SUSTAINABLE DEVELOPMENT PRACTICES IN ALGERIAN FAMILY BUSINESSES: AN EMPIRICAL INVESTIGATION

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This research paper investigates the implementation of sustainable development practices in Algerian family businesses. Furthermore, it examines whether the application of these practices varies based on factors such as job title, educational attainment, and professional experience. A quantitative research methodology was employed, utilising a questionnaire survey administered to 100 middle and upper-level management employees in these companies. Data analysis was conducted using SPSS V.25. The findings revealed that Algerian family businesses engage in practices aligned with all three TBLs of SD (economic, social, and environmental). Moreover, no statistically significant differences were observed in the application of these practices across job titles, educational levels, or professional experience. The limitation of this study lies in its relatively small sample size (22 family firms) and its limited scope to the western region of the country. The study concludes by presenting a set of recommendations and prospects aimed at deepening the understanding of the role of family firms in achieving sustainable development and providing valuable insights that contribute to enhancing sustainable practices at both the local and regional levels.

Keywords: Sustainable Development; Algerian Family Businesses; Economic Dimension; Social Dimension; Environmental Dimension.

INTRODUCTION

Sustainable development is a comprehensive concept that integrates human activities across global, national, and local levels (Marinela et al., 2024). The notion of SD is currently widely recognised and extensively utilised by numerous legal entities and individuals in their activities within the modern, globalised world(Bilan, 2013). The aim of SD is to ensure ongoing growth in the economic well-being of society, preserve the stability of social systems, protect environmental quality, promote inclusive development, and implement governance that safeguards improvements in the quality of life for both current and future generations (Imam et al., 2023).

Despite the prominence of sustainable development in contemporary discourse, no clear consensus exists on its precise concept or on the specific actions required to achieve it (Laine, 2005). The 2030 Agenda outlines 17 goals, known as The Sustainable Development Goals (SDGs), which address critical global challenges requiring immediate action to foster environmental sustainability, social cohesion, and economic prosperity worldwide (Avrampou et al., 2019; Awuah et al., 2024; Bebbington & Unerman, 2018).

In today's dynamic business environment, development achieving sustainable requires companies to possess the resources and capabilities to adapt effectively to both short-term and longterm internal and external changes. This necessitates a comprehensive approach that integrates sustainable development strategies, policies, and procedures into all aspects of daily operations, enabling companies to gain and maintain a competitive edge while addressing current and future challenges (Naudé, 2011) Sustainable strategies cannot rely solely on minor adjustments to existing practices; instead, they often demand substantial or even transformative innovations in products, services, processes, technologies, and/or business models (Sharma, 2014; Sharma & Sharma, 2024).

A comprehensive understanding of the private sector's role is paramount to achieving the SDGs. This knowledge is essential for both policymakers and businesses. By recognising their impact, companies can develop strategies that not only enhance their own sustainability performance but also contribute significantly to the broader goals of sustainable development (van Zanten & van 2021). Sustainable development Tulder. performance refers to how effectively businesses carry out their production, operations, and management activities in ways that address environmental and social concerns, leading to balanced outcomes in economic, environmental, and social spheres. It encompasses three key dimensions: environmental performance, economic performance, and social performance (Teixeira et al., 2022; Zhao et al., 2024).

Sustainable development for businesses signifies a long-term vision that prioritises social, economic, and environmental well-being (Domańska et al., 2022). One such type of company is a familyowned business which is among the most prevalent and prosperous companies globally, playing a significant role in value creation across national economies, and this is the motivation behind these companies' increased focus on sustainable development. Especially as family businesses play a vital role in driving sustainable economic growth, fostering innovation, and ensuring stable employment opportunities (Lee et al., 2023). The sustainable development of family businesses is crucial not only for their success but also for the advancement and prosperity of the broader economy (Li et al., 2024). Future leaders in these businesses will face a unique set of challenges, including the need to navigate rapid change, overcome the barriers to sustainable development (SD), and create a new business landscape that delivers value to both society and the business (Naudé, 2011). In Africa, family businesses encounter numerous challenges that jeopardise their survival and their capacity to continue contributing to the region's economic growth. These challenges, such as managing conflicts, may be addressed in various ways by family firms, influenced by contextual factors like culture, environment, family structure, and the level and type of education, which vary significantly across continents (Agu et al., 2024; Krueger et al., 2021; Odame & Hinson, 2024). Despite the significant attention garnered by the reach and influence of family-owned businesses on both local and international levels, research has yet to fully explore how their locality and internationalisation strategies impact their sustainable development (Baù et al., 2021).

