

Ahmadi, Hamid; Bakhtiarian, Iraj (2023). Mapping and Analysis Knowledge Structure of Hawraman Research in Iran: A Co-word Analysis and Information Clustering. *Journal of Knowledge-Research Studies*, 2 (3), 31-49.

Doi: 10.22034/jkrs.2024.58983.1037

URL: https://jkrs.tabrizu.ac.ir/article_17553.html

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Mapping and Analysis Knowledge Structure of Hawraman Research in Iran: A Co-word Analysis and Information Clustering

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Received: October, 25, 2023

Revised: December, 18, 2023

Accepted: December, 19, 2023

Published: December, 20, 2023

Abstract

Purpose: The purpose of this research is to analyze the knowledge structure of Hawraman research in Iran.

Methodology: This study employed content analysis techniques, specifically co-word analysis and information clustering. The research community encompassed all scientific outputs from the beginning until 2022.

Findings: The findings indicate a significant growth in research on Hawraman over the past two decades, with over 15 geographical areas being studied. Co-word analysis revealed more than 1500 concepts or keywords mentioned, with "Hawraman," "Tourism," "local architecture," and "Hawrami dialect" being the most frequently used concepts. Notably, the conceptual pairs "Hawraman-tourist attractions," "Hawraman-history," and "Hawraman-Palangan" exhibited the highest co-occurrences. Additionally, clustering analysis uncovered 15 main clusters within the field's knowledge. Furthermore, the analysis of conceptual maps showed extensive relationships between concepts, indicating a dense network of interconnected ideas.

Conclusion: The Hawraman region has gained substantial attention from researchers due to its unique environmental conditions and UNESCO registration. Consequently, there has been a surge in research, leading to the exploration of numerous concepts. This research provides a comprehensive overview of the current state of Hawraman research and sheds light on the key issues being investigated.

Value: This study represents the first attempt at analyzing research data for an area in western Iran.

Key Words: *Hawraman Research, Co-word Analysis, Information Clustering, Scientometrics, Scientific Maps*

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Extended Abstract

Introduction: Located in the Zagros region, which holds a significant place in Iranian history, Hawraman has historically attracted considerable interest due to its distinct topography and living conditions. As a result, researchers have generated various materials and contents about the region. This study aims to collect, organize, analyze, and disseminate scientific information to unravel the scientific structure and comprehensively evaluate the scientific activities related to this historical, natural, and cultural area.

Purpose: This research focuses on analyzing the knowledge structure of Hawraman research in Iran. The main question guiding this study is: How is the knowledge structure of Hawraman research in Iran determined through co-word analysis?

Methodology: Using content analysis, specifically co-word analysis and information clustering techniques, this research aimed to determine the knowledge structure of Hawraman research. Following the selection of the research area, the methodology involved extracting concepts or vocabulary from relevant documents, finalizing the selection, constructing a vocabulary co-occurrence matrix, and finally clustering and analyzing the co-occurrence data to create conceptual maps. The research community considered all scientific outputs from the beginning until 2022. Findings: The findings indicate a significant growth in research on Hawraman over the past two decades, with numerous researchers contributing to its scientific production. Additionally, more than 15 geographical areas have been investigated. Co-word analysis revealed over 1500 mentioned concepts or keywords, with "Hawraman," "Tourism," "local architecture," and "Hawrami dialect" emerging as the most frequently utilized. The conceptual pairs "Hawraman-tourist attractions," "Hawraman-history," and "Hawraman-Palangan" exhibited the highest co-occurrences. Moreover, clustering analysis unveiled 15 main clusters representing various aspects of the field, such as history, language and literature, development and economy, security, border settlement issues, tourist attractions, ecotourism, natural resources, customs and folk literature, residence and housing, tourism employment in villages, historical geography, warfare, local music, cultural beliefs, cooking, and local foods, and weaving. Conceptual maps demonstrated extensive relationships between concepts, suggesting a dense and interconnected network within the field.



Journal of
Knowledge-Research Studies
(JKRS)

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Table 1: Ranking of concepts in the field of Hawraman research based on frequency (20 High-Frequency Concepts)

Frequency	Concepts	Rank	Frequency	Concepts	Rank
1	Hawraman	196	12	Construction in cities	58
2	Tourism	143	13	Hawrami's poem	55
2	local architecture	136	13	local music	55
3	Hormi dialect	102	14	Iran - Iraq war	47
4	Tourist Attractions	101	15	Hajij, village	42
5	Tourism in villages	86	16	Pir Shaliar	36
7	Historical geography	80	17	etiquette	34
8	public culture	69	18	Operation Paveh	30
10	Kurdish poem	68	18	Women	30
10	Construction in village	68	19	Counter- revolution	29
11	The History of Hawraman	67	20	Villages	28

Conclusion: Due to its unique environmental conditions, the Hawraman region has become a prominent subject for researchers. Its UNESCO registration further increased its significance, resulting in a surge of studies. The analysis highlights the diverse nature of Hawraman research, organized into logical thematic clusters that hold substantial importance. The extensive conceptual network reflects the region's specific cultural, social, and historical factors. Consideration of these factors collectively is crucial for an accurate understanding of the area and effective addressing of potential issues. Furthermore, the absence of concepts related to rights, lawsuits, or delinquency indicates fewer problems in the Hawraman region, making it suitable for national and international tourism. Overall, this research offers valuable insights into the current state of Hawraman research and addresses key issues within the field.

Value: This study represents a pioneering effort to analyze research data pertaining to a western Iranian region.

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(JKRS)

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