

The Commons and Differences

--An Urgent Need to Localize CBT in Chinese Gambling Addiction Treatment

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Abstract: Pathological gambling, or gambling disorder, was more familiar as “gambling addiction” in Chinese society, which is considered to bring enormous damage to both individuals’ psychological health and social economic improvement, features as a serious of error cognition with behavior dysfunctions in the past 12 months according to a DSM-V standard. Cognitive behavioral therapy (CBT), as one of the four main psychotherapies, plays a suitable role in helping patients adjust to both cognition and behavior imbalance induced by gambling addiction. However, it still leads to a huge gap in how it developed in China compared with the broader application and its effectiveness study of CPT in gambling addiction from foreign countries. In this paper, the localization of CBT in treating addictive gambling is summarized in social burden to show its urgent need, with related problems pointed out, such as shortage of qualified therapists, lack of mature cohort study design with poor usage, unbalanced target population spread with ignored problem severity.

Keywords: gambling addiction, CBT, pathology gambling, psychotherapy

1. Introduction

Pathological gambling, or gambling disorder, was more familiar as “gambling addiction” in Chinese society. Take DSM-V criteria, it is diagnosed as an irrepressible gambling behavior reviewing in the past 12 months. Based on Baidu Index, active searching for “gambling” from 2023.Mar.01 to 2024.Mar.01 up to 1,620 per day on average, almost 4 times higher than “abstinence of gambling” (“Jie Du” in Chinese). In the mean time, according to the Supreme People's Procuratorate, only online gambling related cases rose up to 19,000 in 2023, 5.9% higher than last year. With a heavy burden in Chinese society[1][2][3], an overall psychological intervention strategy is required.

CBT (Cognitive behavioral therapy), was formally recognized in the 1970s by Mahoney, Meichenbaum et al. [4] and its application was quickly rising. Localization of CBT in China was focused on depression and anxiety at first, then expanded into positive emotional response, sleeping disorders and internet addiction disorder[5]. For its multiple usages and well-admitted effectiveness, CBT has already been recognized as one of the most applied psychological therapies in China.

2. CBT therapy application and its effectiveness in gambling addiction

2.1. Oversee CBT therapy application of gambling addiction in this decade

In recent decades, CBT has been acclaimed as one of the most effective psychological therapy. The extensive utilization of CBT in Western countries has demonstrated its efficacy in enhancing self-control and emotional regulation among patients struggling with GA. These positive outcomes underscore the potential benefits of CBT as a valuable therapeutic intervention in the treatment of GA. In 2015, a Spain cohort study recruited 440 adults and revealed that CBT made great progress in strengthening their self-control and emotional response dealing with gambling behavior by SCL-90 evaluation before and after a 16 week's treatment procedure[6]. Factors including education, age and family support correlate with therapy coherence, treatment consistency, and prognosis results need to be noticed during GA treatment[7]. These features were shared with participants from Rome, while social support was also mentioned as one of the prognosis factors, with another one factor was self-awareness of personal behavior disorder [8]. Co-exist problems including stress and depression, while gambling behavior itself may develop into the resource of stress, also mentioned as a cognitive mechanism for practitioners [9]. In 2020, a meta-analysis of 202 former studies figured out a series of points for psychotherapy, including impulsive and/or risk-taking personality, education level lower than high school with limited income, it also indicated that patients' (or visitors') family relationship should also be learned during treatment[10]. Comprehensive measurement including CBT therapy with the Gambling Act 2005 and other policies was already established in UK[11], aiming to help with multiple cognitive disorders and misconduct [12][13][14]. Currently, in 2023, a milestone cohort study targeting 3991 cases clarifies CBT as an effective therapy in gambling addiction by 3 dimensions in problematic behavior severity, frequency, and intensity of gambling behavior[15]. This result agreed with a comparison performed in Nigeria [16].