The existing body of literature on sustainable development in family businesses is extensive, with studies employing a range of methodological approaches (quantitative, qualitative, and mixed methods). However, a notable gap exists in the literature regarding the state of sustainable development within Algerian family businesses. The primary objective of this study lies in bridging this gap by attempting to investigate the current state Algerian family of businesses' implementation of practices that align with the three dimensions of sustainable development (economic, social, and environmental). To achieve this goal, a survey-based field study will be conducted to collect data from middle and senior management. Furthermore, the research will examine whether the responses exhibit statistically significant variations in the responses of participants based on their job title, educational attainment and professional experience, as these factors may influence their perceptions of sustainable development. More specifically, the current study aims to answer two questions: Do Algerian family businesses adopt practices that align with sustainable development? And does the implementation of these practices vary based on job title, work experience, and educational level?

This paper is organised as follows: Section 1 provides a literature review, covering concepts related to sustainable development and family businesses, and concludes with the development of research hypotheses. Section 2 details the research methodology, including the design of the research instrument and the characteristics of the sample. Section 3 presents the key findings of the study. Following this, Section 4 provides an in-depth discussion and interpretation of the results. Finally, Section 5 concludes the study by summarising the main findings and addressing its limitations.

LITERATURE REVIEW

Sustainable development is a dynamic concept, recognising that human prosperity and

environmental integrity are deeply intertwined and constantly influence each other across geographical and temporal dimensions (van Zanten & van Tulder, 2021). Brundtland's (1987) definition of sustainable development, emphasising the needs of both present and future generations, has served as a cornerstone for global initiatives aimed at realising the goals of sustainable development.

The Rio de Janeiro Earth Summit witnessed the UN's formal embrace of sustainable development and sustainable agriculture through the adoption of Agenda 21. Implemented alongside the revision of the Common Agricultural Policy (CAP), Agenda 21 recognised the interconnectedness of social, and economic factors. environmental, This framework was later expanded to include 21 targets, 60 indicators, and eight Millennium Development Goals (MDGs) for the period 2000-2015 (Dalampira & Nastis, 2020). The UN Summit on Sustainable Development in September 2015, held concurrently during the 70th UN General, adopted new development guidelines and the post-2015 development agenda. The summit's outcome document, "Transforming Our World: An Agenda for Sustainable Development until 2030," outlined 17 SDGs, each with specific targets (169 in total), to shape global development efforts (Nate et al., 2021).

The triple bottom line (TBL) framework, which emphasises the integration of economic. environmental, and social dimensions, is a widely used framework for evaluating organisational sustainability. Current perspectives on sustainable development recognise that robust economic performance is essential for addressing social and environmental challenges (Isaksson, 2006). Corporate sustainability, encompassing concepts like CSR, environmental management, the TBL, corporate citizenship, and SD, represents a multifaceted approach. While these terms are often used interchangeably, it's crucial to recognise the distinct nuances and interconnectedness between them (Izzo et al., 2020). To keep their competitive edge, businesses must implement strategies that take into account their capacity to execute such procedures. As a result, businesses have implemented TBL-based sustainability initiatives. Based on the three people, planet, and this standard corporate operationalises sustainability. emphasising social, economic, and environmental sustainability (Curado & Mota, 2021).

