



Article

The Impact of Owner-Managers' Personality Traits on Their Small Hospitality Enterprise Performance in Saudi Arabia

Abu Elnasr E. Sobaih ^{1,2,*} , Amer A. Al-qutaish ¹, Hassane Gharbi ³ and Ahmed E. Abu Elnasr ⁴

¹ Management Department, College of Business Administration, King Faisal University, Al-Ahsaa 31982, Saudi Arabia

² Hotel Management Department, Faculty of Tourism and Hotel Management, Helwan University, Cairo 12612, Egypt

³ Management Department, School of Business, University of Sfax, Sfax 3018, Tunisia

⁴ Higher Institute for Specific Studies, Future Academy, Cairo 11771, Egypt

* Correspondence: asobaih@kfu.edu.sa

Abstract: Governments in many countries have paid close attention to small enterprises because of their social and economic impacts. The role of the owner-manager in advancing the performance of their small business cannot be underestimated. The current study tests the influence of an owner-manager's big five personality traits on the performance of their small enterprises. For this purpose, a pre-tested questionnaire was directed to owner-managers of small hospitality enterprises in Saudi Arabia. The results of SEM analysis, with AMOS, showed that high levels of both openness to experience and agreeableness of owner-managers have a significant positive impact on the performance of their small enterprises. However, a high level of neuroticism has a significant negative impact on the performance of their small enterprises. The results interestingly showed that high levels of both conscientiousness and extraversion among owner-managers have positive, but insignificant, impacts on the performance of their small enterprises. These two traits had a minor impact on the performance of small hospitality enterprises. Hence, managers of small hospitality enterprises in Saudi Arabia are required to have high levels of openness to experiences and agreeableness and low level of neuroticism to achieve significant organizational performance.

Keywords: enterprise performance; owner-managers; personality traits; Saudi Arabia (SA); small hospitality enterprises



Citation: Sobaih, Abu Elnasr E., Amer A. Al-qutaish, Hassane Gharbi, and Ahmed E. Abu Elnasr. 2022. The Impact of Owner-Managers' Personality Traits on Their Small Hospitality Enterprise Performance in Saudi Arabia. *Journal of Risk and Financial Management* 15: 585. <https://doi.org/10.3390/jrfm15120585>

Academic Editor: Cristina Raluca Gh. Popescu

Received: 13 November 2022

Accepted: 29 November 2022

Published: 7 December 2022

Publisher's Note: MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



Copyright: © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Small businesses have altered the entire world, because they have multiple positive consequences, such as economic development, generation of jobs, reduction of poverty and the resolution of socioeconomic issues (Li et al. 2020; Al-Mamary et al. 2020; Alshebami and Seraj 2021; Arkorful and Hilton 2021; Cai et al. 2021). Therefore, Rajesh et al. (2011) indicated that governments in most countries have paid close attention to small enterprises because of their effectiveness and contribution to the well-being of the economy. In this context, Tripathi (2019) revealed that small enterprises contribute to 80% of the international gross domestic product.

In the context of Saudi Arabia (SA), the government has recognized the roles played by small businesses in the Saudi economy; hence, they have set a target to increase the contributions of small businesses to the national GDP from 20 to 35% and reduce the unemployment rate from 12.9 to 7% by 2030 (Aljarodi 2020; Aloulou 2021; Alshebami and Seraj 2021). Thus, the Saudi government launched a particular authority titled "Monsha'at" to support small businesses. As a result, the government offered limitless support to small businesses, such as reforming the regulation and laws, removing barriers to investment, and advancing access to finance services (Al-Mamary and Alshallaqi 2022). Basri (2020) reported that small businesses in SA have been growing at a significant rate in the recent two decades.

According to latest report by Monsha'at, the hospitality sector has received the largest share of investment capital in the first half of 2022 compared to enterprises in other sectors. This is a part of the government direction towards investing in the tourism industry. The hospitality industry is dominated by small businesses (Thomas and Thomas 2005; Sobaih 2018). Yet, to the best of the researchers' knowledge, the published research on the traits of owner-managers and the relationship with the performance of their enterprises is noticeably limited in the hospitality and tourism literature, particularly in the context of many countries, e.g., SA.

Research on small enterprises in the hospitality sector has shown no single definition for this term (Thomas and Thomas 2005; Sobaih 2011, 2018). However, scholars have asserted some indicators for small enterprises in the hospitality industry, for instance, having less than 50 rooms or less than 10 employees (Buhalis 1995). Ahmad (2015) indicated that small hospitality enterprises have less than 100 employees. The success of small businesses is based on the enterprise's performance. An enterprise's performance can be described as its capacity to provide acceptable results and activities (Yakubu and Onuoha 2022). Performance is clearly a fundamental concept of interest in research on small businesses (Pushpakumari 2009). Aragón-Sánchez and Sánchez-Marín (2005) investigated the performance of small businesses based on three aspects: productivity, profitability, and market share. On the other hand, Lumpkin and Dess (1995) employed financial methods for performance such as revenue, profit, and market share, together with indications of overall performance. Murphy et al. (1996) examined 51 academic papers and discovered 71 different operational performance metrics organized into eight primary aspects, the most commonly utilized of which are efficiency, growth, and profit. An enterprise's performance can be evaluated using two dimensions: market performance and financial performance (Fujianti 2018). Different measures are employed in the literature to determine small enterprise performance levels. For instance, financial and non-financial performance measures have been utilized in some studies (e.g., Venkatraman and Ramanujam 1986; Greenly 1986). While others measured the level of performance for small businesses using subjective and/or objective measures (Ramanujam et al. 1986). Kachali et al. (2012) addressed four aspects to measure the performance of enterprise namely, overall performance, level of debt, organization's cash flow and organization's level of profitability.

