

## ORIGINAL ARTICLE

# Identification and Ranking of Factors Affecting the Sustainability of Mobarakeh Steel Company, with Emphasis on Environmental Awareness

\*Sayed Mohsen Madineh<sup>1</sup>, Abdollah Taki<sup>2</sup>

1. Assistant Professor, Department of Accounting, Payame Noor University, Tehran, Iran

1. Assistant Professor, Department of Accounting, Payame Noor University, Tehran, Iran

Correspondence:

Sayed Mohsen Madineh

Email: [madineh1361@pnu.ac.ir](mailto:madineh1361@pnu.ac.ir)

Received: 3.Jun.2025

Received in revised form: 12.Oct.2025

Accepted: 17.Oct.2025

### How to cite:

Madineh, S.M., & Taki, A. (2026). Identification and Ranking of Factors Affecting the Sustainability of Mobarakeh Steel Company, with Emphasis on Environmental Awareness. *Journal of Environmental Education and Sustainable Development*, 14(4), 183-203.

(DOI: [10.30473/EE.2025.74712.2852](https://doi.org/10.30473/EE.2025.74712.2852))

## ABSTRACT

Corporate sustainability is a multidimensional concept that combines financial and non-financial dimensions (environmental, social, ethical, and governance). It not only meets the diverse needs of stakeholders but also facilitates the path toward sustainable development. Considering the significant role of companies in achieving sustainable development, the present study—through an innovative approach and with a focus on the non-financial dimensions of corporate sustainability, particularly social and ethical aspects—aims to identify and rank the factors influencing the sustainability of Mobarakeh Steel Company, the largest steel producer in Iran and one of the top performers in the Iranian capital market, within the time scope of the year 2024. This unique focus distinguishes the study from other sustainability research and provides a foundation for ranking corporate sustainability. The research is applied in purpose and falls within survey-based studies. First, individual and environmental indicators were extracted through library research. Subsequently, based on expert opinions, seven individual indicators and six environmental indicators were selected. In the next step, 19 experts from Mobarakeh Steel Company completed the pairwise comparison questionnaire, and the data were analyzed using the Analytic Hierarchy Process (AHP) and Expert Choice software version 11. The results showed that, from the perspective of the experts at Mobarakeh Steel Company, individual indicators have a greater impact on corporate sustainability compared to environmental indicators. Individual indicators, with a weight value of 0.796, were selected as the first priority, compared to environmental indicators with a weight value of 0.204. Furthermore, among the individual indicators, environmental awareness, with a weight value of 0.286, was identified as the most important indicator by the experts. Environmental awareness leads to a deeper understanding of environmental issues, and the role of environmental education in strengthening this indicator—and in overcoming the environmental challenges of a rapidly changing world—is undeniable.

## KEYWORDS

Environmental Awareness, Ethics, Corporate Sustainability, Analytic Hierarchy Process (AHP).



## Introduction

Today the concept of corporate sustainability has become an important issue in many industries and businesses due to its positive and significant effects on the continuity of companies' activities. Improving living standards and environmental performance is not possible without the cooperation of the industrial sector, so companies and industries whose activities have extensive environmental and social impacts face a serious challenge in disclosing their non-financial information (Akbari & Pourzamani, 2019). Transforming companies into sustainable companies and strengthening corporate sustainability, in order to continue and improve their activities, depends on identifying and paying attention to various factors affecting this strategic category.

It must be said that the limited attention paid by Iranian companies to corporate sustainability compared to other countries has created uncertainty about the continuity of these companies' activities. Despite the development of a sustainability disclosure standard in the financial dimension by the Audit Organization of Iran and its implementation from the beginning of 2026, there is still a lack of standards for other aspects of sustainability. Therefore, it is necessary to develop other standards in the field of corporate sustainability and facilitate the sustainability reporting process, and create mechanisms to encourage companies to implement and disclose their sustainability. A suitable solution in this regard is to identify the factors affecting corporate sustainability, especially in large companies, and extend it to other medium and small companies. Given the breadth of sustainability dimensions, prioritizing dimensions and sub-categories and focusing on higher priority dimensions will also be of particular importance.

In research in the field of sustainability, and specifically in the steel industry, identifying and ranking individual and environmental factors affecting corporate sustainability has not been addressed, which adds to the value of the present study. Accordingly, the main goal of the present study is to identify and prioritize individual and environmental factors affecting corporate sustainability - especially non-

financial dimensions with an emphasis on ethical and social factors - in Isfahan Mobarakeh Steel Company. The results of this study can, in addition to developing and enriching the theoretical literature of research related to sustainability, help explain the role of individual and environmental factors in corporate sustainability and develop and expand corporate sustainability indicators and related standards. They can also help managers and decision-makers at Mobarakeh Steel Company and other companies develop appropriate solutions to disclose non-financial dimensions of sustainability alongside financial reports and provide transparent information to stakeholders.

The concept of sustainability was first introduced in the 1960s in response to concerns about environmental degradation, and the concept has evolved in line with the development of sustainability theory and its different applications. A categorization of sustainability according to the societal level it affects includes global sustainability, national sustainability, local sustainability, and corporate sustainability (Dyllic & Muff, 2016). The term sustainability is derived from a broader concept called sustainable development. In sustainable development, the principle is that the basic natural resources are protected in such a way that future generations produce and consume at least as much as the present generation.

Bonnet (1999) believes that sustainability as a mental framework can have positive and widespread educational implications. He adds that in recent years there has been a growing consensus that environmental education should be focused around sustainable development. Rezaei & Mirizdi (2022) consider the dimensions of sustainability to be complementary and emphasize that a company that is effectively led, advocates ethical principles, is committed to governance, social responsibility and environmental requirements, and can be sustainable in generating long-term financial performance.

The results of Yahyazadeh Far's (2015) research showed that organizational, individual, and group factors are among the most important and fundamental factors affecting organizational sustainability. Akbari et al

(2020) also emphasize that the success of organizations in achieving sustainable performance is not limited to tangible factors, but intangible factors such as ethical characteristics and adherence to them have significant effects on sustainable performance. Rezaei & Mirizdi (2022) emphasize that companies that conduct their business in an ethical manner are more sustainable in the long term and can produce economic growth and development with higher quality and quantity.

Despite taking effective measures regarding sustainability, due to the broad scope of sustainability, individual and environmental factors affecting the company's sustainability, especially ethical and social factors, have not been specifically examined at Mobarakeh Steel Company. Paying attention to the aforementioned factors can improve sustainability indicators and reporting quality, enhance performance, and help the company survive and thrive in competitive global markets.

## Methodology

The present study is applied in terms of purpose and is a subset of survey research in terms of implementation method. In the first part of this study, by examining articles and research conducted in the fields of humanities and sustainability, using the library method, individual and environmental factors that were likely to affect corporate sustainability were extracted.

In the second step, field surveys and experts' opinions were used to monitor and summarize the variables. Finally, seven individual factors, including environmental awareness, spiritual

well-being, organizational paranoia, organizational commitment, organizational silence, Machiavellianism, and spiritual intelligence, and six environmental factors, including organizational ethics, organizational support, organizational justice, organizational culture, innovation culture, and organizational learning, were selected as the individual and environmental factors identified by the experts for use in the AHP method.

In order to collect qualitative data, a second questionnaire was prepared and, using a nine-point scale and performing pairwise comparisons between selected individual and environmental factors through the AHP method, the individual and environmental factors affecting corporate sustainability were prioritized. Expert Choice software, version 11, was used to analyze the data and extract the results from pairwise comparisons of factors and indicators.

## Results

A summary of the results related to the scoring and comparison between the two main indicators, individual and environmental, by the experts can be seen in Table 1, while a summary of the output related to the ranking and weighting of the individual and environmental sub-indicators can be seen in Table 2.

**Table 1.** Ranking and Weighting of Individual and Environmental Indicators

| Index Type          | Weighted value | Rank |
|---------------------|----------------|------|
| Individual Index    | 0.796          | 1    |
| Environmental Index | 0.204          | 2    |

**Table 2.** Ranking and Weighting of Individual and Environmental Sub-indicators

| Outputs related to environmental factors |                |                         | Outputs related to individual factors |                |                           |
|------------------------------------------|----------------|-------------------------|---------------------------------------|----------------|---------------------------|
| Rank                                     | Weighted value | environmental factors   | Rank                                  | Weighted value | individual factors        |
| 1                                        | 0.299          | Organizational Support  | 1                                     | 0.286          | Environmental awareness   |
| 2                                        | 0.183          | Culture of Innovation   | 2                                     | 0.267          | Organizational commitment |
| 3                                        | 0.171          | Organizational Culture  | 3                                     | 0.158          | Spiritual well-being      |
| 4                                        | 0.124          | Organizational Ethics   | 4                                     | 0.102          | Organizational silence    |
| 5                                        | 0.112          | Organizational Justice  | 5                                     | 0.070          | Spiritual intelligence    |
| 6                                        | 0.111          | Organizational Learning | 6                                     | 0.065          | Organizational paranoia   |
| ----                                     |                |                         | 7                                     | 0.052          | Machiavellianism          |

## Conclusion

The values in the tables above indicate that the experts consider individual factors to be more effective than environmental factors in corporate sustainability and have selected environmental awareness, organizational commitment, and spiritual well-being as the most effective individual factors affecting the sustainability of the steel company. The results are consistent with the views of Zahedi (2016) and Akbari (2020) regarding the primacy of individual changes over environmental factors. In addition, the confirmation of the impact of individual and environmental variables on performance improvement, corporate sustainability, and sustainable development is in line with the research of Stern et al. (2000) and Baghianpour (2020).