The term "corporate sustainability" is frequently used to describe the implementation of strategies aimed at achieving SD at the business level. The use of these principles affects organisations' shortand long-term social, economic, and environmental performance (Sánchez et al., 2022). Companies aiming to support one or more SDGs should integrate social and environmental performance indicators alongside traditional economic and financial metrics into their operational frameworks (Gamble et al., 2020). In their discussion of sustainable development's triple bottom line (TBL), scholars have addressed indicators for quantifying these aspects from a corporate perspective. Mian et al. (2017) contend that the achievement of the social dimension of sustainable development necessitates the consideration of three critical indicators: learning and growth (assessed through education, training, job security, and employment); community development (evaluated through the assessment of Indigenous rights, good governance, cultural heritage, social involvement, and human rights. consumer/product responsibility); and safety and security (assessed through labour practices, fair practices, and health and safety). Alhaddi (2015) emphasised that the economic dimension of sustainability links organisational growth to economic expansion, highlighting the organisation's contribution to local economic development and its ability to support future generations. Alhaddi (2015) further states that the environmental aspect of the TBL involves practices that sustain environmental resources for future generations. In the same context, Høgevold et al. (2019) highlighted the importance of several environmental factors, such as ecological footprint, climate change and global warming, the implementation of various initiatives, and the pursuit of product and process decarbonisation, dematerialisation, and efficiency gains.

Given their substantial contribution to value creation, family businesses are a critical component of organisational sustainability and warrant significant attention in sustainability discourse. These businesses are characterised by a governance structure where family members exercise primary decision-making authority, with the active participation of the second generation in both governance and management (Borre et al., 2022). A key characteristic of family-owned businesses is the long tenure of their leaders, contributing to greater business continuity and stability. Moreover, these businesses often prioritise long-term sustainability and disciplined

growth beyond immediate profitability. Finally, the strong family connection within these businesses fosters employee loyalty and long-term relationships (Brenes et al., 2011). The distinctive attributes of family owners and family firms have served as a primary impetus for the burgeoning field of family firm research within the past decade (Cheng, 2014).

Families deeply embedded in their communities and prioritising the preservation of their reputation are more likely to embrace sustainability initiatives that enhance both their firm's reputation and profitability (Curado & Mota, 2021). In this context, Domańska et al. (2022) argue that the Brundtland definition of SD aligns closely with the inherent nature of family-owned businesses. Similarly, Dasanayaka et al. (2021) pointed out that owners of family businesses are strongly motivated achieve socio-environmental to performance. This motivation stems from a desire to maintain the company's goodwill and reputation and to ensure the long-term sustainability and positive legacy of the family business for future generations. It is crucial to ensure that sustainable practices adopted by these firms are aligned with the company's strategic objectives and effectively address the needs of their customers. Furthermore, any successful business strategy must prioritise the primary value proposition for customers - the reason they choose to purchase the good or service (Sánchez et al., 2022). Recognising the intricate interplay of economic, social, and environmental factors, the SDGs offer a framework for businesses to maximise value creation while simultaneously minimising their negative impacts and enhancing their positive contributions to society and the environment. This framework facilitates a deeper understanding of the multifaceted and interconnected impacts of business activities on sustainable development (Izzo et al., 2020).

The family-owned business must prioritise sustainability practices, as these are directly tied to the firm's long-term survival and the maintenance of crucial stakeholder relationships, including those with individuals and groups within the surrounding communities (Al Rawaf & Alfalih, Berrone et al. utilising 2023). (2012),Socioemotional Wealth (SEW) theory, have demonstrated that family-owned firms exhibit a stronger alignment with sustainability practices compared to their non-family counterparts, owing to their long-term, transgenerational perspective and deeper connections to local communities. On the other hand, in a recent study by Herrero et al. (2024), that compared the extent to which family and non-family firms strive to implement sustainable development practices across their TBL (economic, social, and environmental), the results revealed that in the case of economic and environmental sustainability, there is no significant difference between small and medium-sized family firms and their non-family counterparts. However, in the case of social sustainability, small and medium-sized family firms perform better than small and medium-sized non-family firms. Furthermore, family firms are capable of achieving greater social sustainability compared to nonfamily firms, even in the context of crises, without compromising their long-term economic goals or their ability to survive.