Regarding the relationship between small businesses performance and owner-manager's personality traits, Yakubu and Onuoha (2022) indicated that the performance of small businesses was linked to the personality of the manager-owner. Reynolds et al. (1994) claimed that owner-managers' personality traits determine the overall performance level of small businesses in the hospitality industry. Likewise, Antoncic et al. (2018) confirmed that the characteristics of small entrepreneurs, who act as managers and founders, are essential for successful entrepreneurial activities. Owner-managers' personality traits are regarded as key to their business performance and activities. In that sense, De Zoysa and Herath (2007) emphasized that small business performance is affected by a variety of intrinsic and extrinsic factors. The personality traits of owner-managers are among these factors, and are considered to be one of the most important variables that can have an impact on performance.

It has been acknowledged that the owner-manager's personality traits are important for small businesses operations, such as decision-making processes and performance (Chollet et al. 2016), success, development and profitability (Baum and Locke 2004), and capital structure (Bistrova et al. 2011), as well as survival (Baum and Locke 2004). According to Barrick et al. (2003), owner-manager personal traits associated with organizational overall performance. In this context, scholars (e.g., Richbell et al. 2006; Delmar and Wiklund 2008) confirmed that small business performance has been connected to owner-managers' psychological traits, aspirations for professional advancement, motivations, and capabilities (Barbero et al. 2011). Hence, owner-managers are commonly recognized as the most crucial resource in a business, and their commitment to development plays a crucial role in determining an organization's performance (Smallbone et al. 1995; Mazzarol et al. 2009; Hansen and Hamilton 2011).

Earlier studies (e.g., Baum et al. 2007; Rauch and Frese 2007; Chell et al. 2008; Antoncic et al. 2018; Elshaer and Sobaih 2022) confirmed that the functioning and performance of enterprises may depend on the innate characteristics of the managers. The personality traits of an entrepreneur influence their skills, such as opportunity perception skills, which in turn affects the enterprise's performance (Baum et al. 2007). Furthermore, certain personality qualities are associated with entrepreneurial business performance and success in the hospitality industry (Reijonen 2008; Hachana et al. 2018). Hence, traits are considered an important aspect that stimulates entrepreneur success (Franco and Prata 2019) since the owner-manager's traits will influence firm strategy (Peterson et al. 2003). Personality predicts behavior, and differences in personality lead to variances in behavior (Nave et al. 2017). Thus, it is essential for academics, economists and decision makers to understand the interrelationship between an owner-manager's personal traits and enterprise performance. In the context of personal traits, the Big Five taxonomy is the most common framework employed to study individuals' personality traits (Zhao and Seibert 2006; Zhao et al. 2010; Caliendo et al. 2014). The big five theory is a list of five traits linked to personality (John and Srivastava 1999). According to Digman (1990), the big five taxonomy are "openness to experience, extraversion, conscientiousness, agreeableness, and neuroticism". The big five theory has been employed as the foundation for current research. As highlighted above, limited studies have investigated the personality traits of owner-manager in relation to the performance of small hospitality enterprises (Peterson 2020). As a result, the current study addresses this gap in earlier literature by examining to what extent the personality trait of owner-managers affects the performance of small businesses, particularly in the hospitality industry.

The aim of the current study is to test the extent to which the personal traits of owner-managers influence the performance of their small hospitality enterprises in SA. The current research aims to establish and empirically test a structural model that links personal traits of small business owner-managers and enterprise performance through five hypotheses, as well as to establish the influence of such owner-managers' characteristics on hospitality enterprise performance. The current study makes progress with its empirically verified and conceptually developed model that incorporates personal traits of small business owner-managers and their businesses' performance in terms of overall performance, level of debt, profitability, and enterprise cash flow, which have not previously been studied in combination. In order to achieve the research's aims, the paper has the following structure: Section 2 presents a hypothetical analysis of the influence of personal traits on small enterprise performance. Afterward, Sections 3 and 4 present the research methods and examine research findings, respectively. At the end, Sections 5 and 6 discuss the research outcomes and conclude the study.

2. Review of Literature

2.1. Personality Traits and Small Hospitality Enterprises Performance

Despite the fact that there is a large body of literature on small businesses, whether globally or in SA context, there are few studies that investigate the relationship between small enterprise performance and personal traits of owner-managers in the hospitality industry. The earlier studies have paid more attention and scope on topic, such as entrepreneurial intention, entrepreneurial education, psychological capital and other relevant topics (Ibrahim and Amari 2018; Alkahtani et al. 2020; Aloulou 2021; Sharahiley 2020; Al-Mamary et al. 2020; Alshebami and Seraj 2021). On the other side, Durand et al. (2008) suggested that personality is the drive of human behavior. For example, Hachana et al. (2018) indicated that personality traits are connected to entrepreneurial performance. Personality traits refer to cognitions, emotions and behavior of human characteristic patterns (Goldberg 1992). According to some entrepreneurship scholars (e.g., Naffziger 1995), personality influences enterprise success. Baum et al. (2001) indicated that opportunity recognition is one of the many aspects that personal traits use to influence enterprise performance. However, an owner-manager may favor the decisions that are satisfactory rather

than optimal due to bounded rationality (Sent 2018), which may affect their performance and success. Franco and Prata (2019) considered that the owner-managers personality traits are a critical attribute that motivates them to success. Personal traits of owner-managers have an influence on enterprise strategy and performance (Peterson et al. 2003). The big five traits concept is regarded as the most comprehensive and accurate framework for understanding personality (Holt et al. 2007; McCrae 2011; Roccas et al. 2002). Studies (e.g., Sarwar et al. 2020; Fietze and Boyd 2017; Sobaih and Elshaer 2022) emphasized that the big five personality traits have a relationship with entrepreneurs' intention and performance. As result, employment of the personal traits in order to measure enterprise performance in a commercial environment is crucial (e.g., Tett et al. 1991; Salgado 1997; Barrick et al. 2002). Personal qualities have been linked to both personal wellbeing (Sun et al. 2018) and pay satisfaction (Shrader and Singer 2014).

