

Power Distance Belief Research in Tourism

—A Visual Analysis Based on CiteSpace and VOSviewer

Hui Wang *

Xi'an International Studies University, Xi'an, China

*Corresponding Author: Hui Wang

ABSTRACT

Power distance was first proposed in Hofstede's theory of cultural value dimensions and has garnered widespread attention from scholars in various fields such as sociology, organizational behavior, and consumer behavior. With the in-depth research and development of power distance, marketing scholars have introduced "power distance belief" (PDB) from the perspective of individual cultural values, thereby expanding the research scope of power distance belief. In recent years, power distance belief has gained some attention in the field of tourism, but the academic community still lacks a systematic review of its research findings. This article uses CiteSpace and VOSviewer software for literature analysis to reveal recent progress in power distance belief research abroad and summarize current research focuses. First, research on power distance belief in tourism is still in its infancy. Second, the research regions for power distance belief are primarily the United States and China. Third, future research on power distance belief in tourism can continue from the perspectives of tourism marketing and consumer behavior. Finally, based on current research themes, future research directions and prospects for power distance belief in tourism are proposed.

KEYWORDS

Power distance; Power distance belief; Tourism marketing; Visual analysis

1. INTRODUCTION

The report of the 20th National Congress of the Communist Party of China proposed to "promote the deep integration of culture and tourism, and advance the development of culture and tourism." The deep integration of culture and tourism plays an increasingly important role in cultural revitalization, image presentation, and telling China's story well. In the process of cultural exchange and integration, differences in cultural values are objective. Hofstede proposed a landmark cultural value dimension model in 1973, in which power distance is one of the six cultural dimensions [1] Previous cross-cultural research on power distance mainly focused on differences at the national and societal levels. However, with interdisciplinary research, marketing scholars formally defined power distance at the individual level as "power distance belief" (PDB) [2], providing a new perspective for understanding cross-cultural marketing practices and consumer behavior from the perspective of individual cultural values.

With the proposal and in-depth research of power distance belief in the field of consumer marketing, it has brought fruitful results to academia and marketing practice. As an important part of the tertiary industry and one of the fastest-growing emerging industries, tourism plays a significant role in promoting the transformation and upgrading of consumption structures. Consumer marketing is closely related to tourism development. In the past decade, a large number of studies on power

distance belief have emerged in the marketing field, and many scholars have introduced power distance belief into tourism contexts. However, current research on power distance belief in the tourism field is still in its infancy, and existing research conclusions are relatively scattered. The lack of systematic literature reviews on power distance belief in the tourism field abroad hinders a deeper understanding of power distance belief. To understand the research hotspots of power distance belief in the tourism field, this article systematically reviews existing foreign research on power distance belief.

2. RESEARCH METHODS AND DATA SOURCES

2.1. Research Methods

This article mainly uses the knowledge graph method to sort out the research hotspots and themes of foreign power distance belief research. The knowledge graph method is developed based on citation analysis theory and information technology visualization. Currently, the main visualization analysis software includes SPSS, CiteSpace, VOSviewer, etc. VOSviewer is a literature analysis and knowledge visualization software developed by Van Eck and Waltman from the CWTS Research Center at Leiden University in 2010. It has unique advantages in keyword analysis, cluster analysis, and author information [3]. The software also has significant advantages in processing literature data and drawing images, clearly showing research hotspots and themes. CiteSpace focuses on representing the strength of relationships between themes with tree diagrams and connections, while VOSviewer mainly uses distance and density to deconstruct the clustering relationships between nodes. The two complement each other and can accurately mine research themes [4]. Therefore, this study selects VOSviewer and CiteSpace as analysis tools. CiteSpace is mainly used to draw research institution maps, and VOSviewer is mainly used to draw literature coupling knowledge maps, co-citation maps, and co-occurrence maps.

2.2. Data Sources

To ensure the comprehensiveness and accuracy of the research sample, the article selects the Web of Science core database for journal retrieval as the sample data. The literature retrieval rules are as follows: First, "power distance" and "power distance belief" are used as the main keywords, combined with "tourism," "travel," "tourist," "hospitality," "hotel," and "accommodation" as subject searches. The time span of the literature is from January 2014 to December 2020, and a total of 215 articles were retrieved. Then, through reading and judgment, 176 duplicate and irrelevant articles were manually excluded, such as articles published in other disciplines like psychology and ethics. Finally, 39 articles were selected and exported in plain text format, converted, and imported into CiteSpace and VOSviewer software for visual analysis.

