and other inequalities, some citizens who participate in sports are socially excluded and marginalized, which precisely reveals the "dark side of social capital" in sports participation. Some foreign scholars also say that whether sports participation can promote the accumulation of positive social capital depends on the role played by the sport itself, and Jarvie G (2003) said that the relationship between sports participation and the community is always changing, that is, it is unrealistic that sports are entirely responsible for maintaining a sense of community, or even strengthening social capital, but only to say that, in Scotland, sports can contribute to the revitalization of the sense of civic participation[31]. Seippel Ø (2006) empirical study with relevant data from Norway found that participation in sports activities can either enhance or hinder social relations between people, depending on the role played by sport itself[32]. Most foreign scholars believe that sports participation is often accompanied by increased civic engagement and social responsibility, and that in the process of organizing sports activities, through the joint efforts of members of sports associations, sports volunteers, sports organizers, sports supporters, athletes, and coaches, which in turn contribute to the smooth running of the activities, the active participation of citizens also further enhances the accumulation of positive social capital[16-21].

3.2.4. Dissemination and Recognition of Values

The values of fair play, teamwork and perseverance in sport are not only emphasized in sport, but also widely disseminated and recognized in society. Allison L (1998) suggests that sport makes a unique contribution to civil society based on the values of sport, i.e., that sport does "reflect" the general state of civil society in some countries, countries' general state of civil society and also suggests that sport has the potential to become an important part of civil society in the future[33]. Subsequently, Uslaner E M (1999) stated that social capital mainly reflects a value system, especially social trust; sport builds social capital because it builds self-confidence and teaches people to respect the rules; sport expands social ties, and it can quietly spread the values of tolerance and equality[34]. Domestic scholars Qiu Jun and Zhong Jianwei (2010)[35], Liang Yucheng and Jia Xiaoshuang (2022)
indicate that sports participation can increase the level of interpersonal trust among people, strengthen ties with other members of the community, and form a positive social atmosphere under the influence of such values, which in turn increases the country's positive social capital accumulation.

### 3.2.5. Health and Well-being Promotion

Foreign scholars Kawachi I & Kennedy B P & Glass R (1999)\(^{[37]}\), Bailey* R (2005)\(^{[38]}\), Hartmann D & Depro B (2006)\(^{[39]}\) indicated that physical activity participation not only exercises to physical and mental health, but also helps to reduce the emergence of juvenile delinquency. From the perspective of policy, some scholars Persson H T R (2008)\(^{[40]}\), Spaaaj R (2011)\(^{[41]}\), Coalter F (2013)\(^{[42]}\) indicated that the support of policy to promote sports organizations, sports associations and other sports organizations to join the process of building the future of society, and thus promote the accumulation of national social capital. In addition, some scholars, Zhang Xiaoli, Zhang Yixiang, and Du Xiayu (2022)\(^{[43]}\), Lin Y & Zhang P & Ma X (2024)\(^{[44]}\), stated that sports participation can improve people's quality of life, and that collective social capital plays a crucial role in creating a positive community sports atmosphere. In summary, sports participation plays an irreplaceable role in building and maintaining stable social relationships, and sports participation also helps to improve the health and social capital of the whole community.

### 3.2.6. Intercultural Communication and Inclusion

In the context of globalization, sports events and activities can effectively promote communication and understanding between individuals from different cultural backgrounds. Foreign scholars Schulenkorf N (2013) found that sports development programs (e.g., international sports events) promote social capital through a survey study of cross-cultural games programs conducted in rural areas of Sri Lanka, and these activities promote cross-cultural communication\(^{[21]}\). Meanwhile, foreign scholars Skinner J & Zakus D H & Cowell J (2008)\(^{[12]}\), Taylor T (2004)\(^{[26]}\) stated that sports activities often cross cultural and social boundaries, and it can provide a platform for inclusion and communication. Domestic scholars Peng Guofang and Tan Xiangying (2021) found through a questionnaire survey of 1,200 new-generation farmers in Sichuan and Chongqing regions that new-generation migrant workers can effectively accumulate individual social capital through active participation in sports, and then integrate into urban life\(^{[45]}\). To summarize, sports participation is regarded as an important source of social capital in both domestic and foreign countries, which helps different individuals to communicate with each other, and thus promotes social inclusion and diversity.