2.1.1. Openness and Small Hospitality Enterprises Performance

Openness to experience was defined as a person's intellectual curiosity as well as their tendency to explore new experiences and discover new ideas (Zhao and Seibert 2006). Therefore, those who have a high level of openness to experience tend to be flexible and tolerant to various values (Reed et al. 2004; Roccas et al. 2002; Zhao et al. 2010). These traits can assist hospitality owner-managers to identify customer desires and develop the ability to handle competition and market changes. Consequently, a change in how tasks are carried out directly affects how well the organization as a whole performs (Zhang 2003; Zeffane et al. 2018; Teng 2008; Shafiro 2004). Regarding the relationship between openness and enterprise performance, Zhao et al. (2010) indicated that openness to experience has a significant connection with entrepreneurship performance. Ciavarella et al. (2004) emphasized that openness to experience has been negatively associated with performance of business. Shane and Nicolaou (2013) argued that there is a correlation between openness to experience as a personality trait and enterprise financial performance. Likewise, Franco and Prata (2019), Hachana et al. (2018) confirmed that openness to experience has a positive influence on organizational performance. Hence, we could propose the following hypothesis (H):

Hypothesis 1 (H1). *A high level of openness to the experience of owner-manager has a significant positive influence on their small hospitality enterprise's performance.*

2.1.2. Conscientiousness and Small Hospitality Enterprises Performance

Conscientiousness refers to facets of traits such as achievement oriented, competent, deliberate and self-disciplined (Zhao et al. 2010). According to Van Ness and Seifert (2016), conscientiousness has two aspects: a drive for success and the willingness to work effectively. A manager with conscientiousness is careful, dutiful, hardworking, trustworthy, meticulous, reliable, well organized, capable of restraint of desires, and committed to an organization's goals (Barrick et al. 2002). Thus, Penney et al. (2011) argued that a highly conscientious manager exhibits positive attitudes and has a high level of performance at work (Hurtz and Donovan 2000). Likewise, Antoncic et al. (2018) asserted that a conscientious manager grows because of manager's effectiveness, responsibility, accuracy, and organization. Attaining positive outcomes with deliberate practices is an example of that which conscientiousness incorporates (Caspi et al. 2005). Conscientious managers are acknowledgeable and promote change in their enterprise (Liu and Campbell 2017; Myszkowski et al. 2015). This personality trait is crucial for enhancing a company's growth, enhancing enterprise financial performance and promotion strategy in the competitive market of today (Ramadani et al. 2015). Conscientious managers should have leadership skills (Cogliser et al. 2012); hence, they become able to manage businesses effectively. Furthermore, conscientiousness is often linked to high level of spirit (Luthans et al. 2007). Ciavarella et al. (2004) confirmed that high conscientiousness of managers has a positive influence on small enterprise performance and survival. Earlier studies

(e.g., [Barrick et al. 2002, 2003, 2005](#); [Penney et al. 2011](#)) found that conscientiousness of manager and enterprise performance are correlated. Hence, we could propose:

Hypothesis 2 (H2). *The high level of conscientiousness of an owner-manager has a significant positive influence on their small hospitality enterprise's performance.*

2.1.3. Extraversion and Small Hospitality Enterprises' Performance

According to [Zhao and Seibert \(2006\)](#) highly extraverted managers admire individuals and business teams, and pursue excitement and stimulation, while less extraverted managers prefer to be alone and are described as independent, quiet and reserved. Likewise, [Penney et al. \(2011\)](#) revealed that extraverted owner-managers are more likely to be positive and able to connect successfully with a diverse range of individuals, including venture capitalists, consumers, and employees. The extraverted aspect is a good stimulus of manager and staff behavior ([Barrick and Mount 1993](#)). According to [Barrick et al. \(2002\)](#), extraversion is associated with performance, training and group work. Extrovert managers are creative, intelligent, and take on unusual responsibilities ([Lai et al. 2017](#)). They have a significant desire to form extensive networks and social connections in order to gain access to new knowledge. Starting a performance and achieving success are typically viewed as creative actions and a new potential that may be realized through extraversion ([Johnson et al. 2003](#)). Extraversion is described by experiences and positive feelings that have a positive impact and are a real predictor of overall performance in business environment ([Vinchur et al. 1998](#)). Extraversion is demonstrated in fully participating with work accomplishments, and manager is engaged in a process of self-improvement ([Franco and Prata 2019](#)). Because the operations of small business require social communication, extraversion has a vital role in business performance since extroverted managers are more directly involved in business operations. According to [Franco and Prata \(2019\)](#) and [Zhao et al. \(2010\)](#), extraversion is associated with successful business performance. To conclude, extraversion positively influences the enterprise's performance because extroversion owner-managers are more likely to be actively involved in corporate operations ([Franco and Prata 2019](#)). Therefore, we could propose:

Hypothesis 3 (H3). *A high level of extraversion of an owner-manager has a significant positive influence on their small hospitality enterprise's performance.*