3. ANALYSIS OF RESEARCH RESULTS

3.1. Descriptive Analysis of Literature Publication

Figure 1 shows the number of journal articles on the theme of power distance belief abroad from 2014 to 2020. The related literature on this theme generally shows an increasing trend, especially in 2019 and 2020. Among them, the number of related literature studies on power distance belief in the tourism field has also increased in the past three years. Currently, research on power distance belief in tourism is still in its infancy but shows a growing trend.

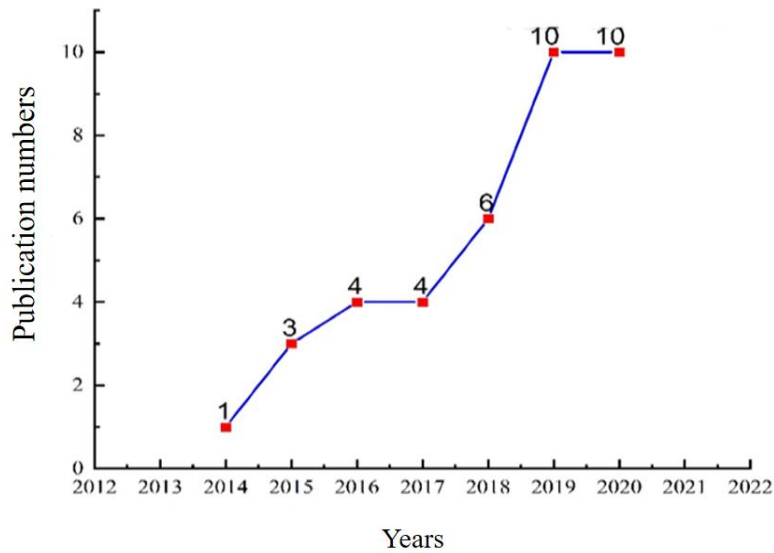
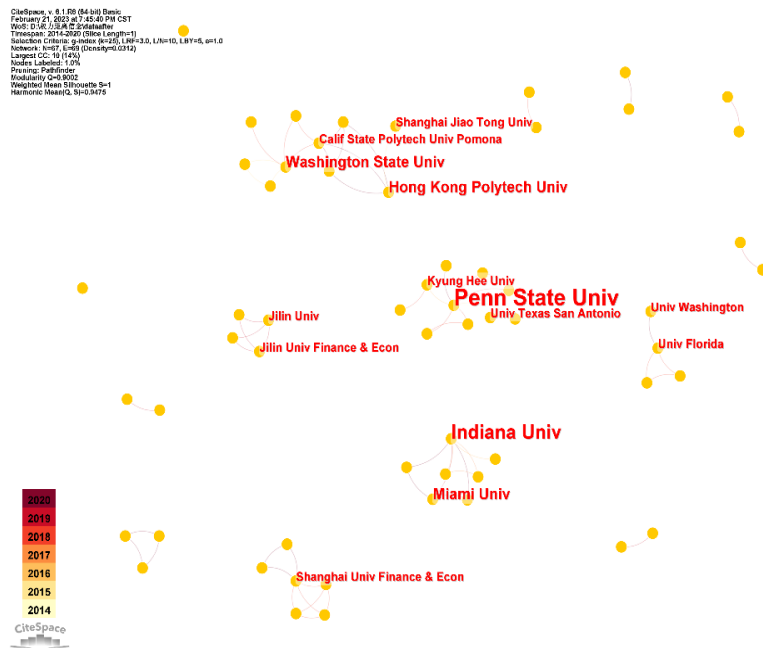


Figure 1. Number of articles published each year

3.2. Analysis of Knowledge Graph of Publishing Institutions

Through CiteSpace's analysis of the literature, the cooperation network of research institutions on this theme can be obtained (Figure 2). In terms of the ranking of publishing institutions, Pennsylvania State University, Washington State University, and Hong Kong Polytechnic University rank in the top three in terms of the number of publications on this theme. In addition, Indian universities, Shanghai University of Finance and Economics, and Jilin University also have some research output on this theme. In terms of the regional distribution of publishing institutions, research on power distance belief is mainly distributed in the United States and China. In terms of institutional cooperation, there are 67 nodes and 69 connections, with a network density of 0.0312. Therefore, the connections between research institutions on this theme are relatively few, and except for the top three publishing institutions, cooperation between other research institutions is relatively limited.