2.2. CBT as a therapy of gambling addition localized in China

2.2.1. CBT therapy application of gambling addiction in China

In China, CBT therapy for gambling addiction was ignored for a long period; in fact, the whole treatment of gambling addiction was rarely mentioned. Searching “Dubu” (which means “gambling”) on xueshu.baidu.com, the earliest report of CBT therapy of it was in 2013. In the same year, a survey performed by Huang etc., revealed that gambling addiction was little learned by Chinese psychiatrists not mentioned their treatment ability. By Huang's estimation, only 23% of psychiatrists were qualified to deal with gambling addiction, while 36% of them could give it a proper diagnosis and evaluation, though there were still around 80% of them admit GA was a public health problem[17]. Until 2015, the effectiveness of CBT therapy used to reverse biased cognition during addictive gambling behavior thus adjust misconduct was introduced into China, but these reports were also summarized from studies abroad[18]. Further more, still in the same year, a survey really performed in Chinese population which compared cognitive function between IAD(internet addiction disorder) and PG (pathological gambling) indicated that both disorders show higher impulsivity with executive control disorder and working memory impact, and IAD maybe worse[19]. In the context of the GA treatment, this research contributes a cognitive function mechanism that may guide the application of the CBT among Chinese patients. However, progress in gambling addiction treatment in China remains sluggish, as evidenced by the establishment of the first addictive behavior ward in Beijing Huilongguan Hospital as recently as 2019.

Despite some advancements, several obstacles continue to impede the localization of CBT in addressing GA in China, including insufficient understanding of this disorder, a scarcity of support groups, and the absence of mature consulting and assistance agencies [20]. These challenges

emphasize the urgent need for a comprehensive and accelerated development of Chinese psychotherapy approaches, especially in CBT therapy. Nonetheless, this situation also presents a broader scope for exploration and innovation in the field.

2.2.2. Current study of gambling behavior in China

To understand the gambling behavior population in China, through literal searching, the key word is selected as “Dubo (means ‘Gambling’)”, in xueshu.baidu.com, and 19 papers were categorized into psychological and behavioral related. Among them, it’s selected into demographic analysis that 12 papers published by analyse gambling behavior from student population, which excluded were 3 popularization or news report articles, and one paper published in 1991 introduced foreign aetiology and therapy of pathological gambling, and others talked about gambling psychological reasons or case report of treatment in CBT. From Table.1, questionnaire research of adolescents spread from northern to southern China, these were mainly emerging in the 2010s, focusing on revealing students’ healthy behaviors. During these research, gambling was treated as a minor problematic behavior compared with other unhealthy life styles or internet addiction, with a ratio from 39.0% to 6.4. There is no doubt that students can be considered as a distinct target population in the study of gambling behaviors. However, it is more important to recognize the distinctions in psychological development, social environment, and lifestyle between students and adults. Notably, the definition of "gambling-like entertainment behavior" employed in these studies differs from the commonly understood notion of addictive gambling behavior typically associated with gambling establishments.

Table 1: Current studies of gambling behavior population in China.

Publish Date	Research Population	Volume of Participant	Ratio of Gambling Like Entertainment Behavior	Gender Difference	City
2007 [21]	College student	1138	23.9%	Not mentioned	Beijing, Beijing
2007 [22]	Senior School Student	334	39.0%	Male>Female (P<0.05)	Haikou City, Hainan Province
2007 [23]	Junior, Senior and Professional middle School Student	2248	23.8%	Male>Female (P<0.01)	Nanyang City,
2008 [24]	Junior, Senior, Professional middle School, and College Student	3844	21.0%	Male>Female (P<0.001)	Foshan City, Guangdong Province
2008 [25]	Junior, Senior, Professional middle School, and College Student	10800	13.89%	Male>Female (P<0.001)	Haoebin City, Jiamusi City, and Suihua City, Heilongjiang Province

Table 1: (continued)

2008 [26]	Senior and Junior High School Student	4124	20.0%	Male>Female (P<0.05)	Nanjing City, Jiangsu Province
2009 [27]	Junior, Senior and Professional middle School Student	1716	22.3%	Not mentioned	Huairou District, Beijing City
2010 [28]	Junior, and Senior School Student	1232	15.3%	Not mentioned	Shijingshan District, Beijing City
2012 [29]	Medical School Student (College)	516	6.4%	Male>Female (P<0.0001)	Shanxi Province
2016 [30]	College Student from a University in Nantong City	404	7.4%	Not mentioned	Nantong City, Jiangsu Province
2017 [31]	College Student from a University in Maocao	357	24.1%	Male>Female (P<0.01)	Maocao
2019 [32]	College Student from a University in Chongqing City	2483	7.69%	Male>Female (P<0.01)	Chongqing City, Chongqing