In contrast, another research by Gavana et al. (2016), conducted on 230 listed non-financial Italian family firms, confirmed that without family involvement in the board of directors, the level of family ownership is negatively associated with sustainability reporting. Similarly, this argument is supported by Memili et al.'s (2018) study, which was conducted on 195 family firms, the results of this research found that family ownership may be negatively associated with valuable strategic business decisions, which can impact the adoption of sustainability practices. However, a long-term orientation can mitigate these negative relationships. A longer time horizon, derived from the intention to maintain family control over the firm, can help its leaders avoid managerial shorttermism and direct their efforts towards developing patient capital and long-term investments, such as sustainability practices. Moreover. close monitoring and control by family owners with a long-term perspective can lead to a higher prioritisation of sustainability practices.

In another context related to the impact of trust between family owners and non-family CEOs on the sustainable development performance of family firms, a study conducted by Tang et al. (2025) on a group of Chinese family firms (281 non-family CEOs in China), indicates that calculative trust can hinder the sustainable development performance of family firms, while relational trust and institutional trust can enhance this performance. More specifically, calculative trust reduces supervisory non-family behaviour bv CEOs. thereby weakening the sustainable development performance of family firms. In contrast, both relational trust and institutional trust can enhance supervisory behaviour by non-family CEOs, thus promoting the firm's sustainable development performance.

Corporate sustainability should strive to enhance economic, social, and environmental sustainability in a balanced manner, without compromising the long-term survivability and transgenerational transfer of family firms. However, despite a growing research focus on the sustainability of family firms in recent years, significant gaps in the literature remain unresolved (Herrero et al., 2024).

In Algeria, family businesses are widespread and contribute significantly to the country's economic value-added, job creation, and unemployment absorption. However, like many family businesses, they face the challenge of sustainability beyond the third generation of owners, often leading to mergers, sales, or, in the worst-case scenario, dissolution. Building on the aforementioned and the literature review, this research seeks to shed light on the current state of sustainable development in Algerian family businesses through a quantitative approach based on a survey of middle and upper-level management personnel. The following first research hypothesis was formulated:

H1: Algerian family businesses adopt practices aligned with all three dimensions (economic, social, environmental) of sustainable development.

In order to understand the disparities in responses among middle and upper-level management employees within these family businesses, we hypothesise the following:

H2: The adoption of sustainable development dimensions by Algerian family businesses varies significantly based on the job title, educational attainment, and professional experience.

The second hypothesis is further divided into three subsidiary hypotheses, which are:

- **H2.1**: The adoption of sustainable development dimensions by Algerian family businesses varies significantly across different job titles.
- **H2.2**: The adoption of sustainable development dimensions by Algerian family businesses varies significantly across different educational attainment.
- **H2.3**: The adoption of sustainable development dimensions by Algerian family businesses

varies significantly across different professional experiences.

METHODS

To carry out the applied aspect of this study, several phases were followed. Starting from data collection, where a questionnaire was used as the primary research tool. After retrieving the completed questionnaires from the respondents, the collected data were analysed using the SPSS software. Subsequently, the results were written and discussed in light of the existing literature. Additionally, a set of future research directions was proposed, along with the study's limitations and practical implications.

Data Collection and Sample

To collect primary data for this study, a structured questionnaire was administered to a sample of middle and upper-level managers employed in 22 family-owned businesses located in Western Algeria during the period from December 2023 to March 2024. The questionnaire comprised two distinct sections. The first section gathered demographic information from respondents, including educational attainment, job title, and professional experience. The second section focused on the study variable, sustainable development (SD), encompassing its three key dimensions: economic (5 items), social (6 items), and environmental (6 items). A 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) was used to assess responses. The Relative Importance Index (RII) was employed to rank the indicators based on their significance. This index, ranging from 0 to 1, provided a standardised measure to differentiate between indicators of low and high importance. Specifically, an RII value between 0 and 0.2 denoted a low (L) level of significance, indicating that the indicator had minimal impact or relevance. Conversely, an RII value between 0.8 and 1 signified a high level (H) of significance, highlighting the indicator's crucial role and substantial influence.

A total of 100 completed questionnaires were collected from this target population with a response rate of 76.92% and were subsequently analysed using SPSS v.25 statistical software.

Sample Characteristics

Regarding job titles, a considerable proportion of respondents held other middle and upper-level management positions within family businesses (52 responses). Department heads constituted the second-largest group, followed by company owners and executive managers. The general manager position was the least frequently represented.