2.1.4. Agreeableness and Small Hospitality Enterprises Performance

The agreeable owner-manager is kind, trustworthy, friendly, forgiving, and compassionate. Sincerity, trust, compliance, modesty, altruism and tender-mindedness are associated with agreeableness ([Carpenter 2008](#); [Nuseir and Madanat 2017](#); [Persyn 2010](#); [Pouncey 2010](#); [Pouncey and Medcalfe 2010](#)). Worker mindfulness, as an indication of mindfulness, has a significant impact on performance ([Zeffane et al. 2018](#)). As a result, a connection between agreeableness and enterprise performance is recorded ([Boyle et al. 2008](#); [Dyrenforth et al. 2010](#); [Mitchelson 2005](#); [Teimouri et al. 2018](#)). Agreeableness is a significant determinant of an enterprise's success ([Leutner et al. 2014](#)). Earlier studies (e.g., [Patel and Thatcher 2014](#); [Schröder et al. 2011](#); [Shane and Nicolaou 2013](#)) revealed that a high level of agreeableness is related with doing well in commercial enterprises. Likewise, [Schröder et al. \(2011\)](#) indicated that agreeable owner-managers are able to convey difficult transactions and encourage others to achieve corporate goals. Furthermore, [Zhao and Seibert \(2006\)](#) asserted that agreeableness has a negative impact on risk-taking, pro-activeness and innovativeness of enterprise middle managers' performances. However, agreeable owner-managers are properly successful in operating their small business ([Franco and Prata 2019](#)). Agreeable owner-managers can elicit trust, respect and cooperation ([Cogliser et al. 2012](#)). As a result, agreeableness is a curial issue, particularly in service-oriented entries such as hospitality sector ([Zhao et al. 2010](#)). Hence, we hypothesize that:

Hypothesis 4 (H4). *A high level of agreeableness of an owner-manager has a significant positive influence on their small hospitality enterprise's performance.*

2.1.5. Neuroticism and Small Hospitality Enterprises Performance

Neuroticism refers to frequency and intensity of negative emotions such as anxiety, vulnerability and depression (Zhao et al. 2010). It is one of the traits that might be described as a “dark” personal attribute (Martin et al. 2015). Zhao et al. (2010) assumed a negative correlation between neuroticism and enterprise performance and success. Goldberg et al. (2006) revealed that neuroticism has a detrimental influence on enterprise because emotionally stable manager values independence, individualism, and autonomy. Neuroticism might have undesirable indirect impacts through relationship conflict and a preferred direct impact on new enterprise performance (De Jong et al. 2013). The purpose and perceived ability of self-employment are negatively affected by neuroticism (Singh and DeNoble 2003). On the contrary, according to an organizational psychology study by Tett et al. (1991), emotional stability and organizational performance are negatively correlated, suggesting that the association between neuroticism and performance may also be favorable. Due to their lack of social skills, neurotic people do not often have a substantial network (Barrick et al. 2005; Cogliser et al. 2012; Patel and Thatcher 2014). Thus, they perform less well in socially-entrepreneurial enterprises such as hospitality, which is a service industry depending upon human interaction. Thus, it could be proposed that:

Hypothesis 5 (H5). *A high level of neuroticism of an owner-manager has a significant negative influence on their small hospitality enterprise's performance.*

3. Methods

3.1. Research Sample

The population of the research are owner-managers of small hospitality enterprises “small hotels and restaurants”. These were identified based on the number of employees. Small hotels in the current study had less than 20 employees and small restaurants had less than 10 employees. We were targeting about 250 owner-managers. We decided this number based on the recommendation of Roussel (2005). According to Roussel (2005), we should have at least five times and, most favorably, up to ten times the number of items in the questionnaire as a sample size. In our case we had 20 items; hence, the sample should be 200 participants or above. Hence, we distributed 350 questionnaire forms with support from a specific corporation of data collection. We were able to have 281 questionnaires returned sufficiently valid for analysis. The collected forms had nearly equal participation from males (52%) and females (48%). Most respondents were holding bachelor's degrees (67%); while 21% were holding master's degrees and 12 were holding a diploma degree or the equivalent.

3.2. Measurement Scales

In this study, we have adopted a pre-examined instrument (please see Appendix A). We performed principal component analysis to confirm the value of our research scale. We able to confirm the uni-dimensionality of our research variables: “agreeableness, extroversion, conscientiousness, openness to experience, neuroticism and enterprise performance” and the values were 77.705%, 74.841%, 72.126%, 86.195%, 58.709% and 45.885%, separately of the total variance explained. To check if our data is suited for factor analysis, we adopted the Kaiser-Meyer-Olkin (KMO) Test. The KMO produced the following values: 0.794, 0.861, 0.817, 0.759, 0.701, and 0.833, respectively. These values confirm that the data is suitable for factorial analysis (please see Appendix B). To ensure that our scale is reliable, we adopted Cronbach's Alpha. The findings showed values of 0.849, 0.827, 0.871, 0.920, 0.985 and 0.817, respectively, which confirms that these values were excellent (Nunnally 1978). We were able to reject the null hypothesis since the p -value specific to 3 variables was equivalent to 0.