Considering that the individual factor of environmental awareness has the highest ranking, it is suggested that the company should create a platform for sharing environmental

knowledge and experiences among employees by forming sustainability working groups. Also, by using the scientific capacities available inside and outside the country and taking advantage of university professors and industrial experts, it should provide the basis for familiarizing employees with sustainability standards, especially environmental issues, and take steps to improve the environmental awareness of its employees.

It is also suggested that companies, organizations, and businesses, in line with the implementation of global and international sustainability standards, especially the GRI trans-industry standards, should define the individual and organizational variables identified in this study in the development and completion of their ethical codes or ethical principles. In addition, it is suggested that a study using SASB industry-based indicators should be conducted to rank financial, environmental, and governance indicators in Mobarakeh Steel Company.

«مقاله پژوهشی»

## شناسایی و رتبه‌بندی عوامل اثرگذار بر پایداری شرکت فولاد مبارکه اصفهان، با تأکید بر آگاهی محیط‌زیستی

\*سید محسن مدینه<sup>۱</sup>، عبدالله تاکی<sup>۲</sup>

۱. استادیار، گروه حسابداری، دانشگاه پیام نور، تهران، ایران
۲. استادیار، گروه حسابداری، دانشگاه پیام نور، تهران، ایران

نویسنده مسئول:

سید محسن مدینه

رایانامه: [madineh1361@pnu.ac.ir](mailto:madineh1361@pnu.ac.ir)

تاریخ دریافت: ۱۴۰۴/۰۳/۱۳

تاریخ بازنگری: ۱۴۰۴/۰۷/۲۰

تاریخ پذیرش: ۱۴۰۴/۰۷/۲۵

استناد به این مقاله:

مدینه، سید محسن. و تاکی، عبدالله. (۱۴۰۵). شناسایی و رتبه‌بندی عوامل اثرگذار بر پایداری شرکت فولاد مبارکه اصفهان، با تأکید بر آگاهی محیط‌زیستی، فصلنامه علمی آموزش محیط زیست و توسعه پایدار، ۱۴(۴)، ۱۸۳-۲۰۳. (DOI: [10.30473/EE.2025.74712.2852](https://doi.org/10.30473/EE.2025.74712.2852))

### چکیده

پایداری شرکتی مفهومی چندبعدی و ترکیبی از ابعاد مالی و غیرمالی (محیط‌زیستی، اجتماعی، اخلاقی و حاکمیتی) است، که ضمن تأمین نیازهای متنوع ذینفعان، مسیر دستیابی به توسعه پایدار را هموار می‌سازد. با توجه به نقش مهم شرکت‌ها در رسیدن به توسعه پایدار، هدف پژوهش حاضر با رویکردی نوآورانه و با تمرکز بر ابعاد غیرمالی پایداری شرکتی، بویژه ابعاد اجتماعی و اخلاقی، شناسایی و رتبه‌بندی عوامل موثر بر پایداری شرکت فولاد مبارکه اصفهان- بعنوان بزرگ‌ترین تولیدکننده فولاد کشور و از برترین‌های بازار سرمایه ایران- در قلمرو زمانی سال ۱۴۰۳ می‌باشد، که این خود علاوه بر تمایز آن از سایر پژوهش‌های پایداری، بستری برای رتبه‌بندی پایداری شرکت فراهم می‌نماید. پژوهش از نظر هدف، کاربردی و جزء پژوهش‌های پیمایشی می‌باشد. ابتدا به روش کتابخانه‌ای اقدام به استخراج شاخص‌های فردی و محیطی شد. در ادامه و با استفاده از نظرات خبرگان، هفت شاخص فردی و شش شاخص محیطی انتخاب شدند. ۱۹ نفر از خبرگان شرکت فولاد مبارکه اصفهان در گام بعدی اقدام به تکمیل پرسشنامه مقایسات زوجی نموده و داده‌ها با استفاده از روش تحلیل سلسله‌مراتبی (AHP) و بکارگیری نرم افزار اکسپرت چویس نسخه ۱۱ تحلیل شد. نتایج نشان داد که از دید خبرگان شرکت فولاد مبارکه اصفهان شاخص‌ها و عوامل فردی نسبت به عوامل محیطی اثر بیشتری بر پایداری شرکتی داشته و شاخص‌های فردی با ارزش وزنی ۰/۷۹۶ نسبت به شاخص‌های محیطی با ارزش وزنی ۰/۲۰۴ بعنوان اولویت اول خبرگان انتخاب شدند. همچنین از بین شاخص‌های فردی آگاهی محیط‌زیستی با ارزش وزنی ۰/۲۸۶، بعنوان برترین شاخص توسط خبرگان انتخاب شد. آگاهی محیط‌زیستی باعث درک و فهم عمیق از مسایل محیط‌زیستی شده و در این بین نقش آموزش محیط زیست در تقویت این شاخص و برون‌رفت از چالش‌های محیط‌زیستی جهان در حال تغییر غیر قابل انکار است.

### واژه‌های کلیدی

آگاهی محیط‌زیستی، اخلاق، پایداری شرکتی، تحلیل سلسله‌مراتبی.

## Introduction

The idea of survival in competitive markets has compelled companies to identify and implement the concept of sustainability at various organizational levels. Today, corporate sustainability has become an important topic in many industries and businesses due to its significant and positive effects on the continuity of corporate operations. Kelabi and Sharaei (2024) define corporate sustainability as the evolved form of traditional concepts used to describe ethical corporate behavior. Anji and Rezaei (2015) argue that sustainability is a set of practices that improve the dimensions of sustainable financial and non-financial performance (environmental, social, ethical, and governance). Improving living standards and environmental performance is not possible without the cooperation of the industrial sector; therefore, companies and industries whose activities have extensive environmental and social impacts face serious challenges in disclosing their non-financial information (Akbari & Pourzamani, 2019). Companies may voluntarily use ESG reporting frameworks—such as CDP, GRI, and SASB—to disclose their progress toward achieving the United Nations Sustainable Development Goals, or they may rely on managerial guidelines issued by the International Organization for Standardization (ISO) (Fakhari et al., 2018). Corporate sustainability is defined as a focused process aimed at achieving all five dimensions of sustainable performance: economic, governance, social, ethical, and environmental (Rezaei & Miryazdi, 2022). To transform companies into sustainable organizations, mechanisms must be established and monitoring processes must be implemented so that companies are encouraged to execute and disclose their sustainability practices. A suitable approach in this regard is identifying the factors influencing corporate sustainability, which can improve the implementation and disclosure of sustainability and facilitate companies' progress toward achieving sustainable development. The limited attention of Iranian companies to corporate sustainability, compared to other countries, has placed the continuity of their operations under uncertainty.

In previous studies, several dimensions and components influencing corporate sustainability—such as individual, social, and organizational factors—have been overlooked, making the identification of sustainability-related factors an unavoidable necessity. Inspired by Bandura's Social Cognitive Theory (1986), which highlights the interaction between the individual, environment, and behavior, and emphasizes that individuals' behavior and performance are influenced by personal and environmental characteristics, it can be argued that in companies, sustainability and sustainable performance are also affected by employees' behavior and performance. Therefore, individual and environmental factors can enhance corporate performance and serve as a foundation for sustainable development within organizations. The Sustainability Accounting Standards Board (SASB) emphasizes that material sustainability issues differ depending on the industry in which a company operates. One of the prominent listed companies in Iran is Mobarakeh Steel Company. In sustainability-related research, and particularly in the steel industry, the identification and ranking of individual and environmental factors affecting corporate sustainability have not yet been addressed—an aspect that adds significant value to the present study. Accordingly, the main objective of this research is to identify and prioritize individual and environmental factors influencing corporate sustainability—especially non-financial dimensions with an emphasis on ethical and social factors—in Mobarakeh Steel Company. The findings of this study can enrich the theoretical literature on sustainability, clarify the role of individual and environmental factors in corporate sustainability, contribute to the development and expansion of sustainability indicators and related standards, and assist managers and decision-makers at Mobarakeh Steel Company in formulating appropriate strategies for disclosing non-financial sustainability dimensions alongside financial reports, thereby providing transparent information to stakeholders. Conducting this research can, on the one hand, facilitate the process of corporate sustainability ranking, assist investors in identifying and selecting sustainable investment options, and provide a

foundation for applied research in the field of sustainability; and on the other hand, it can make access to these outcomes easier for other companies.