3.3. Literature Coupling Analysis

Literature coupling was first proposed by Kessler in 1963, referring to the situation where two articles share the same references. If two articles cite the same reference, they have a coupling relationship, and the coupling strength is 1 [5]. The more references two articles share, the stronger their connection. As shown in Figure 3, the literature coupling analysis of power distance belief generated three clusters. The red cluster includes the most research, involving power distance belief in the tourism and hotel fields. The green cluster mainly focuses on research from the perspective of consumer marketing. The blue cluster mainly includes research from the field of organizational behavior.

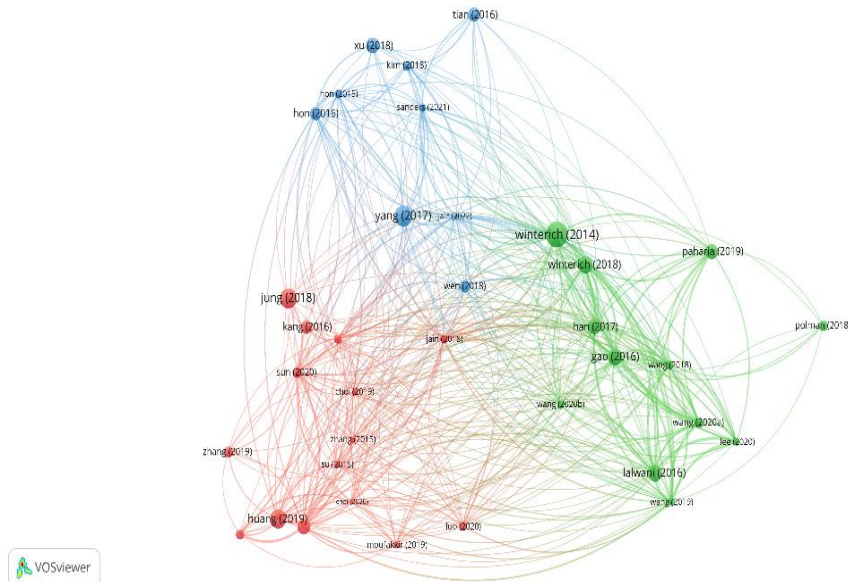


Figure 3. Knowledge graph of literature coupling

3.4. Co-citation Analysis

When two selected articles cite the same group of authors, these authors are considered co-cited. The more articles a group of authors are co-cited in, the stronger their co-citation relationship. Therefore, they appear closer in the network visualization. By selecting authors who have been co-cited at least nine times, 20 authors were identified and divided into three groups. Figure 4 shows the co-citation knowledge graph, revealing three main author networks. The red cluster mainly revolves around Hofstede, who first proposed the concept of power distance in the cultural value dimension theory [1] and developed a power distance measurement scale. The green cluster includes scholars like Zhang, who first proposed power distance belief and developed three measurement methods for power distance belief, introducing power distance belief into the field of consumer marketing [2]. The blue cluster mainly focuses on research from the perspective of consumer behavior.