4. The Results

4.1. The Results of Factorial Analysis

As a part of our data analysis, we conducted factorial analysis or CFA “confirmatory factor analysis” to confirm the fitness or scale for data collection. We used the guidelines of Bentler and Bonett (1980), Hair et al. (2014) and Roussel (2005) to undertake the factorial analysis and interpret its results. The model Chi-squared should be less than. The Normed Fit Index (NFI) and Comparative Fit Index (CFI) should be >0.90. The Root Mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMSR) should be <0.08. The Relative Fit Index (RFI) Incremental Fit Index (IFI), Tucker–Lewis index (TLI), and Normed Fit Index (NFI) should be close to 1. We undertook first order CFA for all study constructs, including both independent and dependent variables (Figure 1). The results of model fitness (Figure 1) showed model has excellent model fits as the values are “ χ^2 (153, N = 281) = 399.23 $p < 0.001$, normed $\chi^2 = 3.609$, RMSEA = 0.085, SRMR = 0.0520, CFI = 0.988, TLI = 0.988, NFI = 0.993, RFI = 0.971, and IFI = 0.912”.

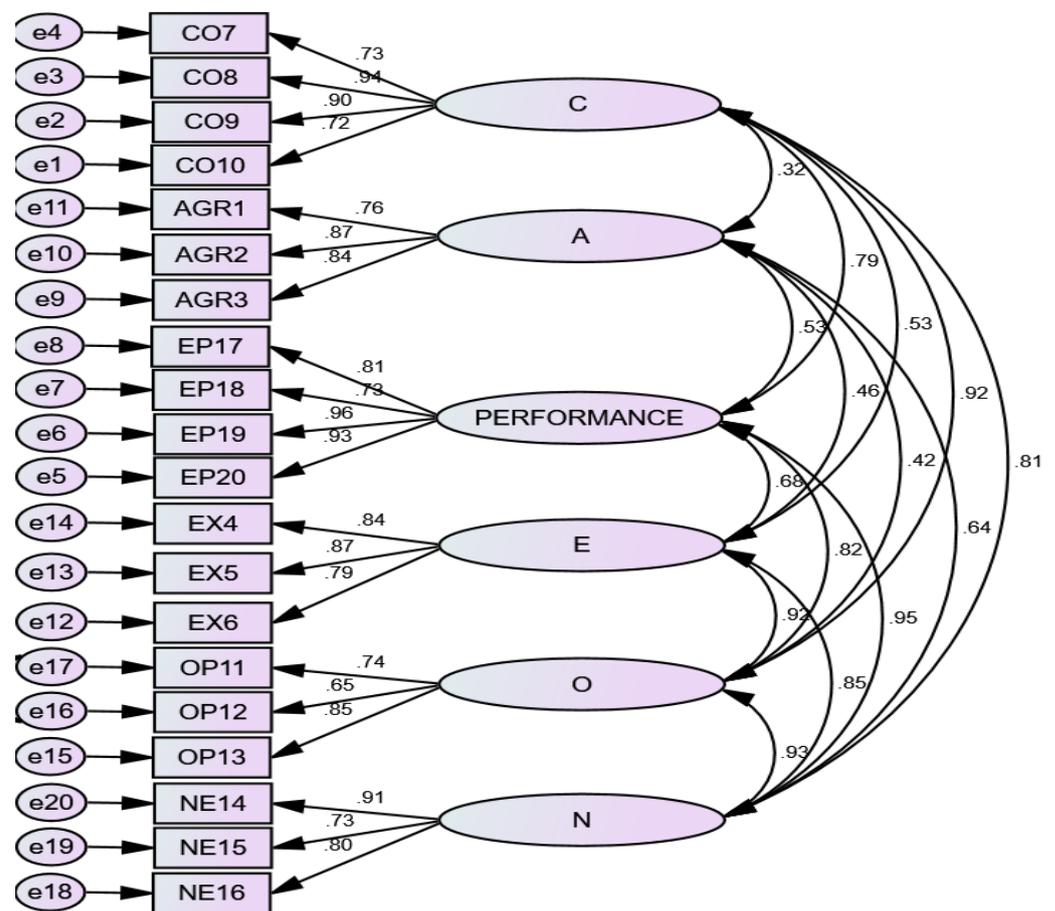


Figure 1. The results of first order CFA. Model fit: (χ^2 (153, N = 281) = 399.23 $p < 0.001$, normed $\chi^2 = 3.609$, RMSEA = 0.085, SRMR = 0.0520, CFI = 0.988, TLI = 0.988, NFI = 0.993, RFI = 0.971, IFI = 0.912, PCFI = 0.750 and PNFI = 0.780).

Table 1 shows the results of descriptive statistics if the research instrument (i.e., minimum, maximum, mean, standard division, skewness and kurtosis). We have adopted skewness to measure the asymmetry of distribution and kurtosis to measure how the tail of the distribution differs from the tails of normal distribution. Using the assumptions of Kline (2015), the results of our research (see Table 1) confirm that the distribution is normal since the skewness is less than 3.

Table 1. Minimum, Maximum, Mean, Standard Division, Skewness and Kurtosis.