The concept of sustainability was first introduced in the 1960s. In the early 1980s, sustainability became more focused on environmental protection and human sciences, and in 1987, the Brundtland Commission defined sustainability as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Connelly et al., 2012). Sustainability is derived from the broader concept of sustainable development. In sustainable development, the principle is that basic natural resources must be preserved in such a way that future generations can produce and consume at least as much as the current generation (Zahedi, 2016). Bonnett (1999) believes that sustainability, as a conceptual framework, can have broad and positive educational implications. He adds that in recent years, there has been increasing consensus that environmental education should be centered around sustainable development. With rising awareness of the need for sustainable development, companies participate in environmental protection by adopting sustainability strategies and implementing various innovations such as reducing pollutants, recycling natural resources, and conserving them. John et al. (2023) argue that in the Brundtland Commission report, the combination of the technical meaning of development with a set of ethical requirements and preferences is clearly evident. Huckle (1993) believes that current global changes require intensified learning and exploration of new ethical, economic, and educational patterns. Reufi Maram et al. (2022) consider ethical approaches an inseparable part of modern management systems and describe managers' ethical orientation as the driving force behind sustainable development. Abbaszadeh Tehrani (2016), emphasizing the necessity of defining the ethical dimension within sustainability concepts, states that the world needs a new definition of sustainable development—one that, in addition to preserving and enhancing environmental, social, and economic aspects, also considers the elevation of ethics and the spiritual

development of individuals. Zahedi (2016) argues that achieving sustainable development requires changes in culture and lifestyle. He categorizes change into two types: exogenous and endogenous, noting that endogenous change originates from within the individual and is more persistent and sustainable, whereas exogenous change is imposed on the individual through the environment.

In management science, all entities—whether governmental, private, service-oriented, or manufacturing—are considered organizations, and the term “organization” cannot be viewed independently from “company” (Daft, 2014). Therefore, alongside the concepts of sustainable development and corporate sustainability, the notions of organizational sustainability and sustainable organizational performance are also widely used in theoretical foundations. One classification of sustainability, based on the social level it affects, includes global sustainability, national sustainability, local sustainability, and corporate sustainability (Dyllick & Muff, 2016). Rezaei and Miryazdi (2012) consider the dimensions of sustainability to be complementary and emphasize that a company that is effectively led, adheres to ethical principles, and is committed to social responsibility governance and environmental requirements, can achieve long-term sustainable financial performance. Zahedi (2016) believes that in today's world, the most important principle guiding attitudes, prioritization, and behavioral orientation is the principle of personal interest, which he refers to as the “iron principle.” Nevertheless, Jalilpour et al. (2019), in a contrasting perspective, argue that ethical orientation and ethical behaviors in individuals' daily lives contradict conventional views in the domain of rational choice and personal utility-seeking in decision-making, and they emphasize that focusing on understanding ethical behavior is necessary and essential. The findings of Yahyazadeh Far et al. (2015) showed that organizational, individual, and group factors are among the most important and fundamental elements influencing organizational sustainability. Akbari et al. (2020) also emphasize that organizational success in achieving sustainable performance is not limited to tangible factors; rather, intangible factors such as ethical characteristics and

adherence to them have significant effects on sustainable performance.

Companies around the world follow the United Nations Sustainable Development Goals (SDGs) to move toward sustainable development and implement corporate sustainability. Attention to these goals leads to positive environmental impacts, recognition of individual differences, employee training, adherence to ethical principles, and compliance with human rights standards. Leal Filho et al. (2023) believe that organizations need indicators of ethical performance measurement to evaluate their success in achieving ethical objectives. They categorize the key indicators of ethical performance measurement into corporate culture and ethical values, ethical charter, ethical performance, and ethical reporting. The Internal Controls Guideline (2012) and the Corporate Governance Guideline (2018) serve as tools that support corporate sustainability and the fulfillment of social and ethical responsibilities. All companies listed in Iran's financial market, as well as governmental organizations and small and medium-sized enterprises, possess ethical charters to varying degrees. One of the drivers for having an ethical charter in Iranian companies is cross-border activities, foreign commercial contracts, and obtaining international representation. Rezaei and Miryazdi (2021) argue that an appropriate ethical charter—one that promotes ethical and professional behavior and shapes the organizational ethical structure—serves as the backbone of effective corporate governance. They emphasize that, given the persistence of corporate scandals and financial crises, companies that conduct their business ethically are more sustainable in the long term and can generate higher-quality and higher-quantity economic growth and development.

In Mobarakeh Steel Company, despite effective actions taken regarding sustainability and achieving a relative level of maturity in this domain, due to the broad scope of sustainability, the individual and environmental factors influencing corporate sustainability—particularly ethical and social factors—have not been specifically examined. Attention to these factors can improve sustainability indicators,

enhance reporting quality, elevate performance, and ultimately assist the company in fulfilling its commitments toward stakeholders.

Based on the theoretical foundations presented, several domestic and international studies related to the research topic are outlined below: Kelabi and Sharaei (2023) found in their study that eight main clusters exist within the research domain of corporate sustainability, including corporate sustainability indicators and their impact on financial performance, ethics, and social responsibility. Sabziani et al. (2023) identified environmental factors, professional ethics, and sustainable value creation as the main themes of the corporate sustainability model in their research. Akhtarshenas et al. (2023) introduced nine components influencing corporate sustainability, including adherence to ethics and the company's social reputation. Onuzolik et al. (2024) noted that ethical considerations play a fundamental role in the theoretical foundations of corporate sustainability. Kajazi et al. (2023) demonstrated in their study that innovation in business models has a positive and significant effect on corporate sustainability, and that there is a positive relationship between employee training and corporate sustainability. Ahmed and Al-Jefri (2025) showed that a strong relationship exists between high sustainability rankings and increased market value of companies.

## Research Methodology

The present study is applied in terms of purpose and, in terms of implementation method, falls under survey research and is classified as field research. Considering the characteristics of the statistical population and the selection of experts along with the analysis of their opinions, sampling is non-probabilistic and purposive. Inspired by the views of Rezaei and Miryazdi (2022), who highlight the significant role of ethics in corporate sustainability and achieving sustainable development; Abbaszadeh Tehrani (2016), who emphasizes the necessity of defining the ethical dimension within sustainability concepts; and Reufi-Maram et al. (2022), who consider ethical orientation and social responsibility as essential

for corporate survival in competitive markets—this study focuses on ethical and social elements and indicators at both individual and environmental levels.

In the first stage of the research, by reviewing articles and studies conducted in the fields of humanities and sustainability, and using the library method—while considering the criteria and objectives of the International Organization for Standardization (particularly ISO 26000, 20400, 45001, and 14001), the GRI standards, and the sustainability indicators of the World Steel Association—individual and

environmental factors that were likely to influence corporate sustainability were extracted. This process resulted in identifying 58 individual factors and 52 environmental factors.

In the second stage, considering the nature of the study and its focus on non-financial dimensions, a field investigation was conducted and the opinions of experts in ethics, faculty members in psychology, management, and accounting, as well as experts from Mobarakeh Steel Company, were gathered to screen and summarize the variables.