### 4. A STUDY RELATED TO SOCIAL CAPITAL OF DRUG ADDICTS

#### 4.1. Social Capitalization of Drug Addicts

##### 4.1.1. Breakdown of Social Networks of Drug Addicts

At the end of the twentieth century, ST Ennett & KE Bauman (1993) found a high degree of correspondence between young drug addicts' early subjective perception of their peers' social structure and their friendship choices through a study based on social networks\(^{[46]}\). And domestic scholars Zhang Guibao and Li Runlin et al. (1992) indicated that non-engaged youths and young workers with poor knowledge and low cultural level accounted for the majority of drug addicts, which led to their drug addiction mainly due to the curiosity drive, affluent family economic status, and the influence of the special environment around them\(^{[47]}\). In the early twentieth century, domestic scholars Xia Guomei (2003) argued that youth misbehavior was influenced by a variety of factors, which included the ability of family education, the influence of peers on their values, the label of low educational level, and the misconceptions of anti-drug education\(^{[48]}\). And foreign scholar Martin Lindström (2004) believes that some sources of socialization in adolescence are closely related to
social capital factors in early adulthood \[49\]. This suggests that the adolescent group is prone to mistakenly enter the drug-using group at an early age due to the influence of some social factors, such as family relationships, peer relationships, and personal factors, leading to the rupture of their social relationship network. On the other hand, according to Anne M Lovell (2002), the study indicates that most drug addicts with traditional social capital have access to a wider social life that can easily motivate them to return to drug use or to become stakeholders responsible for drug use \[50\]. In other words, the social circle of these drug addicts can thus be limited to other drug users and drug suppliers, lacking positive and healthy social relationships.

4.1.2. Lack of Social Trust among Drug Addicts

At the beginning of the twenty-first century, Tim Rhodes et al. (2005) indicated that the concept of social capital is multi-valued and it includes aspects of social networks, trust and consensus \[51\]. Foreign scholars Room R. (2005) indicated that drug addicts may be stigmatized and thus socially excluded and discriminated against, and that there is also a high degree of marginalization and stigmatization of people receiving treatment for drug problems \[52\]. Subsequently a growing body of research has indicated that people with drug addictions are discriminated against by a variety of groups in society, including health care professionals (2009, Ronzani TM & Higgins-Biddle J & Furtado EF.) \[53\], the public (2012, Livingston J D & Milne T & Fang M L ) \[54\], self stigma \[54\], etc. Domestic scholars Li Biping and Zeng Lu Hai et al. (2002), based on an avoidant personality survey of 513 cases of heroin dependence, stated that most drug addicts would be afraid of not being trusted and accepted by their families and society, and then showed characteristics such as fear and poor psychological tolerance \[55\].Moore L D & Elkavich A (2008) stated that drug addicts did not suffer from imprisonment rather these problems tend to worsen and at the same time they become socially unwellcome as a result, discrimination and unsafe environments force them to return to a life full of risks \[56\].Myers B&Fakier N&Louw J (2009) stated that drug addicts are in treatment due to various labels placed on them by the society, stigmatization felt by the family, community and media's negative perception of the negative perceptions of treatment ineffectiveness, etc., resulting in drug users being hindered from seeking treatment due to stigma \[57\]. In addition to this, most scholars at home and abroad (2005, 2009, 2011) stated that female drug addicts are more likely to be discriminated against and treated unfairly than male drug addicts \[57-59\]. However, there are also scholars (2008) who believe that male drug addicts are in a worse situation after using drugs \[60\].

In summary, after exposure to drugs, drug-addicted persons often suffer from low social trust due to their drug-addicted behaviors, and the addition of stigma and social discrimination against them leads to difficulties in integrating into the society, further exacerbating their sense of social isolation.

4.1.3. Low Social Participation of Drug Addicts

Wang Zengzhen, Ling Xiufeng, and Jiang Donglin et al. (2004) argued that psychosocial factors can affect the effectiveness of drug rehabilitation for drug addicts and lead to the continuation of drug abuse behavior \[61\]. Jiang Tao and Zhu Lingyi (2005) analyzed from the perspective of social environment that drug addicts develop drug abuse behaviors as a result of the subculture of hedonism, unsatisfied relative needs, failure of social expression, and expansion of drug abuse networks \[62\]. Later, Dong Kaisha (2014) indicated that drug addicts have a low level of social identity, which directly affects their mental health, due to the fact that they are in a long-term situation of being "labeled" as "addicts" and "drug addicts", and their families are in a situation of being "labeled" as "drug addicts" and "drug addicts" and "drug addicts" and "drug addicts". This has a direct impact on their mental health, as they have long been "labeled" as "addicts" and "drug addicts", have broken up their families, and live in drug-addicted groups, which leads to a lack of a correct social identity \[63\]. Xiong Feng, Zhu Changcai and Li Guodong et al. (2017), on the other hand, argued that discrimination and rejection of drug-addicted people are prevalent in social groups \[64\]. Foreign scholars Matsuzaki M & Vu Q M & Gwadz M et al. (2018) stated that there are stereotypes and discrimination in the society against drug addicts, which leads to greater stigma and economic
difficulties, etc., that they need to face when they receive treatment, while the lack of social support seriously affects their social participation and integration into society [65]. In the same year, some scholars (2018) argued that there are more serious problems in the social support system of drug addicts, in which social factors are the main cause of relapse, including emptiness and boredom, temptation of drug addicts, difficulties in employment, and prejudice and discrimination of community residents, which leads to their low social capital relative to normal residents [66,67]. In summary, social discrimination and stigmatization of drug addicts easily lead to their lack of correct social identity, which not only reduces their self-esteem and self-efficacy, but also tends to increase the prevalence of their mental health problems, which in turn leads to the emergence of relapse. In addition to this, policies in some countries and regions do not take into account the needs of drug addicts. For example, in the United States, access to medical and social services is often difficult for drug addicts, which further hinders their social participation [65]. In contrast, Lianping Ti & Despina Tzemenis & Jane A Buxton (2012) suggest that Australia and Canada have been able to address the needs of people with addictions more effectively by facilitating their participation in the development of policies, which in turn have led to a gradual improvement in their social participation [68].