Abbr	Item	Min	Max	M	SD	Sk.	Ku.
Agreeableness							
Agr1	"I am on good terms with nearly everyone"	1	5	4.30	1.086	−1.787	2.616
Agr2	"I often get into arguments with my family and co-workers"	1	5	4.35	1.089	−1.855	2.721
Agr3	"Some people think of me as cold and calculating"	1	5	4.07	1.256	−1.428	0.971
Extroversio							
Ex4	"I often feel as if I am bursting with energy"	1	5	3.96	1.260	−1.145	0.258
Ex5	"I am a cheerful, high-spirited person"	1	5	3.90	1.272	−1.059	0.053
Ex6	"I am a very active person"	1	5	3.64	1.343	−0.794	−0.518
Conscientiousness							
Co7	"I am pretty good about pacing myself so as to get things done on time"	1	5	3.58	1.251	−0.682	−0.399
Co8	"I make plans and stick to them"	1	5	3.63	1.258	−0.700	−0.420
Co9	"I continue my job until everything is perfect"	1	5	3.57	1.209	−0.620	−0.363
Co10	"I never seem to be able to get organized"	1	5	4.07	1.121	−1.299	1.132
Openness to experience							
Op11	"I often try new things"	1	5	4.07	1.187	−1.299	0.856
Op12	"I often enjoy playing with theories or abstract ideas"	1	5	4.00	1.192	−1.133	0.439
Op13	"I have little interest in speculating on the nature of the universe or the human condition"	1	5	3.87	1.218	−0.923	−0.053
Neuroticism							
Ne14	"I often feel inferior to others"	1	5	3.73	1.346	−0.806	−0.526
Ne15	"When I am under a great deal of stress, sometimes I feel like I am going to pieces"	1	5	3.70	1.321	−0.727	−0.614
Ne16	"I seldom feel lonely or blue"	1	5	2.55	1.603	0.542	−1.340
Enterprise performance							
P17	"Overall performance of the organization"	1	5	4.42	0.743	−1.234	1.468
P18	"Level of debt"	1	5	4.33	0.736	−0.658	−0.692
P19	"Organization's cash flow"	2	5	4.45	0.691	−1.070	0.635
P20	"Organization's level of profitability"	1	5	4.44	0.745	−1.506	2.933

According to [Hair et al. \(2014\)](#), factor loading of 0.55 or above is acceptable, which means that all our standardized factor loading (SFL) are acceptable (Table 2). We undertook composite reliability (CR) to examine the internal consistency of our scale, which has to be higher than 0.7 ([Hair et al. 2014](#)). We also adopted average variance extracted (AVE) to validate our construct. According to [Jöreskog \(1988\)](#) AVE should be greater than maximum shared variance (MSV), which also has to be higher than 0.5. The results of our research (see Table 2) confirm that our values of CR and AVE are acceptable. We have also ensured the discriminant validity of our construct. This helped us to ensure that the elements of our construct are sufficiently related to each other ([Hair et al. 2014](#)).

Table 2. The constructs’ validity.

Factors and Items	SFL	CR	AVE	MSV	1	2	3	4	5	6
1—Agreeableness ($\alpha = 0.849$)		0.864	0.680	0.425	0.824					
“I_am_on_good_terms_with_nearly_everyone”	0.73									
“I_often_get_into_arguments_with_my_family_and_co-workers”	0.87									
“Some_people_think_of_me_as_cold_and_calculating”	0.84									
2—Extroversion ($\alpha = 0.827$)		0.872	0.696	0.202	0.588 **	0.834				
“I_often_feel_as_if_I_am_bursting_with_energy”	0.84									
“I_am_a_cheerful_high-spirited_person”	0.87									
“I_am_a_very_active_person”	0.79									
3—Conscientiousness ($\alpha = 0.871$)		0.896	0.686	0.531	0.634 **	0.450 **	0.828			
“I_am_pretty_good_about_pacing_myself_so_as_to_get_things_done_on_time”	0.73									
“I_make_plans_and_stick_to_them”	0.94									
“I_continue_my_job_until_everything_is_perfect”	0.90									
“I_never_seem_to_be_able_to_get_organized”	0.72									
4—Openness to experience ($\alpha = 0.920$)		0.793	0.564	0.387	0.652 **	0.421 **	0.729 **	0.750		
“I_often_try_new_things”	0.74									
“I_often_enjoy_playing_with_theories_or_abstract_ideas”	0.65									
“I_have_little_interest_in_speculating_on_the_nature_of_the_universe_or_the_human_condition”	0.85									
5—Neuroticism ($\alpha = 0.985$)		0.856	0.667	0.199	0.337 **	0.266 **	0.515 **	0.447 **	0.816	
“I_often_feel_inferior_to_others”	0.91									
“When_I_am_under_a_great_deal_of_stress_sometimes_I_feel_like_I_am_going_to_pieces”	0.73									
“I_seldom_feel_lonely_or_blue”	0.80									
6—Enterprise performance ($\alpha = 0.817$)		0.920	0.744	0.044	0.035	0.003	0.109	0.024	0.021	0.862
“Overall_performance_of_the_organization”	0.81									
“Level_of_debt”	0.73									
“Organization’s_cash_flow”	0.96									
“Organization’s_level_of_profitability”	0.93									

Note: Values in bold are the square roots of the AVEs; ** $p < 0.01$.

4.2. Testing the Research Hypotheses

We tested the research hypotheses by undertaking a structural model using structural equation modelling of AMOS software. The results of the structural model are in Figure 2 and Table 3. The research structural model has good fitness as all the values were satisfactory “($\chi^2(106, N = 281) = 266.06, p < 0.001$, normed $\chi^2 = 2.51$, RMSEA = 0.041, SRMR = 0.003, NFI = 0.936, CFI = 0.928, TLI = 0.912, RFI = 0.966, and IFI = 0.927)”. The findings of SEM showed that openness to experience and agreeableness of owner-managers have positive significant influences on their enterprise’s performance ($\beta = 0.24$, t-value 3.213, $p < 0.001$) and ($\beta = 0.26$, t-value 3.840, $p < 0.001$) supporting H1 and H4, respectively. On the other hand, the results showed that conscientiousness and extraversion of owner-managers have positive but insignificant influences on their enterprise’s performance ($\beta = 0.09$, t-value 0.964, $p = 0.335$) and ($\beta = 0.06$, t-value 1.745, $p < 0.081$). However, neuroticism of owner-managers has negative and significant influences on their enterprise’s performance ($\beta = 0.35$, t-value 4.976, $p < 0.001$) (see Table 3 and Figure 2).