**Table 1.** Demographic Information of Experts for Monitoring and Optimizing Variables

| Table IV: Demographic Information of Experts for Monitoring and Optimizing Variables |                 |           |                     |                           | Mean Work Experience | Standard Deviation of Mean Work Experience |
|--------------------------------------------------------------------------------------|-----------------|-----------|---------------------|---------------------------|----------------------|--------------------------------------------|
| Demographic Characteristics                                                          |                 | Frequency | Assistant Professor | Associate Professor       |                      |                                            |
| Faculty members                                                                      | Accounting      | 3         | 2                   | 1                         | 18.48                | 4.49                                       |
|                                                                                      | Management      | 3         | 2                   | 1                         |                      |                                            |
|                                                                                      | Psychology      | 2         | 1                   | 1                         |                      |                                            |
|                                                                                      | Islamic Studies | 1         | 1                   | -                         |                      |                                            |
|                                                                                      |                 | Frequency | Experience          | Education Level           |                      |                                            |
| Experts working at Mobarakeh Steel Company                                           | Manager         | 4         | Over 20 years old   | Master's degree and above | 19.30                | 5.73                                       |
|                                                                                      | President       | 2         | Over 15 years old   | Master's degree and above |                      |                                            |

After the screening and refinement process conducted by the experts, 17 individual variables and 12 environmental variables were selected. In the third step, a questionnaire was used for the final screening and selection of

variables, in which the experts rated the variables using a five-point Likert scale. The results obtained from this questionnaire, extracted using SPSS software version 22, are presented in Table (2):

**Table 2.** Descriptive Statistics Results of the First Questionnaire

| Classification     | Factor                  | Mean | Standard Deviation | Skewness | Kurtosis |
|--------------------|-------------------------|------|--------------------|----------|----------|
| Individual factors | Epistemological beliefs | 2.73 | 0.765              | 1.421    | 0.822    |
|                    | Sensitivity to justice  | 3.09 | 0.541              | 0.983    | 0.846    |
|                    | Spiritual well-being    | 3.72 | 0.531              | 0.873    | 0.963    |
|                    | Religious attitude      | 2.62 | 0.834              | 0.902    | 0.816    |
|                    | Personality Type        | 2.76 | 0.712              | 1.421    | 0.513    |
|                    | Self-Confidence         | 3.08 | 0.456              | 1.263    | 0.874    |
|                    | Self-control            | 3.12 | 0.673              | 1.192    | 0.956    |
|                    | Environmental awareness | 4.48 | 0.604              | 0.851    | 0.817    |
|                    | Organizational paranoia | 3.54 | 0.591              | 1.214    | 0.963    |

| Classification                   | Factor                          | Mean | Standard Deviation | Skewness | Kurtosis |
|----------------------------------|---------------------------------|------|--------------------|----------|----------|
|                                  | Organizational belonging        | 4.29 | 0.608              | 1.102    | 0.883    |
|                                  | Organizational commitment       | 4.23 | 0.836              | 0.986    | 0.811    |
|                                  | Job Satisfaction                | 3.22 | 0.771              | 0.893    | -0.908   |
|                                  | Organizational Silence          | 3.54 | 0.419              | 1.411    | -0.509   |
|                                  | Individual Learning             | 3.35 | 0.852              | 1.324    | 0.609    |
|                                  | Time Management                 | 2.72 | 0.457              | 1.686    | 0.726    |
|                                  | Spiritual Intelligence          | 3.77 | 0.901              | 0.744    | 0.930    |
|                                  | Machiavellianism                | 3.62 | 0.473              | 0.912    | 0.855    |
| Average of individual factors    |                                 | 3.40 | —                  | —        | —        |
| Environmental factors            | Organizational participation    | 2.34 | 0.649              | 1.048    | 0.817    |
|                                  | Organizational development      | 2.24 | 0.766              | 0.729    | 0.798    |
|                                  | Organizational support          | 3.76 | 0.493              | 1.464    | 0.538    |
|                                  | Culture of innovation           | 3.29 | 0.625              | 0.867    | 0.816    |
|                                  | Organizational ethics           | 3.21 | 0.714              | 0.986    | 0.923    |
|                                  | Customer orientation            | 2.51 | 0.812              | 0.669    | 0.829    |
|                                  | Organizational justice          | 2.98 | 0.598              | 1.204    | 0.974    |
|                                  | Organizational learning         | 2.94 | 0.471              | 1.409    | 0.899    |
|                                  | Culture of knowledge sharing    | 2.01 | 0.632              | 1.059    | 0.844    |
|                                  | Incentive and punishment system | 2.67 | 0.815              | 0.744    | 0.979    |
|                                  | Organizational culture          | 3.37 | 0.932              | 0.912    | 0.725    |
|                                  | Organizational vision           | 2.21 | 0.473              | 0.522    | 0.691    |
| Average of environmental factors |                                 | 2.80 | —                  | —        | —        |

Next, the variables in each group—individual and environmental—that received scores higher than the mean were selected as the final variables for use in the AHP method. The mean scores for individual and environmental factors were 3.4 and 2.9, respectively. Accordingly, seven individual factors (indicators)—environmental awareness, spiritual well-being, organizational paranoia, organizational commitment, organizational silence, Machiavellianism, and spiritual intelligence—and six environmental factors (indicators)—organizational ethics, organizational support, organizational justice, organizational culture, innovation culture, and

organizational learning—were selected as the individual and environmental factors identified by the experts.

### **Review of the Individual and Environmental Variables Selected by Experts**

Environmental awareness arises from education related to environmental issues and includes information about the reciprocal relationships between individuals and the environment, as well as the recognition and understanding of the threats and changes the environment is facing (Takala, 1991). In the 1990s, increasing concern about environmental problems and development led to support for an educational

approach that not only contributes to short-term environmental protection but also lays the foundation for long-term sustainability (Tilbury, 1995). Stern (2000) stated that environmental awareness increases employees' motivation to engage in environmentally responsible behaviors.

Spiritual well-being is a multidimensional construct consisting of a vertical and a horizontal dimension. The vertical dimension refers to one's relationship with God, while the horizontal dimension relates to a sense of purpose in life and satisfaction with it (Fehring et al., 1987). Afkhami Ardakani (2023) defines spiritual well-being as a concept arising from an individual's affirmation of having connections with oneself (personal dimension), with others (social dimension), with nature (environmental dimension), and with God (or the transcendent dimension). The positive effects of spiritual well-being on job satisfaction, organizational loyalty, and improved performance have been confirmed in the studies of Behzadi et al. (2013) and Bagianpour et al. (2020).

Organizational paranoia is a phenomenon in which negative feelings toward the organization replace organizational belonging (Deyhimpour & Dolati, 2020). Babaei and Rahimi (2020) identified the factors contributing to organizational paranoia in three categories: individual, organizational, and environmental. Deyhimpour and Dolati (2020) showed that organizational paranoia reduces employees' motivation and efficiency and negatively affects organizational performance.

Organizational commitment is one of the essential values for employees to ensure the survival of an organization. In addition to creating a sense of loyalty to the organization, it leads employees to perform their duties in the best possible way (Ashayeri et al., 2020). Ali (2021) found that organizational commitment affects corporate social responsibility. Shabani et al. (2012) state that organizational commitment can lead to desirable outcomes for both the individual and the organization, resulting in improved performance and organizational excellence.

Organizational silence is a phenomenon in which employees refrain from providing information, opinions, and concerns regarding potential work-related issues and problems (Danaiefar et al., 2012). Manakatim and Jasim

(2025) argue that organizational silence can have serious consequences for the quality of managerial decision-making, negatively influencing the governance dimension of sustainability and adversely affecting organizational performance.

Machiavellianism is one of the dark personality traits that can influence individuals' integrity, virtue, and ethical behavior (Jones, 2017). Behavioral studies in the field of financial reporting have shown that individuals with Machiavellian traits are more inclined toward unethical behaviors and earnings management (Sadeghian et al., 2019). The behavioral bias of Machiavellians leads them to choose actions that achieve desired goals without considering their impact on others, and this trait is undoubtedly inconsistent with the principles of business sustainability (Zainivand et al., 2022).

Spiritual intelligence refers to the adaptive use of spiritual information to facilitate solving everyday problems and achieving goals (Mohammadi et al., 2017). Characteristics of individuals with high spiritual intelligence include ethical values, spirituality, strong mental capacity, flexibility, and multidimensional thinking (Ahmadi & Pourzamani, 2024). Mohammadi et al. (2017) highlight the indispensable role of spiritual intelligence in organizational sustainability. The results of Mirzaei et al. (2014) also showed a significant negative relationship between spiritual intelligence and job burnout, which is considered a factor that weakens organizational performance.

Organizational ethics refers to how an organization responds to internal and external stimuli (Akbari et al., 2020). Akbari et al. (2021) demonstrated that promoting environmental ethics—one of the dimensions of organizational ethics—leads to environmentally responsible behaviors among employees and ultimately improves the organization's environmental performance. The findings of Androvaj et al. (2022) showed that there is a positive relationship between organizational ethics and corporate social responsibility.

Organizational support means that the organization values assisting and supporting its members and is concerned about their future (Shahzad et al., 2020). Organizational support

is a factor that leads to the creation of trust and encourages employees to become committed to the organization (Zandi et al., 2020). Huang et al. (2011) believe that employees who receive high levels of support from their organization try to reciprocate by supporting organizational goals, which in turn improves organizational performance.

Organizational justice refers to the perceived fairness of the organization's economic and social interactions and encompasses the relationships between the individual, colleagues, and the organization as a social system (Nuraie Ashtiani, 2023). Attention to the concept of justice increases employee satisfaction and effectiveness (Yeganagi & Bahramian, 2023). The positive and significant effect of organizational justice on corporate social responsibility and organizational performance was confirmed in the study by Khademi et al. (2023).