The analysis of the sample's educational attainment revealed that individuals with a Master's degree constituted the largest proportion (42%), followed by those with a Bachelor's degree (23%). Respondents with a high school diploma comprised the third-largest group (17%). The remaining categories included 8% with an MBA, 7% with other unspecified educational levels, and 3% with doctoral degrees. Notably, 76% of the respondents held university degrees (Master's, MBA, Doctorate), which is consistent with the target sample of middle and upper-level managers, as these positions typically require a universitylevel education.

In terms of professional experience, the largest group of respondents (28 individuals) had 5-10 years of experience. The second-largest group consisted of those with fewer than 5 years of experience. The remaining respondents were divided between those with over 15 years of experience and those with 11-15 years of experience.

Data Analysis

The data were analysed using SPSS 25 (version 25). Reliability was assessed through Cronbach's alpha to evaluate internal consistency, and descriptive statistics were employed to summarise response patterns and identify overarching trends. Hypotheses testing was performed using inferential statistical methods, such as *t*-tests and ANOVA, to examine group differences and relationships in line with the study's research objectives.

RESULTS

Reliability Test

The reliability of the sustainable development scale, which consists of 17 items, was assessed

using Cronbach's Alpha. As shown in Table 1 below, the findings indicated a strong level of internal consistency, with an Alpha coefficient surpassing the widely accepted threshold of 0.70.

Table 1: Reliabil	ity Test		
Cronbach's alpha value	N of items		
.752	17		
Source: SPSS v.25 outputs			

Testing of Hypotheses

Table 2 below reveals a general tendency among respondents to agree with the implementation of the three dimensions of sustainable development. The mean scores for the items varied, starting from a minimum of 3.33 (for the item stating that the company recycles waste generated from the production process) to a high of 4.44 (for the item indicating that the company is keen to increase its production capacity without negatively impacting the environment). The overall mean scores for the dimensions also varied, with the social dimension ranking highest at 3.96, followed by the economic dimension at 3.94, and the environmental dimension at 3.735. All mean scores fell within the agreement range on the five-point Likert scale. Regarding the Relative Importance Index (RII), it showed high to medium (H-M) levels for most items and dimensions, except for items (ECO3, ECO5, SOC2, SOC3, SOC5, ENV6), which were of high levels (H).

These findings can be further supported by the ttest results presented in Table 3 below, where the first hypothesis was tested after being statistically formulated:

- H0: Algerian family businesses do not adopt practices aligned with all three dimensions (economic, social, environmental) of sustainable development at a significance level of $(p \le 5\%)$.
- H1: Algerian family businesses adopt practices aligned with all three dimensions (economic, social, environmental) of sustainable development at a significance level of $(p \le 5\%)$.

	ainable	Itomc/I limoncion		Std.	RII	
Develop	pment (SD) The business strives to increase its profits		Mean	Deviation		
	ECO1	while minimalising resource consumption.	3.98	.77824	.796 (H-M)	
Economic dimension (ECO)	ECO2	The business is committed to reducing the prices and costs of its products/services while maintaining their quality.	3.90	.67420	.78 (H-M)	
dimensi	ECO3	The business uses resources (energy, water, raw materials) rationally and without waste.	4.05	.75712	.81 (H)	
omic	ECO4	The firm undertakes the recycling of by- products from its production operations.	3.33	1.20651	.666 (H-M)	
Econ	ECO5	The business aims to boost its production output without compromising environmental standards	4.44	4.06592	.888 (H)	
		Overall (ECO)	3.9400	.98165	.788 (H-M)	
	SOC1	The business is committed to meeting the diverse needs of the community in which it operates.	3.86	.80428	.772 (H-M)	
C	SOC2	The company's employees enjoy various rights, such as occupational safety, health insurance, the right to vacation, and fair wage distribution.	4.03	.94767	.806 (H)	
sion (SO	SOC3	The firm actively seeks to attract talented and skilled professionals from the community it serves.	4.05	.77035	.81 (H)	
Social dimension (SOC)	SOC4	The business's employees undergo various training and development programmes to enhance their professional skills.	3.85	.91425	.77 (H-M)	
Soc	SOC5 The business meets its customers' needs for quality and affordable prices and responds to their various concerns.		4.10	.65905	.82 (H)	
	SOC6 The business is committed to developing plans related to its social responsibilities.		3.87	.78695	.774 (H-M)	
		Overall (SOC)	3.9600	.57253	.792 (H-M)	
()	ENV1	The business participates in and supports environmental protection programmes, such as clean-up campaigns and tree planting.	3.39	1.06263	.678 (H-M)	
ı (EN	ENV2	emissions and harmful gases.		.82701	.754 (H-M)	
mension	ENV3	The business views environmental protection as a responsibility it must uphold.	3.81	.86100	.762 (H-M)	
ıtal di	ENV4	At least one of the firm's products or services is environmentally friendly.	3.67	.94340	.734 (H-M)	
Environmental dimension (ENV)	ENV5	The business takes into account the possible adverse environmental effects when creating new products or services.	3.72	.98555	.744 (H-M)	
Envi	ENV6	The business adheres to laws and regulations that require environmental protection.	4.05	.80873	.81 (H)	
		Overall (ENV)	3.7350	.69796	.747 (H-M)	