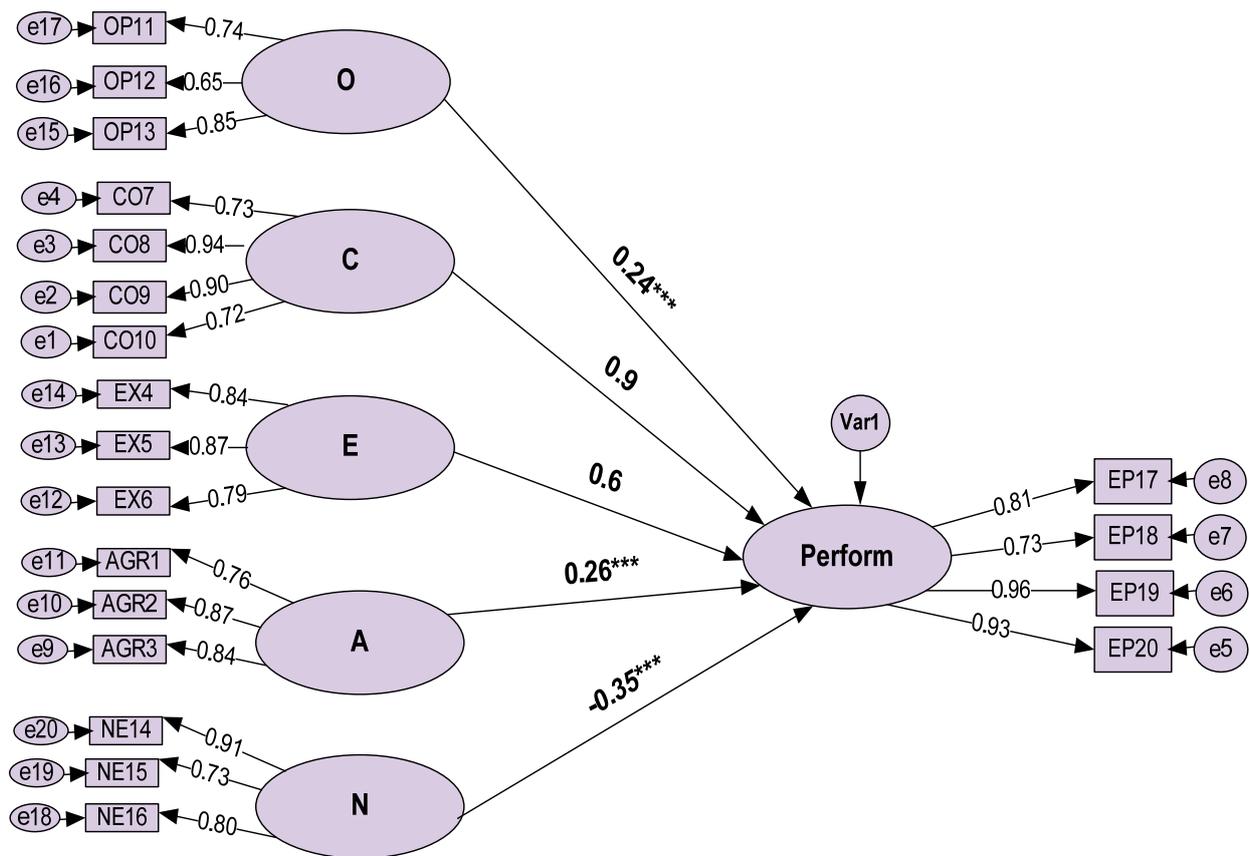


Figure 2. The structural model (***) $p < 0.001$.

Table 3. Testing the research hypothesis.

Result of the Structural Model	β	p	C-R t-Value	R^2	Hyp. Results
H1-O \rightarrow PERFOR	0.24	***	3.213		Supported
H2-C \rightarrow PERFOR	0.09	0.335	0.964		Not Supported
H3-E \rightarrow PERFOR	0.06	0.081	1.745		Not Supported
H4-A \rightarrow PERFOR	0.26	***	3.840		Supported
H5-N \rightarrow PERFOR	-0.35	***	-4.976		Supported
PERFOR				0.530	

Model fit indices: “(χ^2 (106, N = 281) = 266.06 $p < 0.001$, normed $\chi^2 = 2.51$, RMSEA = 0.041, SRMR = 0.003, NFI = 0.936, CFI = 0.928, TLI = 0.912, RFI = 0.966, IFI = 0.927, PCFI = 0.773 and PNFI = 0.759), *** $p < 0.001$ ”.

5. Discussion

We undertook the current research to bridge a gap in knowledge regarding the relationship between owner-manager’s big five personality traits and their enterprise’s performance (Peterson 2020). This research tests the influence the owner-manager’s personality traits on the performance of their small enterprises. The results supported three research hypotheses and did not support two hypotheses. The results supported the first research hypothesis that owner-managers with high level of openness to experience have positive significant influence on their enterprise’s performance. These findings support the work of previous scholars (Shane and Nicolaou 2013; Hachana et al. 2018; Franco and Prata 2019) who also found a correlation between openness to experience as a personality traits and enterprise performance. The results also support findings of a recent study (Sobaih and Elshaer 2022) that openness to experience has a positive influence on entrepreneurship intention. This finding confirms that characteristics of owner-managers,

who are open to new and different ideas, have a significant positive effect on their small hospitality enterprise's performance.