Organizational culture is the main factor and driving force behind sustainable development and environmental protection (Zahedi, 2016). In other words, culture is the root and fundamental structure of comprehensive development (Masumi et al., 2012). The results of the study by Pahlevan Sadegh and Noweh-Ebrahim (2021) indicate a direct relationship between organizational culture and organizational sustainability, and additionally, in the study by Akhtarshenas et al. (2021), organizational culture was identified as a factor influencing corporate sustainability.

Innovation culture is defined as the collective values, beliefs, and practices of an organization that create an environment in which creativity and the pursuit of new ideas are encouraged and accepted, and individuals have the ability to take risks and challenge the status quo to create positive change (Hosseini & Alizadeh, 2018). The impact of innovation on corporate sustainability has been confirmed in the studies of Sezen and Cankaya (2013) and Lai (2015).

Organizational learning consists of a set of knowledge-management processes that facilitate the acquisition, storage, sharing, and application of knowledge among individuals at all organizational levels (Kordab et al., 2020). Senge (1990) emphasizes that organizations

learn through their people. Chavoshi and Khashaei (2022) consider organizational learning a factor in achieving sustainable competitive advantage and a key variable in enhancing organizational performance. Smith (2012) believes that there is a direct relationship between organizational learning and organizational sustainability.

In the second part of the study, and for the purpose of collecting qualitative data, a second questionnaire was prepared. Using Saaty's scale and conducting pairwise comparisons among the selected individual and environmental factors through the AHP method, the prioritization of the factors influencing corporate sustainability was carried out. In this method, the goal must first be defined; then, various alternatives that can help the decision-maker reach the defined goal are listed. The criteria influencing the prioritization of alternatives are compared in pairs, and finally, the alternatives with the highest priority are selected (Izadbakhsh, 2010).

AHP, by structuring the group thinking process, creates an effective framework for group decision-making. Group decision-making itself improves the consistency of judgments and increases the reliability of the method. In AHP, since the questionnaire is validated by experts, its validity is confirmed. Additionally, for the pairwise comparison questionnaire, instead of the concept of reliability, the inconsistency ratio is used, which indicates contradictory responses from experts, and its acceptable threshold is less than 0.1 (Saaty & Vargas, 2012).

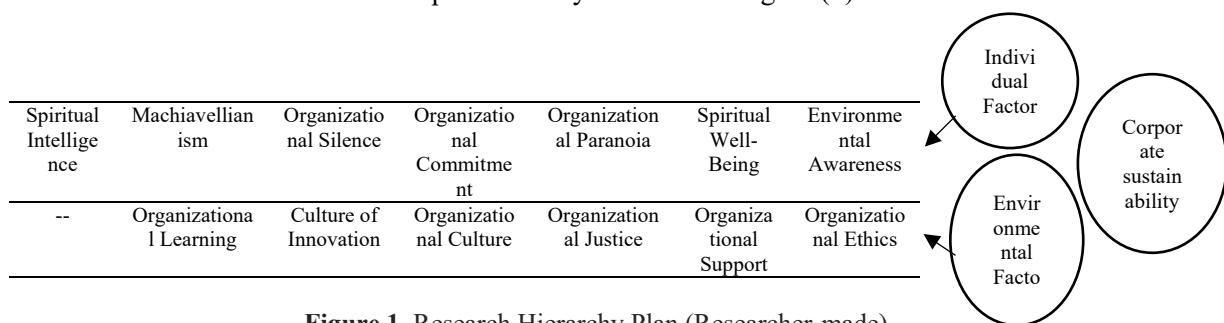
## Research Findings

To analyze the data and extract the results obtained from the pairwise comparisons of factors and indicators, Expert Choice software version 11 was used. The software first analyzes the pairwise comparison questionnaires, calculates the geometric mean of expert opinions, processes them, and determines their inconsistency ratio. For conducting the hierarchical analysis, the opinions of 19 experts employed at Mobarakeh Steel Company and its various deputy departments were used. Their demographic information is presented in Table 3:

**Table 3.** Demographic Information and Descriptive Statistics Related to the Experts of the Steel Company

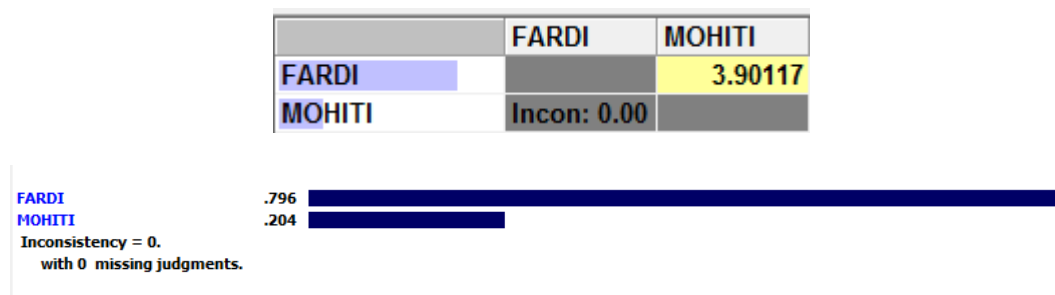
| Demographic Characteristics                |           | Frequency | Experience                  | Education Level |   | Average work experience | Standard deviation of experience |
|--------------------------------------------|-----------|-----------|-----------------------------|-----------------|---|-------------------------|----------------------------------|
| Experts working at Mobarakeh Steel Company | Manager   | 11        | Over 20 years old           | Master's Degree | 4 | 20.25                   | 5.32                             |
|                                            |           |           |                             | PhD             | 7 |                         |                                  |
|                                            | President | 8         | Between 15 and 20 years old | Master's Degree | 6 |                         |                                  |
|                                            |           |           |                             | PhD             | 2 |                         |                                  |

The hierarchical structure of the present study is shown in Figure (1):


**Figure 1.** Research Hierarchy Plan (Researcher-made)

Based on the scoring and pairwise comparison of the two main indicators—individual and environmental—by the experts, the output of the Expert Choice software and

the pairwise comparison matrix of the main indicators are presented in Figure (2), and a summary of the related results is shown in Table (4):


**Figure 2.** Pairwise Comparison Matrix, Ranking and Weight Value of Individual and Environmental Indicators

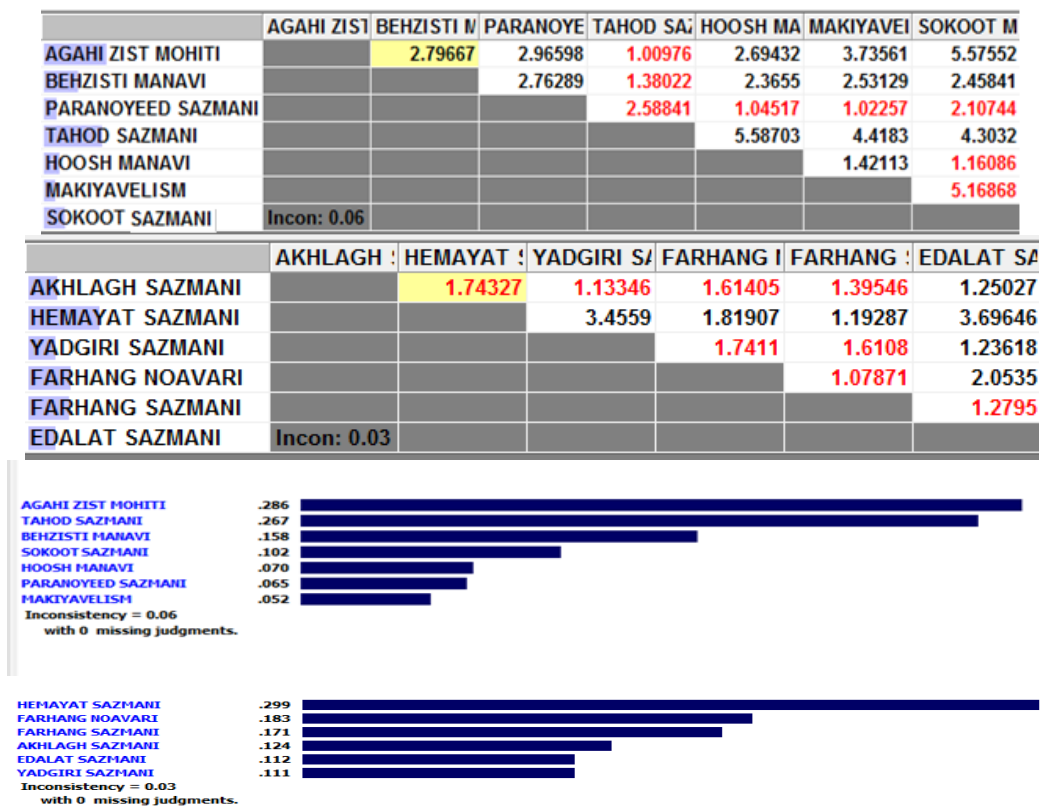
**Table 4.** Ranking and Weighting of Individual and Environmental Indicators

| Index Type          | Rank | Weight Value |
|---------------------|------|--------------|
| Individual index    | 1    | 0.796        |
| Environmental index | 2    | 0.204        |