4.2. The Impact of Social Capital on Drug Treatment and Rehabilitation

The critical role of social networks in the recovery process was emphasized in foreign studies as early as 2007. Samuel R et al. (2007) found that building community resilience does not appear to require consensus or trust, and can be based on social network relationships as a basis for building adaptive patterns between different values and interests [69]. Maycock B R& Howat P (2007) studies confirmed that social capital may enhance both negative and positive behaviors [70]. Polly Radcliffe& Alex Stevens (2008) emphasized the importance of social capital, including connections with people outside the drug market, namely the kinship groups of addicts [71]. Flores D V et al. (2013) stated that social capital can be in a positive or negative form depending on the context in which it is situated, i.e. the author believes that factors such as community, family and social positivity should be taken into full consideration in addressing substance abuse [72]. Munton T&Wedlock E&Gomersall A (2014) stated that the most effective treatment program for people with drug addictions is to recognize the role of social capital and designate interventions that through support programs provided by self-help groups, peer support and family to help them actively participate in withdrawal treatment [73]. And in China, family and community support are recognized as crucial factors in the detoxification and rehabilitation process. Studies have shown that family, community, peers, and school can directly influence the overall development of adolescents; and private relational social capital, similar to that constituted by family, neighbors, classmates, and friends, plays a greater role in solving their employment problems during the development process [74,75]. These support networks not only provide emotional support but also practical resources and a sense of belonging for drug addicts, which will help them reintegrate into society. The concept of recovery capital is beginning to gain popularity with the growing interest in the ability of addicts to recover from substance abuse; Duffy P & Baldwin H (2013) stated that addressing internal factors, i.e., "human capital", provides confidence in sustaining recovery; coupled with external motivators, i.e., family, and maintaining "normal" life, the concept of recovery capital has become more prevalent. and aspects of maintaining a 'normal' life, are what sustain long-term rehabilitation [76]. Subsequently, Mawson E & Best D & Beckwith M et al (2015) found support for the role of social identity in recovery capital and quality of life in a large longitudinal sample [77]. Numerous studies have shown that addicted individuals are able to build social capital and promote recovery capital through a variety of opportunities [78,79]. In a recent experimental study by Nicholas L Bormann (2023), it was found that at 3 and 6 months, drug addicts’ craving for substance use decreased as recovery capital increased [80]. In China, through the establishment of policies and community service systems, the government has adopted policies to help drug addicts reintegrate into society, such as the Anti-Drug Law [81], the Drug Rehabilitation Regulations [82], and the National Plan for Community-based Drug Treatment and Community Rehabilitation (2016--2020) [83]; meanwhile, certain Chinese regions have begun to implement
community-based rehabilitation programs, such as the approach taken in Shanghai’s drug treatment work [84]; this has, to some extent, improved the social capital of drug addicts and facilitated their reintegration into society. Finally, the importance of social capital in the rehabilitation process has also been confirmed in recent long-term studies. Tracy K & Wallace S P (2016) indicated that the continuous participation of peer support has a significant effect in the process of drug treatment [85].

Combining the above scholars' relevant expositions, it can be seen that the impact of social capital on drug treatment and rehabilitation has been well confirmed in both domestic and international studies. Whether through individual, family and community support, or through the improvement of policies and community service systems, the enhancement of social capital is considered to be one of the ways to promote the rehabilitation of drug addicts. Future research and policies should continue to focus on how to enhance the social capital of drug addicts more effectively, thereby supporting their long-term rehabilitation and return to society.

5. CONCLUSION

In recent years, there has been a great deal of research on the positive effects of sport on drug addicts, mainly on the physical, psychological and social levels. Although there has been little research on the relationship between sport, social capital and the social integration of drug addicts, this line of research has important theoretical and practical implications.

Future research could further explore how sport can be used as an intervention to promote the rehabilitation and social integration of drug addicts by enhancing social capital. At the same time, attention also needs to be paid to how sport can be better adapted to the special needs of drug addicts in practice, and how effective sport intervention programs can be designed to help them rebuild social relationships and improve their quality of life.

REFERENCES


[83] Office of the National Narcotics Control Commission; Office of the Central Committee for Comprehensive Management of Public Security; Ministry of Public Security; National Health and Family Planning Commission; Ministry of Civil Affairs; Ministry of Justice; Ministry of Finance; Ministry of Human Resources and Social Security; All-China Federation of Trade Unions; Central Committee of the Communist Youth League; All-China Women's Federation. Notice on the issuance of the National Community Drug Treatment and Community Rehabilitation Work Plan (2016-2020) [L]. 2015-12-15:,2015.
