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## Iran's Scientific Prominences in Social Sciences Compared to Some Islamic Countries

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### Abstract

**Purpose:** The significance of scientific and technological advancements in today's world is such that the development of many countries is largely measured through them. Humanities and social sciences hold a special position in this regard. This study aims to investigate the overall situation of Iran in various sub-areas of social sciences from 2013 to 2022. It explores the areas that have achieved remarkable scientific prominence within each sub-area, as well as Iran's ranking compared to other countries within those fields.

**Methodology:** This research adopts an applied approach with an analytical-descriptive method. It utilizes a scientometric approach and the scientific prominence index. The research encompasses Muslim countries such as Iran, the United Arab Emirates, Indonesia, Pakistan, Turkey, Saudi Arabia, Iraq, Lebanon, Malaysia, and Egypt. The study focuses on their scientific outputs in diverse disciplines within the realm of social sciences. Data is collected using Scival database and the classification of research and development fields (FORD).

**Findings:** During the studied period, a total of 50,954 scientific outputs from Iran within the field of social sciences were indexed in the Scopus database. The subfields of "Economics and Business," "Other Social Sciences," "Psychology and Cognitive Sciences," "Political Sciences," "Law," "Education," "Economic and Social Geography," "Sociology," and "Media and Communication" showcased the highest volume of scientific output, respectively. Iran displayed relative advantages in subjects such as supply chains, supply chain management, industry, sports, students, heroes, water resources, water management, media, news, journalism, attention, brain, learning, internet, students, as well as "housing, neighborhood, gentrification." However, the findings indicated limited scientific output in the media subfield. Additionally, sociology made a modest contribution, while the country as a whole did not fare well in terms of prominent subject areas.

**Conclusion:** The findings of this study present two distinct approaches or steps to the policymakers, managers, and planners in the field of science and technology, particularly within social sciences. Firstly, they should capitalize on Iran's competitive advantages and strengthen them further. Secondly, efforts should be made to invest in areas that exhibit limited quantitative and qualitative contributions, bringing them to a relative level of maturity. These approaches can be implemented at both the micro and macro levels of the country's science and technology ecosystem.

**Value:** The utilization of strategic reference bases, such as SciVal, offers the opportunity to analyze various fields from a broad perspective that aligns with policy development and aids in identifying competitive advantages.

**Keywords:** Scientific Excellence; Scientific Leadership; Social Sciences; Iran's Scientific Outputs; Scientific Prominences

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## Extended Abstract

**Introduction:** The importance of science and technology achievements in today's world is such that a large part of a country's development is evaluated based on them. Humanities and social sciences are particularly important in this regard. Assessing a country's position and performance in science and technology outputs requires continuous observation and monitoring. This necessitates that every country measures its scientific position at the international level, capitalizes on its relative advantages, and addresses its weaknesses.

**Purpose:** The objective of this study is to investigate Iran's overall situation in each sub-field of humanities between 2013 and 2022. Additionally, it aims to identify the most scientifically prominent areas within each sub-field and compare Iran's rank with other countries.

**Methodology:** This research has a practical purpose and utilizes a descriptive analysis methodology with a scientometric approach and relevant indicators. The research community includes Muslim countries such as Iran, United Arab Emirates, Indonesia, Pakistan, Turkey, Saudi Arabia, Iraq, Lebanon, Malaysia, and Egypt. The scientific outputs of various fields in humanities were extracted using the Field-Weighted Citation Impact (FWCI) index. There are six subject categories in this field: agricultural sciences, engineering and technologies, human sciences, medical sciences, social sciences, and natural sciences. The sub-fields of humanities include "Economy and Business," "Other Social Sciences," "Psychology and Cognitive Sciences," "Political Sciences," "Law," "Education," "Economic and Social Geography," "Sociology," and "Media and Communications." Data was collected from the Scival citation database during September 2-8, 2022. It should be noted that prominence indicates the movement or visibility of a specific topic, but does not denote importance. Calculating a topic's prominence involves considering three metrics: citation count, Scopus views count, and average Cite Score.

**Findings:** During the studied period, a total of 50,954 scientific outputs from Iran in humanities were indexed in the Scopus database. The sub-fields with the highest number of scientific outputs were "Economics and Business," "Other Social Sciences," "Psychology and Cognitive Sciences," "Political Sciences," "Law," "Education," "Economic and Social Geography," "Sociology," and "Media and Communication." In terms of citations received, the sub-fields "Economy and Business," "Political Sciences," "Law," "Other Social Sciences," "Psychology and Cognitive Sciences," "Economic and Social Geography," "Education," "Sociology," and "Media and Communication" had the highest numbers respectively. "Law," "Political Science," "Economics and Business," and "Economic and Social Geography" showed higher citation rates and weighted citation impact compared to other sub-fields. The sub-fields of "Psychology and Cognitive Sciences," "Economics and Business," and "Other Social Sciences" had the most active authors.

Subjects such as "Supply chains; Supply Chain Management; industry; 'Sports, students, heroes'; Water; Water resources and water management'; 'Media; news; journalism'; 'Attention, Brain, Learning'; 'Internet, students' and 'housing; The



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Neighborhood; Enlightenment' are areas where Iran has a scientific comparative advantage. However, the country's scientific output in the media sub-field is low, followed by sociology, indicating room for improvement. Moreover, Iran does not have a strong position in terms of scientific impact in globally prominent fields. One notable finding from this study is that Pakistan, Saudi Arabia, and the UAE show good scientific capacities in the sub-fields of economy and business; education; law; media and communication; political science; and psychology and cognitive sciences. One proposed solution is for managers, planners, and researchers to establish cooperation with these countries, taking advantage of their scientific advantages.

**Value:** Evaluating a country's scientific and technological outputs and determining its position among other regional countries and competitors is crucial. The findings of this study suggest different approaches or steps for policymakers, managers, and planners in the country's science and technology sector, especially in humanities. First, they should capitalize on their scientific competitive advantages and strengthen them. Second, they should invest in areas where the country has made limited quantitative and qualitative contributions, bringing them to relative maturity. These approaches can be implemented at both the micro and macro levels of the country's science and technology ecosystem. Pakistan, Saudi Arabia, and the UAE are suitable options for communication and strengthening scientific diplomacy due to their scientific advantages.

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