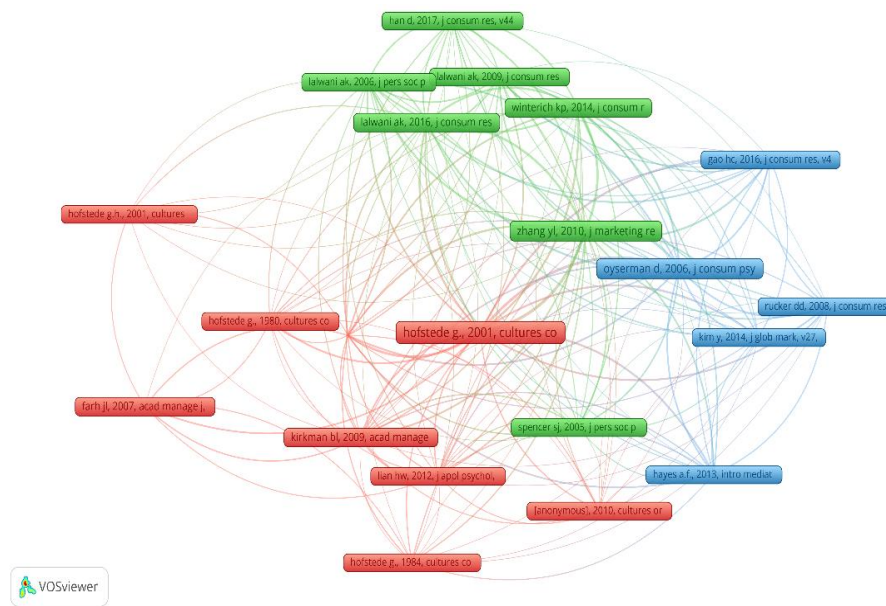


Figure 4. Knowledge graph of co-citation

3.5. Co-occurrence Analysis

This article uses all keywords, including author keywords and Web of Science keywords. The keyword co-occurrence knowledge graph is shown in Figure 5. Research themes related to power distance belief are interconnected rather than mutually exclusive. Among 371 keywords, 31 keywords reached a threshold of 3. These keywords are mainly divided into three categories. The first group is the red cluster, where the keywords "power distance" and "culture" are particularly prominent, followed by "preference," "influence," and "satisfaction." This group mainly focuses on research related to power distance. The second group is the green cluster, which includes keywords such as "perceived organizational support," "job satisfaction," "performance," "cultural values," and "mediating role." Therefore, this cluster mainly focuses on the application of power distance in the field of organizational behavior. The blue cluster forms the third group, with the most common keywords being "power distance belief," "perception," and "national culture." Therefore, this group focuses on research centered around power distance belief.

In the red cluster, the influence of power distance belief on preferences is reflected in various aspects. Previous literature shows that power distance belief can influence brand preferences, advertising preferences, and product preferences. In the field of consumer marketing, Kim and Zhang [6] first explored how power distance belief affects consumers' preferences for status brands (such as Rolex and LV). Their research found that the higher the power distance belief, the stronger the consumer's preference for brand status, which is consistent with previous research by Zhang and other scholars.

In the field of tourism research, Gao et al. studied the impact of consumers' power distance belief on hotel evaluations. Their research found that compared to independent hotels, the negative impact of power distance on online hotel ratings is weaker for chain hotels [7]. In addition, consumers with higher power distance beliefs tend to give lower online ratings to hotels. In terms of advertising preferences, Winterich et al. explored the relationship between power distance belief and consumers' attitudes toward celebrity-endorsed advertisements. The study found that consumers with higher PDB have more positive attitudes and brand evaluations toward celebrity-endorsed advertisements, while consumers with lower PDB show no significant difference in attitudes and brand evaluations between celebrity-endorsed and non-celebrity-endorsed advertisements [8]. This is because consumers with high power distance beliefs perceive stronger professionalism and trust from celebrity-endorsed advertisements and brands. In the tourism context, Huo Da et al. explored the impact of power distance belief and celebrity endorsement on consumers' restaurant choices [9]. The study found that

consumers with high and low power distance beliefs show more positive attitudes and purchase intentions toward restaurants operated by celebrity chefs and celebrity entertainers, respectively. Finally, regarding product preferences, Paharia and Swaminathan found that consumers with low PDB prefer user-designed products, with a sense of empowerment playing a mediating role, while consumers with high PDB prefer company-designed products, with perceived professional value playing a mediating role [10]. Similarly, Song et al. concluded that consumers with low PDB prefer user-designed products due to their identification with such companies, while consumers with high PDB prefer designer-designed products due to their trust in designer-oriented companies [11]. Relevant to this article, six studies in the literature design include consumers' preferences for international tourism companies.

The green cluster mainly introduces power distance belief from the field of organizational behavior, often used to explore the relationship between organizations and employees. In the tourism field, it is also often used to analyze hotel employees and their services from a cross-cultural perspective. Anna pointed out that power distance belief is an important factor in understanding organizational commitment, compensation practices, service encounter evaluations, and employee complaint behaviors in cross-cultural differences [12]. Riyad, based on institutional theory, studied the determinants of innovative behavior among hotel employees and found that employees in companies with low power distance environments are more likely to achieve innovative behavior [13].