 Table 2: Descriptive Statistics

Source: Author based on SPSS v.25 outputs

One-Sample Test Test Value = 3							
	t	df	Sig Mean		Interva	95% Confidence Interval of the Difference	
					Lower	Upper	
ECO	9.576	99	.000	.94000	.7452	1.1348	
SOC	16.768	99	.000	.96000	.8464	1.0736	
ENV	10.531	99	.000	.73500	.5965	.8735	

Table 3: One Sample T-test

Source: SPSS v.25 outputs

Table 3 demonstrates statistically significant results at the 0.05 level. All p-values were less than 0.005, supporting the alternative hypothesis, which states that Algerian family businesses adopt practices aligned with all three dimensions (economic, social, environmental) of sustainable development.

The next step involves investigating whether there are statistically significant differences in respondents' answers based on their educational attainment, professional experience, and job title. A one-way ANOVA test was employed for this analysis.

The second hypothesis (**H2**) is composed of the following three sub-hypotheses:

The first sub-hypothesis (**H2.1**) (Table 4) is also divided into a null hypothesis and an alternative hypothesis:

- **H2.1.0**: The adoption of sustainable development dimensions by Algerian family businesses does not vary significantly across different job titles at a level of $p \le 5\%$.
- **H2.1.1**: The adoption of sustainable development dimensions by Algerian family businesses varies significantly across different job titles at a level of $p \le 5\%$.

Table 4 above represents that the significant value is 0.280 and it is higher than the normally accepted value of 0.05. Therefore, the Null hypothesis is accepted and concluded that there is no significant difference in responses of middle and upper-level management employees in family businesses based on their job titles.

Table 4: Differences in Sustainable Development	
Based on Job Title	

ANOVA						
	Sustainable Development					
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	2.431	26	.486	1.284	.280	
Within Groups	27.643	73	.379			
Total	30.075	99				
Total			v 25 outputs			

Source: SPSS v.25 outputs

The second sub-hypothesis (H2.2) (Table 5):

H2.2 is also divided into a null hypothesis and an alternative hypothesis:

H2.2.0: The adoption of sustainable development dimensions by Algerian family businesses does not vary significantly across different educational attainment at a level of $p \le 5\%$.

H2.2.1: The adoption of sustainable development dimensions by Algerian family businesses vary significantly across different educational attainment at a level of $p \le 5\%$.

Table 5: Differences in Sustainable Development	
Based on educational attainment	

ANOVA						
	Sustainable Development					
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	.785	9	.157	.436	.823	
Within Groups	32.428	90	.360			
Total	33.213	99				

Source: SPSS v.25 outputs

The findings in Table 5 above reveal a p-value of 0.823, which exceeds the conventional significance level of 0.05. Consequently, the null hypothesis is accepted, suggesting no statistically significant differences in responses among middle and upper-level management employees in family businesses based on their educational attainment.