The numbers in the software output represent the priority of the row indicator relative to the corresponding column indicator. Additionally, the inconsistency ratio equals 0.0, which is acceptable. The values in the table

indicate that the experts consider individual factors to be more influential than environmental factors in corporate sustainability. The matrices related to the pairwise comparisons of the sub-indicators of

individual and environmental factors are shown in Figure (3):



It is observed that the inconsistency ratios for the sub-indicators of individual and environmental factors are 0.06 and 0.03, respectively—both within acceptable limits. A

summary of the output related to the ranking and weight values of the individual and environmental sub-indicators is presented in Table (5):

**Table 5.** Ranking and Weighting of Individual and Environmental Sub-indicators

| Environmental Factor Outputs   |              |   | Individual Factor Outputs   |              |         |
|--------------------------------|--------------|---|-----------------------------|--------------|---------|
| Environmental Factor Sub-Index | Weight Value |   | Individual Factor Sub-Index | Weight Value | Ranking |
| Organizational Support         | 0.299        | 1 | Environmental Awareness     | 0.286        | 1       |
| Culture of Innovation          | 0.183        | 2 | Organizational Commitment   | 0.267        | 2       |
| Organizational Culture         | 0.171        | 3 | Spiritual Well-Being        | 0.158        | 3       |
| Organizational Ethics          | 0.124        | 4 | Organizational Silence      | 0.102        | 4       |
| Organizational Justice         | 0.112        | 5 | Spiritual Intelligence      | 0.070        | 5       |
| Organizational Learning        | 0.111        | 6 | Organizational Paranoia     | 0.065        | 6       |
|                                |              |   | Machiavellianism            | 0.052        | 7       |

The outputs of the Expert Choice software show that the experts at Mobarakeh Steel Company selected environmental awareness, organizational commitment, and spiritual well-being—with weight values of 0.286, 0.267, and 0.158—as the most influential individual factors affecting corporate sustainability. According to the experts, among environmental factors, organizational support, innovation culture, and organizational culture—with weight values of 0.299, 0.183, and 0.171—have the greatest impact on corporate sustainability at Mobarakeh Steel Company. These results, in terms of the primacy of individual changes and the greater persistence and stability of individual factors compared to environmental factors, align with the views of Zahedi (2016) and the findings of

Akbari et al. (2020). From the perspective of confirming the impact of selected individual variables on improving performance and corporate sustainability, the results are consistent with the studies of Takala (1991), Stern et al. (2000), Bagianpour et al. (2020), and Behzadi et al. (2013). Furthermore, regarding the confirmation of the impact of selected environmental variables on improving performance, corporate sustainability, and sustainable development, the results align with the studies of Pahlevan Sadegh and Noweh-Ebrahim (2020), Sezen and Cankaya (2013), and Lai (2015). In addition, considering the weight values of the individual and environmental variables and their sub-indicators, the final weighted values of the sub-indicators are presented in Table (6):

**Table 6.** Ranking and Final Weight Value of Individual and Environmental Sub-indicators

| Environmental Factor Outputs   |              |         |                    | Individual Factor Outputs   |              |         |                    |
|--------------------------------|--------------|---------|--------------------|-----------------------------|--------------|---------|--------------------|
| Environmental Factor Sub-Index | Weight Value | Ranking | Final weight value | Individual Factor Sub-Index | Weight Value | Ranking | Final weight value |
| Organizational Support         | 0.299        | 1       | 0.061              | Environmental Awareness     | 0.286        | 1       | 0.227              |
| Culture of Innovation          | 0.183        | 2       | 0.037              | Organizational Commitment   | 0.267        | 2       | 0.212              |
| Organizational Culture         | 0.171        | 3       | 0.035              | Spiritual Well-Being        | 0.158        | 3       | 0.126              |
| Organizational Ethics          | 0.124        | 4       | 0.025              | Organizational Silence      | 0.102        | 4       | 0.082              |
| Organizational Justice         | 0.112        | 5       | 0.023              | Spiritual Intelligence      | 0.070        | 5       | 0.056              |
| Organizational Learning        | 0.111        | 6       | 0.022              | Organizational Paranoia     | 0.065        | 6       | 0.052              |
|                                |              |         |                    | Machiavellianism            | 0.052        | 7       | 0.041              |

## Conclusion

Attention to corporate sustainability, identifying its dimensions, and establishing mechanisms for implementing and disclosing sustainability-related information serve as guarantees for the long-term continuity of companies' operations and as strategic tools for overcoming the challenges of a rapidly changing world and moving toward a sustainable global future.

Considering the main objective of the study—which was to prioritize individual and environmental factors influencing corporate sustainability in Mobarakeh Steel Company—after the initial identification of variables,

expert input was used to screen them, and subsequently, the AHP method was applied to rank the individual and environmental indicators. The outputs showed that, from the perspective of the experts at Mobarakeh Steel Company, individual factors have greater priority than environmental factors, and among the individual factors, environmental awareness, organizational commitment, and spiritual well-being received the highest rankings. Additionally, among environmental factors, organizational support, innovation culture, and organizational culture ranked highest.

Since the variables in this study are primarily related to the ethical and social dimensions of sustainability and fall within the domain of individual and organizational behavior—and because behavioral, ethical, and social dimensions are not confined to the steel industry and are cross-industry variables—these variables can be defined as indicators of corporate sustainability in various industries and used to assess the level of sustainability in companies.

Given that the individual factor environmental awareness received the highest ranking, it is recommended that the company establish sustainability working groups and hold various in-house training programs to create a platform for sharing environmental knowledge and experiences among employees. Furthermore, by utilizing existing scientific capacities inside and outside the country and engaging academic professors and industry experts, the company can enhance employees' familiarity with sustainability standards—particularly environmental issues—and take steps toward improving employees' environmental awareness. In doing so, by cultivating a culture of environmental interest, and managing current needs while considering the needs of future generations, the company can take an important step in advancing corporate sustainability.

Regarding the other selected variables—such as organizational support, innovation culture, and organizational culture—the key decision-makers of the company can contribute to strengthening these variables and fostering a sustainable organization through material (rewards) and non-material support for employees, delegation of authority, enhancing collaborative spirit, promoting continuous individual and organizational learning, creating opportunities for expressing creative ideas and opinions, conducting regular evaluations, and obtaining feedback.

The selection of spiritual well-being as another key variable highlights the importance of this construct. Although it is an individual factor and can be modeled at the personal level, the company can also play a role organizationally by offering training workshops in the areas of religious and philosophical

concepts and by strengthening employees' spiritual dimension. This can enhance organizational commitment and contribute to the improvement and elevation of organizational culture. Although establishing the necessary infrastructures mentioned above requires considerable financial investment, it should be recognized that such efforts can generate substantial future benefits for the company. Through improved efficiency, increased stakeholder satisfaction, and the creation of a competitive advantage, these initiatives can facilitate progress toward achieving sustainable development goals.

It is also recommended that companies, organizations, and various businesses, in line with the localization, implementation, and execution of global and international sustainability standards—particularly cross-industry standards such as GRI—incorporate the individual and organizational variables identified in this study into the development and refinement of their ethical charters or codes of conduct.

Furthermore, researchers can analyze the extent to which the prioritized variables in this study influence corporate sustainability and, alongside these variables, examine the impact of other indicators within the governance and environmental dimensions on corporate sustainability. Additionally, considering the prominent position of Mobarakeh Steel Company in the steel industry and the Tehran Stock Exchange, it is suggested that a study be conducted using industry-specific SASB indicators to rank the financial, environmental, and governance indicators of Mobarakeh Steel Company. By combining those results with the findings of the present study and extracting the final weighted values, a comprehensive corporate sustainability equation—covering all five dimensions—can be formulated for Mobarakeh Steel Company. This equation can then be used as a tool for measuring corporate sustainability and comparing sustainability levels across other steel companies.

Limitations are common in questionnaire-based research. In the present study, given that the focus was on the social and ethical dimensions of sustainability and on prioritizing individual and organizational indicators, it is

possible that respondents refrained from expressing actual individual or organizational realities. Moreover, the large number of pairwise comparisons required in the AHP method and the number of questions in the questionnaire may have reduced response accuracy and negatively affected the results.