The blue cluster focuses on power distance belief, with keywords such as perception, national culture, and values surrounding it. In the hotel service environment, Anna also studied the impact of customers' perceived hotel service failure types on negative emotions, where consumers with different power distance beliefs are affected differently by different service failure types [14]. Customers with high PDB tend to feel higher levels of anger and disappointment with process (versus outcome) service failures, while consumers with low PDB feel higher levels of disappointment with outcome (versus process) failures. This expands the boundaries of power distance belief research in the tourism and hotel fields.

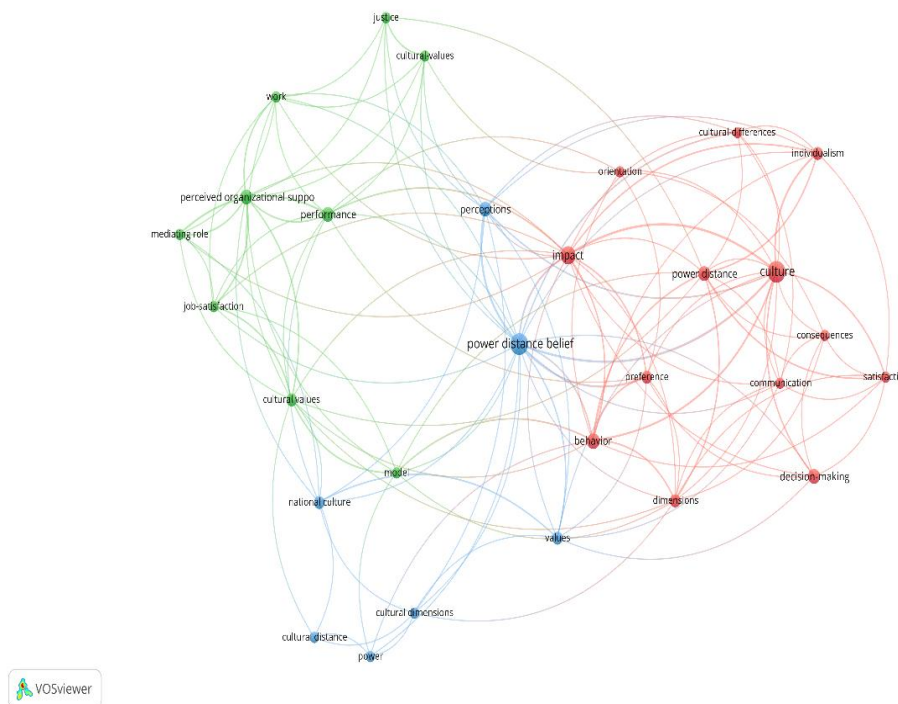


Figure 5. Knowledge graph of keyword co-occurrence

4. ANALYSIS OF RESEARCH HOTSPOTS AND TRENDS

By superimposing the literature publication time on the keyword co-occurrence network, the keyword time graph (Figure 6) is obtained. The node color is determined by the average year each keyword appears in the literature, revealing the evolution trend of research hotspots on power distance belief. The color of the keyword nodes corresponds to the year, with earlier research tending toward yellow and later research tending toward blue. From blue to yellow, the research heat increases. From the analysis of Figure 6, satisfaction, cultural values, work, and national culture were previously hot research topics.

From Figure 6, it can be seen that the research content and questions on power distance belief were relatively scattered in the early stages. Hot keywords mainly included culture, satisfaction, preference, performance, and cultural values. In terms of research methods, quantitative research was predominant, with many studies using quantitative methods to explore the mediating or moderating effects of power distance belief, while qualitative research was less common. In recent years, research on the impact of power distance belief on consumer brand preferences in the field of consumer marketing remains a hot topic, such as mass brands versus niche brands [15]. Some scholars have also studied the impact of power distance belief on educational marketing [16]. However, in the tourism and hotel fields, research mainly focuses on the relationship between hotel employees and organizations, as well as hotel services, such as using power distance belief to explain consumer responses to service failures [17]. There is also research exploring the role of leader apologies in the relationship between hotel employees' power distance belief and leader competence [18].