The third sub-hypothesis (**H2.3**) (Table 6):

- **H2.3** is also divided into a null hypothesis and an alternative hypothesis:
 - **H2.3.0**: The adoption of sustainable development dimensions by Algerian family businesses does not vary significantly across professional experience at a level of $p \le 5\%$.
 - **H2.3.1**: The adoption of sustainable development dimensions by Algerian family businesses vary significantly across professional experience at a level of $p \le 5\%$.

Table 6: Differences in Sustainable Development
Based on professional experience

ANOVA						
	Sustainable Development					
	Sum of Squares	df	Mean Square	F	Sig.	
Between Groups	2.062	5	.515	1.540	.197	
Within Groups	31.460	94	.335			
Total	33.521	99				
Source: SDSS y 25 outputs						

Source: SPSS v.25 outputs

Table 6 above indicates that the significance value is 0.197, which is greater than the commonly accepted threshold of 0.05. As a result, the null hypothesis is accepted, leading to the conclusion that there is no significant difference in the responses of middle and upper-level management employees in family businesses when considering their professional experience.

DISCUSSION

The results pertaining to the first hypothesis indicate that Algerian family businesses implement practices aligned with the three dimensions of sustainable development. The calculated mean scores of 3.96, 3.94, and 3.735 for the social, economic, and environmental dimensions, respectively, reveal a consensus among respondents regarding the application of these

dimensions within the studied businesses. These findings align with those of Berrone et al. (2012), Curado & Mota (2021), Dasanayaka et al. (2021), and Domańska et al. (2022), who noted that leaders of such businesses demonstrate a strong commitment to enhancing the reputation of both the company and the family. This cultural and value-driven commitment to sustaining the continuity of both the business and the family applies to all three dimensions (economic, social, and environmental). Herrero et al.'s (2024) study partially corroborates the findings of this research, specifically regarding the social dimension, as it highlighted that family businesses exhibited stronger adherence to practices aligned with this dimension compared to non-family businesses. This is attributed to the fact that family businesses strive to protect the family's reputation, which is often closely intertwined with the company's image. This drives them to adopt social practices such as supporting the local community or providing employment opportunities for the extended family. Additionally, these businesses are distinguished by an organisational culture built on loyalty and trust among family members, which facilitates the implementation of social initiatives like healthcare for employees or educational programmes. Furthermore, the absence of bureaucratic hierarchies in family businesses' administrative structures enables swift decisionmaking to support social causes. On the other hand, the findings of this study contrast with those of Gavana et al. (2016) and Memili et al. (2018), which demonstrated that family ownership may negatively impact the adoption of sustainable development practices in such businesses. This discrepancy is attributed to the prioritisation of narrow family interests, such as retaining control or distributing profits to family members over the long-term interests of the company or society. Additionally, many family businesses adhere to traditional practices inherited across generations, hindering the adoption of modern concepts like clean energy technologies. Furthermore, conflicts between generations over business management may lead to the marginalisation of long-term sustainability strategies. Our study's results also differ from those of Tang et al. (2025), which divided trust into two types: first, calculative trust, which can hinder the sustainable development performance of family businesses, and second, relational and institutional trust, which can enhance this performance. In general, the results of our research support previous research that has shown that family businesses implement practices aligned with the three dimensions of sustainable development.

The results related to the second hypothesis (H2) and its related sub-hypotheses (H2.1, H2.2, H2.3) revealed no statistically significant variations in the adoption of sustainable development dimensions among Algerian family businesses attributable to job title, professional experience, or educational attainment. The lack of differences can be explained by several interrelated factors. In culturally cohesive environments like Algeria, family businesses often operate with a strong sense of shared values and practices, leading to a uniform approach to sustainable development that transcends individual differences. Centralised decision-making, typically controlled by a small group of family members, fosters a top-down implementation of SD initiatives, minimalising the influence of individual roles, experience, or education. Additionally, when the family collectively prioritise sustainability, this shared commitment drives consistent practices across the business. Furthermore, employees and managers in such settings often have limited autonomy to shape or influence sustainability policies, as these are usually dictated by family leadership, leaving little variation based on individual for room characteristics. Another factor is the adoption of practices such as social responsibility and environmental management by many of these companies, ensuring that all employees are wellacquainted with the key aspects of sustainable development.