3. Conclusion

In conclusion, this article presents a comprehensive overview of the application and efficacy of the CBT for gambling addiction, drawing comparisons between Chinese and international contexts (Table.2). The urgent need for localized therapies, particularly CBT, in China cannot be overstated. This necessitates continuous and concerted efforts to tailor therapeutic approaches to better address the unique cultural and social aspects of gambling addiction within the Chinese population.

Table 2: Gap of CBT application between China and oversee countries.

	China	Oversee countries
Development	Since 2019	Classical since 1980
Treatment center	Rare	Plenty with national found and self-help group
Therapist cognition	Poor	Well
Application ability	Short	Mature
Effectiveness	Less evidence	Confirmed

For the localization of CBT in China, demographic analysis may provide where and what kind of population would be covered by future service covering. The foremost question is to setup an effective method and adjust appropriate direction of research population. Since then, we wondering whether data analysis from the mass-media and judicial cases may help in some extent. From both Baidu Index (Figure.1) and judicial case analysis from Jufaanli.com. (Table.3, Figure.2), both literal searching of “Dubo (gambling)” “Jie du (abstinence of gambling)” “Renzhi Xingwei Liaofa (CBT)” and also judicial cases are concentrate in Guangdong and Zhejiang Province (Figure.1, Table.3, Figure.2). This can’t be underestimated by the geographic impact of Macao and Hong Kong.