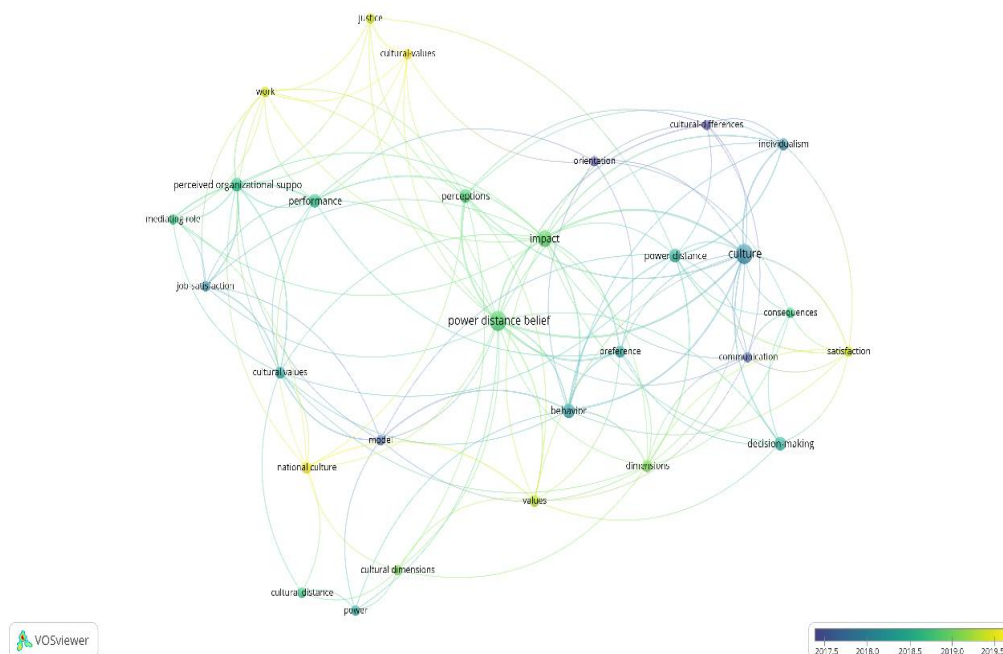


Figure 6. Superimposed visualization graph of keyword co-occurrence

5. RESEARCH CONCLUSIONS AND PROSPECTS

5.1. Conclusions

This study takes 39 articles related to power distance belief from the Web of Science core database as the research object and uses visualization analysis software and Citespace and VOSviewer to draw research institution maps, literature coupling knowledge maps, co-citation maps, and co-occurrence maps. The research results show:

- (1) In terms of the time distribution of literature, there are relatively few related literature studies on power distance belief in the tourism and hotel fields, and research is still in its infancy.
- (2) From the perspective of research institutions and author co-occurrence maps, Pennsylvania State University, Washington State University, and Hong Kong Polytechnic University rank in the top three in terms of research output in this field. In addition, research regions are mainly concentrated in China and the United States.
- (3) In terms of research themes, current research focuses on power distance belief in satisfaction, cultural values, work, and national culture. In the tourism and hotel fields, research mainly focuses on the relationship between hotel employees and organizations, as well as hotel services.

5.2. Research Prospects

With the changing pandemic situation, the tourism industry is showing signs of recovery. At the same time, the world is undergoing profound changes unseen in a century, with technological revolutions and innovations deepening, and the tourism industry is developing towards higher quality. Through a review of foreign research on power distance belief, combined with the new situation and background of tourism development, future research on power distance belief in tourism and hotels can be carried out from the following aspects:

- (1) In terms of research content. Research on power distance belief in tourism can be conducted from the perspectives of tourism consumption and marketing. Understanding tourist behavior and tourism consumption and marketing using power distance belief will be one of the hot research topics. Specifically, first, the impact of power distance belief on tourists' sense of participation, satisfaction, and revisit intention can be explored. Second, in the context of rapid digital development, power distance belief can be used to study tourist consumption behavior from the perspective of value co-creation, such as word-of-mouth promotion and repurchase. Finally, in-depth research can be conducted on hotel accommodation services based on power distance belief, such as peer-to-peer accommodation and service fairness.
- (2) In terms of research methods. Most research on power distance belief uses quantitative research methods, such as mediation and moderation effect analysis. Future research can use qualitative research methods or mixed research methods.

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