CONCLUSION

Through this study, we aimed to investigate the reality of sustainable development in Algerian family businesses. The results indicated that these businesses implement practices that align with the three dimensions of SD. Meanwhile, it was found that there were no statistically significant differences in the level of sustainable development application attributable to job title, educational qualifications, or work experience.

From an academic perspective, this study is the first of its kind to delve into the reality of sustainable development in Algerian family businesses. To the best of the researcher's knowledge, no previous study has addressed a similar topic, making this research highly significant both academically and practically. It paves the way for future studies to delve deeper into this subject.

Policymakers can utilise the findings of this study to develop policies and incentives aimed at encouraging more family-owned firms to adopt sustainable practices. These incentives may include tax exemptions, grants, or recognition programmes for companies demonstrating a commitment to sustainability. Additionally, these results can be used to raise awareness among family firms about the benefits of sustainable development practices, such as enhanced reputation. long-term profitability, and stronger community ties. This study can serve as a benchmark for other family firms in Algeria and the region. By identifying the best approaches from firms already implementing sustainable development practices, others can learn replicate these strategies. Overall, and by translating these research findings into actionable strategies, Algerian family firms can not only strengthen their sustainability efforts but also contribute to the broader economic, social, and environmental development of the country.

The limitations of this study lie in the sample being restricted to 100 individuals from mid-level and senior management, a relatively small number that may not fully reflect the diversity of opinions and experiences within Algerian family businesses as a whole. Additionally, the study was conducted only in Western Algeria, meaning the results may not be generalisable to other regions (such as the East or South), where economic, cultural, and regulatory consequently conditions-and sustainability practices-might differ. Furthermore, the study's reliance on questionnaires as the sole tool may introduce biases, as participants may provide answers aligned with ideal values rather than actual practices.

Future prospects include conducting comparative studies between family and non-family firms in Algeria to analyse differences in the adoption of sustainable development practices and understand the factors influencing this adoption. Additionally, future research could focus on internal factors (such as organisational culture and governance structure) and external factors (such as government policies and market pressures) that either encourage or hinder the adoption of sustainable development practices in these firms. Furthermore, exploring the role of family leadership in promoting or restricting the adoption of sustainable development practices, with an emphasis on family

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values and long-term vision, could be a valuable area of study. Future research could also employ qualitative methodologies (such as in-depth interviews and case studies) to understand the cultural and social contexts that influence the adoption of sustainable development practices in Algerian family firms.

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PRAKSE ODRŽIVOG RAZVOJA U ALŽIRSKIM PORODIČNIM PREDUZEĆIMA: EMPIRIJSKO ISTRAŽIVANJE

Ovaj rad istražuje primenu praksi održivog razvoja u alžirskim porodičnim preduzećima. Takođe, rad analizira da li se primena tih praksi razlikuje u zavisnosti od faktora kao što su radna pozicija, nivo obrazovanja i profesionalno iskustvo. Korišćena je kvantitativna metodologija istraživanja, kroz anketu sprovedenu među 100 zaposlenih na srednjim i višim menadžerskim pozicijama u ovim preduzećima. Analiza podataka obavljena je pomoću softvera SPSS V.25. Rezultati su pokazali da se alžirska porodična preduzeća bave praksama koje su u skladu sa sve tri dimenzije održivog razvoja (ekonomska, socijalna i ekološka). Takođe, nije uočena statistički značajna razlika u primeni ovih praksi u odnosu na radnu poziciju, obrazovni nivo ili profesionalno iskustvo. Ograničenje istraživanja ogleda se u veličini uzorka, koji je relativno mali (22 porodična preduzeća) i ograničen na zapadni deo zemlje. Studija se završava nizom preporuka i predloga za buduća istraživanja sa ciljem dubljeg razumevanja uloge porodičnih firmi u ostvarivanju održivog razvoja, kao i pružanja korisnih uvida koji mogu doprineti unapređenju održivih praksi na lokalnom i regionalnom nivou.

Ključne reči: održivi razvoj; alžirska porodična preduzeća; ekonomska dimenzija; socijalna dimenzija; ekološka dimenzija.