## REFERENCES

- Ali, F. (2021). "Presenting a causal model of organizational social responsibility with an emphasis on the role of organizational commitment (Case study: Industrial companies in Tehran in 2010)". *Smart Marketing Management*, 2(2), 28-44. [In Persian]
- Andrewajh, L., Albonaimi, E., & Afshari, H. (2022). "The relationship between business ethics and corporate social responsibility with brand attitude". *Ethics in Science and Technology*, 17 (1), 196-199. [In Persian] <http://ethicsjournal.ir/article-1-2597-fa.html>
- Abbaszadeh Tehrani, N. (2016). "The missing side of "ethics" in the triangle of sustainable development". *Ethics in Science and Technology*, 11 (1), 1-10. [In Persian] <http://ethicsjournal.ir/article-1-230-fa.html>.
- Afkhami Ardakani, N. (2023). "A review of the concept of spiritual well-being, its functions and methods of promotion". *The third national conference on psychology and health from adaptation to well-being*. <https://doi.org/10.22034/jsetm.2024.475394.1046>
- Ahmad, H. I., & Aljifri, K. (2025). "Corporate sustainability and value". *Journal of Asia Business Studies*, 19(3), 684-702. <https://doi.org/10.1108/JABS-05-2024-0281>
- Ahmadi, Z., & Pourzamani, Z. (2024). "The role of emotional, organizational and spiritual intelligence in the judgment and decision-making of auditors in audit firms". *Judgment and Decision-Making in Accounting*, 3(9), 31-50. [In Persian] <https://doi.org/10.30495/jdaa.2023.1989268.1092>.
- Akbari, A., Pourzamani, Z. (2019). "Corporate management structure, environmental auditing and financial reporting quality". *Management Accounting and Auditing Knowledge*. 7(26), 144-133. [In Persian] <https://doi:10.22034/iaar.2020.112778>.
- Akbari, M., Hoshmand Chaijani, M., & Hatami Nejad, M. (2020). "Professional Ethics and Sustainable Performance in the Food Industry: A Mixed Approach Research". *Journal of Business Research*, 25(98), 1-26. [In Persian] <https://doi:10.22034/ijts.2021.245363>.
- Akhtarshenas, D., Hassanzadeh, S., & Gholami, K. (2023). "The existential philosophy of corporate sustainability in Iran: a hybrid approach". *Applied Research in Financial Reporting*. 12(1), 227-265.[In Persian]
- Akhtarshenas, D., Khodamipour, A., & Pourheidari, O. (2020). "Developing a model of factors affecting corporate sustainability in Iran". *Empirical Studies in Financial Accounting*. 17(65), 201-175. [In Persian] <https://doi.org/10.22034/jsetm.2024.475394.1046>.
- Alizadeh, A., Mousavi, SN., Hakak, M., & Sepahvand, R. (2021). "Analysis of the relationship between promoting environmental ethics with dimensions of green citizenship behavior and environmental performance in manufacturing companies". *Ethics in Science and Technology*. 15 (1), 49-56. [In Persian] <http://ethicsjournal.ir/article-1-2012-fa.html>.
- Ashayeri, T., Javanmard, M., Azartash, M., & Namian, F. (2020). "Explaining Organizational Commitment with a Meta-Analysis Approach". *NAJA Strategic Studies*, 6(21), 131-152. SID. [In Persian] <https://sid.ir/paper/952168/fa>.
- Babaei, S., Rahimi, H. (2020). "Antecedents and consequences of organizational paranoia (Case study: Kashan University employees)". *Quarterly Journal of Human Resource Management Development and*

## Acknowledgment

We express our gratitude to our esteemed colleague, Dr. Shahram Mohammadi, whose support was invaluable throughout the course of this research.

- Support, 15(58), 111-141. [In Persian] <https://sid.ir/paper/966763/fa>.
- Baghianpour, Z., Zhian Bagheri, M., & Beliad, M. (2020). "Predicting job satisfaction based on Islamic lifestyle and spiritual well-being in nurses". *Islamic Lifestyle with a Health Focus*, 3(3), 49-57. [In Persian] <https://www.sid.ir/paper/414415/en>.
- Behzadi, E., Naami, A., & Bashlideh, K. (2013). "Investigating the relationship between organizational virtue and organizational civic behavior, organizational loyalty and spiritual well-being in employees of Karun Oil and Gas Exploitation Company". *Psychological Advances*, 20(2), 256-233. [In Persian]
- Bandura, A. (1986). Social foundations of thought and action. *Englewood Cliffs, NJ*, 1986(23-28).
- Bonnett, M. (1999). "Education for sustainable development: a coherent philosophy for environmental education?". *Cambridge Journal of education*, 29(3), 313-324. <https://doi.org/10.1080/0305764990290302>
- Connelly, J., Smith, G., Benson, D., & Saunders, C. (2012). *Politics and the environment: from theory to practice*. Routledge. <https://doi.org/10.4324/9780203135495>
- Chavoshi, Z., & Khashaei, V. (2022). "The effect of organizational learning mechanisms on strategic innovation capacity". *Strategic Management Studies Quarterly*. 13(50), 21-38. [In Persian] <https://doi.org/10.22034/smsj.2022.135056>.
- Daft, R. L. (2014). Organizational theory and design. *South Western College*.
- Danaiefard, H., Fani, A., & Barati, E. (2012). "Explaining the role of organizational culture in organizational silence in the public sector". *Public Management Perspectives*, 2(8), 61-82. SID. [In Persian] <https://sid.ir/paper/207574/fa>.
- Deyhimpour, M., & Dolati, H. (2020). "The effect of organizational transparency on organizational paranoia mediated by social capital". *Social Capital Management*, 7(3), 373-398. [In Persian] <https://doi.org/10.22059/jscm.2020.305339.2026>.
- Dyllick, T., & Muff, K. (2016). "Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability". *Organization & environment*, 29 (2), 156-174.
- Fakhari, H., Mehrabi, M., Yabloui Khamsaloui, M. & Ghasemi, A. (2018). "Factors affecting corporate sustainability reporting". *Third International Conference on Applied Research in Management and Accounting, Tehran, Shahid Beheshti University*. [In Persian]
- Fazel Yazdi, A., Abbasian Bafeghi, A., & Samare Ferdowsipour, S. (2020). "Recognizing Islamic Spiritual Intelligence in Organizational Sustainability". *International Conference on New Ideas in Management Accounting, Economics and Banking, Tehran*, [In Persian] <https://civilica.com/doc/925988>.
- Fehring, R. J., Brennan, P. F., & Keller, M. L. (1987). Psychological and spiritual well-being in college students. *Research in nursing & health*, 10(6), 391-398.
- Hosseini, S., & Alizadeh Jorkouyeh, E. (2018). "Investigating the relationship between transformational leadership and the new product development process with regard to the mediating role of organizational learning and innovation culture". *Scientific Journal of New Research Approaches to Management and Accounting*. 2(7), 1-14. [In Persian] <https://majournal.ir/index.php/ma/article/view/97>
- Huang, R. T., Deggs, D. M., Jabor, M. K., & Machtmes, K. (2011). "Faculty online technology adoption: The role of management support and organizational climate". *Online Journal of Distance Learning Administration*, 14(2), 1-11.
- Huckle, J. (1993). "Environmental education and sustainability: A view from critical theory". *Environmental education: A pathway to sustainability*. Deakin Publishing.
- Izad Bakhsh, HR. (2010). "Applied Training in Industrial Engineering and Management Software". Tehran: Amir Kabir Industrial Branch University Publications.
- Jalilpur, S., Motafaker Azad, MA., Nazari, H., & Karimi Tekanloo, Z. (2019). "Introducing