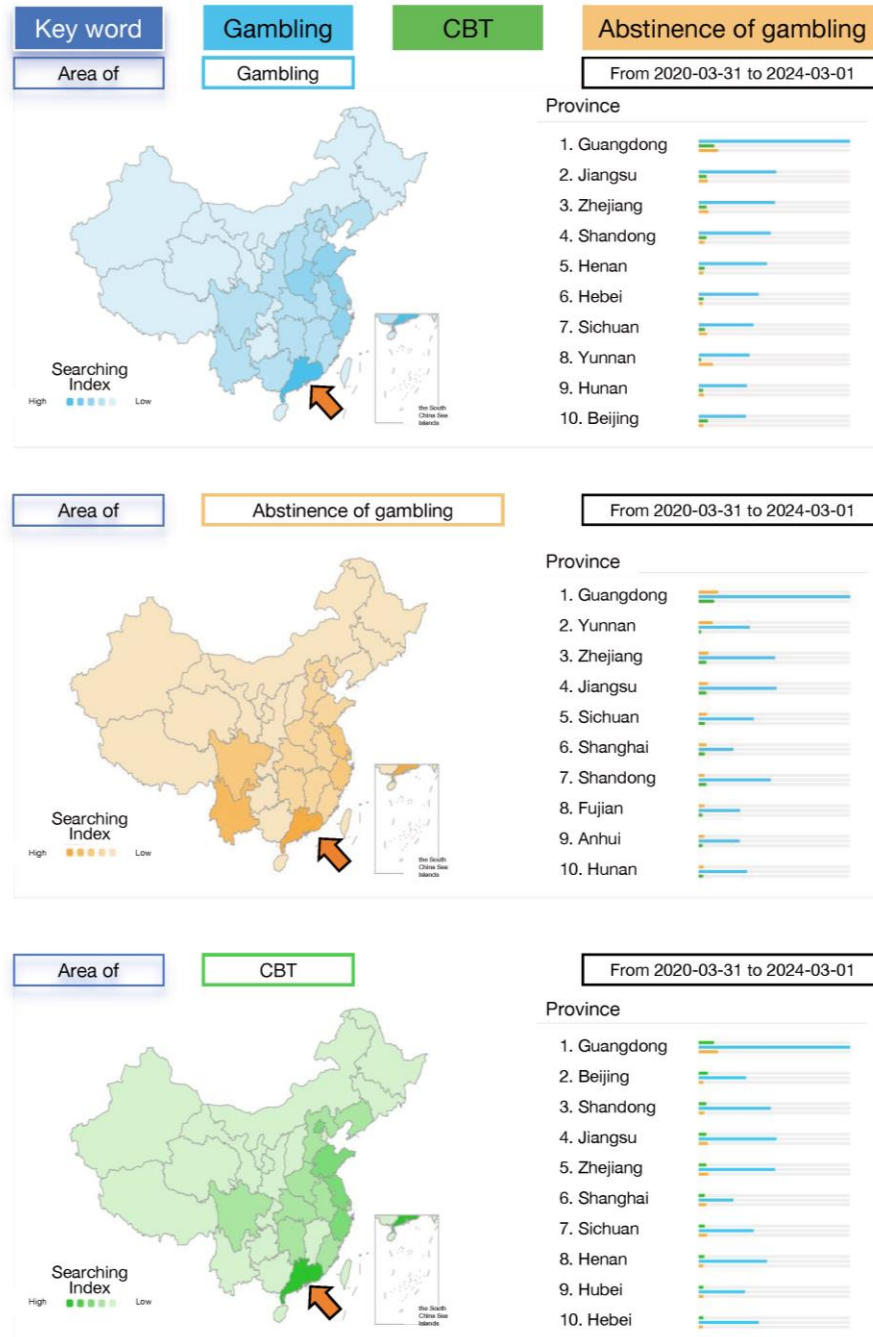


Figure 1: Literal searching index of gambling related words index from Baidu.com[33]

Table 3: Top5 Judicial cases related with gambling in China since online recorded[34].

Province	Case Volume
Zhejiang	105,250
Guangdong	72,855
Jiangsu	63,564
Hunan	45,432
Fujian	42,562

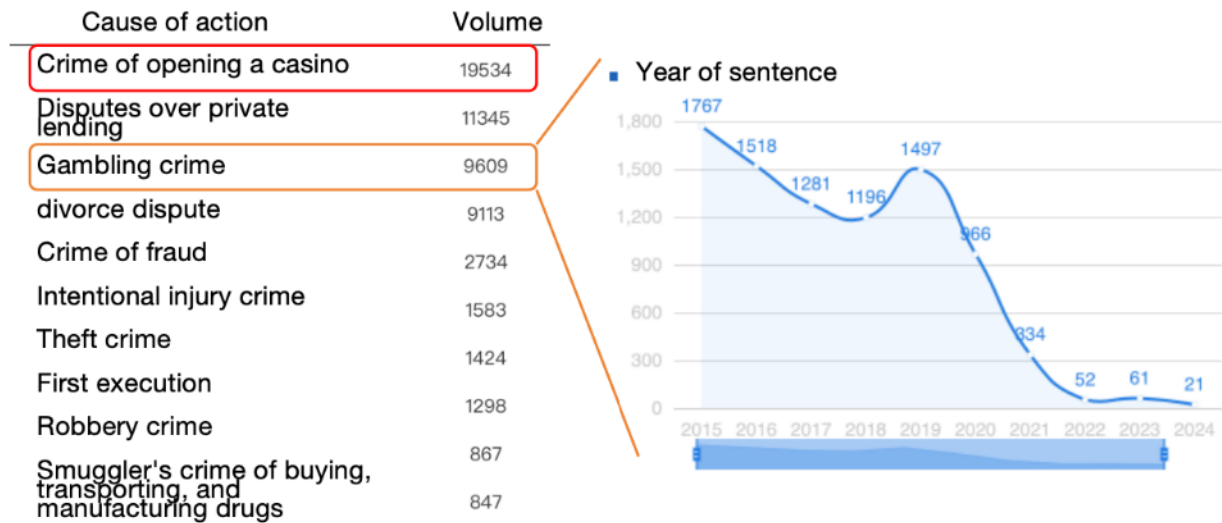


Figure 2: Detailed in Guangdong Province judicial case volume about gambling since online recorded[34].

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