- and evaluating a new behavioral model in adopting sustainable ethical behaviors based on rational choice theory". *Applied Theories of Economics*, 5(1), 53-84. [In Persian]
- Jan, A., Rahman, H. U., Zahid, M., Salameh, A. A., Khan, P. A., Al-Faryan, M. A. S., & Ali, H. E. (2023). "Islamic corporate sustainability practices index aligned with SDGs towards better financial performance: Evidence from the Malaysian and Indonesian Islamic banking industry". *Journal of Cleaner Production*, 405, 136860. <https://doi.org/10.1016/j.jclepro.2023.136860>
- Jones, D. N. (2017). Machiavellianism. In *Encyclopedia of personality and individual differences* (pp. 1-9). Springer, Cham.
- Kajtazi, K., Rexhepi, G., Sharif, A., & Ozturk, I. (2023). "Business model innovation and its impact on corporate sustainability". *Journal of Business Research*, 166, 114082. <https://doi.org/10.1016/j.jbusres.2023.114082>
- Kalabi, A., Sharai, F. (2023). "Presenting a model of strategic innovation ecosystem with emphasis on corporate sustainability". *Business Management*. 15(2), 248-272. [In Persian] <https://doi.org/10.22059/jibm.2023.343119.4375>.
- Khademi, M., Ashjaei, Z., & Farsadnia, U. (2023). "Investigating the relationship between organizational justice and organizational pride with organizational performance and job satisfaction". *Journal of Research in Psychology and Education*. 5(56), 17-39. [In Persian]
- Khodamipour, A., Shafiei Hematabad, H. (2013). "Corporate Sustainability and Its Measurement". *Auditor Magazine*. 69, 1-5. [In Persian]
- Kordab, M., Raudeliūnienė, J., & Meidutė-Kavaliauskienė, I. (2020). "Mediating Role of Knowledge Management in the Relationship between Organizational Learning and Sustainable Organizational Performance". *Sustainability*, 12(23), 10061. <https://doi.org/10.3390/su122310061>
- Lai, W. H., Lin, C. C., & Wang, T. C. (2015). "Exploring the interoperability of innovation capability and corporate sustainability". *Journal of Business Research*, 68(4), 867-871. <https://doi.org/10.1016/j.jbusres.2014.11.043>
- Leal Filho, W., Trevisan, L. V., Eustachio, J. H. P. P., Rampasso, I. S., Anholon, R., Platje, J., & Marcolin, C. B. (2023). "Assessing ethics and sustainability standards in corporate practices". *Social Responsibility Journal*, 20(5), 880-897. <https://doi.org/10.1108/SRJ-03-2023-0116>
- Manakkattil, S., & Jasim, K. M. (2025). "Perceived Anomie, Organizational Silence, Compulsory Organization Citizenship Behavior, and Workplace Alienation as Antecedents of Knowledge Hiding". *Knowledge and Process Management*. <https://doi.org/10.1002/kpm.70001>
- Masumi, S.R., Salehnejad, S.H., & Zabihi Zarrin Kalai, A. (2012). "Identifying variables affecting the level of sustainability reporting of companies listed on the Tehran Stock Exchange". *Auditing Knowledge*. 18(70), 195-221. [In Persian]
- Mirzaei, A., Mashreghi Azar, & Zanjanian, S. (2014). "The relationship between spiritual well-being and burnout of physical education teachers". *Organizational Management and Behavior in Sports*, 3(1), 11-17. [In Persian]
- Mohammadi, M., Saheb-e-Zamani, M., Sarajian, F., Aghaei Nejad, A., Alavi, SM., Garavandi, S., Masoudzadegan, M., & Mohammadi-Voldani, A. (2017). "The relationship between spiritual intelligence and anxiety levels and quality of life of non-native students of Islamic Azad University, Tehran Medical Branch. The relationship between spiritual intelligence and anxiety levels and quality of life". *Jundishapur Education Development*, 8(2), 208-216. SID. [In Persian] <https://sid.ir/paper/228905/fa>.
- Ng, A. C., & Rezaee, Z. (2015). "Business sustainability performance and cost of equity capital". *Journal of Corporate Finance*, 34, 128-149. <https://doi.org/10.1016/j.jcorpfin.2015.08.003>
- Nuraie Ashtiani, N. (2023). "Organizational Justice and Employee Performance in Educational Research and Planning

- Organization". *International and National Conference on Management, Accounting and Law Studies*, 8(8), 359-365. [In Persian] <https://civilica.com/doc/1689495>
- Onwuzulike, O. C., Buinwi, U., Umar, M. O., Buinwi, J. A., & Ochigbo, A. D. (2024). "Corporate sustainability and innovation: Integrating strategic management approach". *World Journal of Advanced Research and Reviews*, 23(3), 236-264. <https://doi.org/10.30574/wjarr.2024.23.3.2669>
- Pahlavan Sadeq, A., & Nave Ebrahim, A. (2021). "The Mediating Role of Organizational Awareness in the Relationship between Organizational Culture and Organizational Sustainability: A Mixed Research in the Higher Education System". *Letter of Higher Education*, 15(57), 7-34. [In Persian]
- Raofi Maram, N., Makondi, F., Makvandi, F., & Chenari, V. (2021). "Designing a model of ethics and social responsibility with a sustainable development approach". *Quarterly Journal of Ethics in Science and Technology*, 16(4), 155-165. [In Persian] <http://ethicsjournal.ir/article-1-2496-fa.html>.
- Rezaei, Z., Mirizdi, S.M. (2022). "Business Sustainability in Iran". Tehran: Buorse. [In Persian]
- Saaty, T. L., & Vargas, L. G. (2012). "Models, methods, concepts & applications of the analytic hierarchy process". *Springer Science & Business Media*. 10(175), 20-63. <https://doi.org/10.1007/978-1-4614-3597-6>
- Sabziani, F., Gholami, A., & Tamimi, M. (2023). "Presenting a model of corporate sustainability development based on the professional ethics of managers and employees of Saderat Bank of Iran". *Governance and Development*. 4(1), 114-93. [In Persian] <https://doi.org/10.22111/jipaa.2024.445087.1165>.
- Sadeghian, M., Bani Mahd, B., Jahangirnia, H., & Gholami Jamkarani, R. (2019). "Machiavellianism, ethical orientation and fraudulent financial reporting". *Accounting and Auditing Reviews*, 26(3), 413-434. [In Persian] <https://doi.org/10.22059/acctgrev.2019.274381.1008100>
- Senge, P. (1990). Peter Senge and the learning organization. *Dimension*, 14.
- Shahzad, I. A., Farrukh, M., & Yasmin, N. (2020). "Career growth opportunities as non financial compensation-a new induction: Reciprocation of performance by combining social exchange theory & organizational support theory". *TEST Engineering & Management*, 83(1), 16905-16920.
- Sezen, B., and Cankaya, S. Y. (2013). "Effects of green manufacturing and eco-innovation on sustainability performance". *Procedia e Soc. Behav. Sci*, 99, 154-163. <https://doi.org/10.1016/j.sbspro.2013.10.481>
- Shabani Kalateh Molla Mohammad Qoli, A., Hossein Zadeh, A., & Ahmadi, Y. (2012). "Investigating the relationship between organizational justice and organizational commitment (case study of the General Tax Affairs Department of Khorasan Razavi Province)". *Tax Research Journal*, 20 (13), 103-120. [In Persian]
- Sharaei, F., Kalabi, A., & Khodad Hosseini, S. H. (2020). "Designing a model for sustainable corporate development: explaining the role of corporate social responsibility, corporate governance, and creating shared value". *Social Capital Management*. 6(3), 325-305. [In Persian] <https://doi.org/10.22059/jscm.2019.279369.1828>.
- Smith, P. A. (2012). "The importance of organizational learning for organizational sustainability". *The Learning Organization*, 19(1), 4-10. <https://doi.org/10.1108/09696471211199285>
- Stern, P. C. (2000). "New environmental theories: toward a coherent theory of environmentally significant behavior". *Journal of social issues*, 56(3), 407-424. <https://doi.org/10.1111/0022-4537.00175>
- Takala, M. (1991). "Environmental awareness and human activity". *International Journal of psychology*, 26(5), 585-597. <https://doi.org/10.1080/00207599108247146>

- Tilbury, D. (1995). "Environmental education for sustainability: Defining the new focus of environmental education in the 1990s". *Environmental education research*, 1(2), 195-212.  
<https://doi.org/10.1080/1350462950010206>
- Yahyazadehfar, M., Hosseini, A., & Aghaei Kordshami, A. (2015). "Analysis of organizational, individual and social factors affecting organizational sustainability". *National Conference on New Approaches in Business Management, Tabriz*. [In Persian]  
<https://civilica.com/doc/324678>.
- Yeganagi, K., & Bahramian, A. (2023). "A review of the concept of organizational justice". *Management Research in the Islamic World*, 14(5), 53-65. [In Persian]  
<http://noo.rs/AqB2c>.
- Zahedi, Shams Sadat (2016). "Sustainable Development". Tehran: Samt. [In Persian]
- Zandi, G., Shahzad, I., Farrukh, M., & Kot, S. (2020). "Supporting role of society and firms to COVID-19 management among medical practitioners". *International Journal of Environmental Research and Public Health*, 17(21), 7961. [In Persian]
- Zainivand, M., Janani, Mohammad, H., Hemmatfar, M., & Setayesh, M. (2022). "Behavioral biases and decisions of real and legal investors based on technical information in the Tehran Stock Exchange". *Financial Economics (Financial Economics and Development)*, 15(4 (57th issue), 233-257. [In Persian]  
<https://doi.org/10.30495/fed.2021.687929>

# COPYRIGHTS



© 2026 by the authors. Lisensee PNU, Tehran, Iran. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution 4.0 International (CC BY4.0) (<http://creativecommons.org/licenses/by/4.0>)