The results supported the fourth research hypothesis, that owner-managers with high level of agreeableness have positive significant influence on their small hospitality enterprise's performance. This confirms that owner-managers who have a high level of agreeableness are more successful in operating their small business (Franco and Prata 2019). The current research confirms that owner-managers who are tender-minded, straightforward, trusting and modest have a positive and significant influence on their enterprise's performance. This finding confirms the positive association between agreeableness and enterprise performance (Boyle et al. 2008; Mitchelson 2005). Moreover, the results supported the fifth research hypothesis that owner-managers with a high level of neuroticism have a negative and significant influence on their enterprise's performance. Such result confirms a negative correlation between neuroticism and enterprise performance (Zhao et al. 2010). These findings when owner-managers are more vulnerable, impulsive, and anxious, they have significant negative influence on their enterprise's performance.

On the other hand, the results, interestingly, did not support the second research hypotheses that conscientiousness of owner-managers have positive but insignificant influences on their enterprise's performance. The results partially support the work of Ciavarella et al. (2004) who found that high conscientiousness positively influences the enterprise's performance, which is confirmed by our results albeit the positive impact was insignificant. It also supports the work of Sobaih and Elshaer (2022) that conscientiousness is positively associated with digital entrepreneurship intention. The results confirmed that the characteristics of conscious owner-manager, e.g., careful, dutiful, hardworking, reliable and well organized, had not significant positive impact on the performance of small enterprises' performance. Furthermore, the results did not support the third research hypotheses that extraversion of owner-managers have positive but insignificant influences on their enterprise's performance. Like conscientiousness, extraversion qualities, e.g., assertiveness, warmth and gregariousness, did not significant influence on the performance of small enterprises. This supports the work of Sobaih and Elshaer (2022) that extraversion is positively associated with digital entrepreneurship intention.

These results have implications for decision makers in the SA that in order to promote high performance of small hospitality enterprises, which will have an impact on the tourism industry and, overall, on the national economy, they will have to pay close attention to encourage their individual to become open to new experience and different ideas. This could be done through development programs and media campaigns. Universities can play a crucial role in developing such individuals and promoting positive personality traits such as such as openness to experience and agreeableness. These results also contribute to the management literature that certain personality traits of owner-managers have the ability to affect the performance of their business significantly either positively such as openness to experience and agreeableness or negatively such as neuroticism.

6. Conclusions

The current research is an academic response to the growing attention by many governments worldwide, particularly the Saudi government, on small business, over the last few decades, due to their positive social and economic impacts. The research is an attempt to bridge a gap in the management literature in relation to the impact of owner-managers' big five personality traits on the performance of their small enterprises, which have not been examined, to the best of researchers' knowledge. The current study tested the influence of an owner-manager's big five personality traits on the performance of their small hospitality enterprises in SA. The results of structural model showed that high levels of openness to experience and agreeableness among owner-managers have a significant positive impact on the performance of their small hospitality enterprises. Nonetheless, a high level of neuroticism has a significant negative impact on the performance of their small hospitality enterprises. The results interestingly showed that high levels of conscientiousness and

extraversion among owner-managers have a positive, but insignificant, impact on the performance of their small hospitality enterprises. It was found that these two personality traits, i.e., conscientiousness and extraversion, have a minor impact on the performance of small hospitality enterprises. Such findings confirm that decision makers should pay attention to promoting personality traits that promote high-level performance of small businesses, such as openness to experience and agreeableness.

The current study was conducted on a sample of small hospitality enterprises in SA; hence, the results may not be representative of other countries without further examination. One of the opportunities for future research could be examining the moderating effect of owners’ age and experience in the link between their personality traits and the performance of the enterprises. A multi-country study could be another opportunity for further research.

Author Contributions: Conceptualization, A.A.A.-q., A.E.E.S., H.G. and A.E.A.E.; methodology, A.A.A.-q., A.E.E.S., H.G. and A.E.A.E.; software H.G.; validation, A.E.E.S. and A.E.A.E.; formal analysis, A.E.E.S. and H.G.; investigation, A.A.A.-q., A.E.E.S. and A.E.A.E.; resources, A.E.E.S.; data curation, A.E.E.S. and A.E.A.E.; writing—original draft preparation, A.E.E.S. and A.E.A.E.; writing—review and editing, A.E.E.S. and A.E.A.E.; visualization, A.E.E.S. and A.E.A.E.; supervision, A.E.E.S.; project administration, A.E.E.S.; funding acquisition, A.A.A.-q. All authors have read and agreed to the published version of the manuscript.

Funding: This work was supported by the Deanship of Scientific Research, Vice Presidency for Graduate Studies and Scientific Research, King Faisal University, Saudi Arabia [GRANT1796].

Data Availability Statement: Data is available upon request from researchers who meet the eligibility criteria. Kindly contact the first author privately through the e-mail.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. The Measurement Scales.

Abbr	Scales and Items	Authors
Agreeableness *		
AGR1	“I_am_on_good_terms_with_nearly_everyone”	Spence et al. (2012) Teng et al. (2011)
AGR2	“I_often_get_into_arguments_with_my_family_and_co-workers”	
AGR3	“Some_people_think_of_me_as_cold_and_calculating”	
Extroversion *		
EX4	“I_often_feel_as_if_I_am_bursting_with_energy”	Spence et al. (2012) Teng et al. (2011)
EX5	“I_am_a_cheerful_high-spirited_person”	
EX6	“I_am_a_very_active_person”	
Conscientiousness *		
CO7	“I_am_pretty_good_about_pacing_myself_so_as_to_get_things_done_on_time”	Spence et al. (2012) Teng et al. (2011)
CO8	“I_make_plans_and_stick_to_them”	
CO9	“I_continue_my_job_until_everything_is_perfect”	
CO10	“I_never_seem_to_be_able_to_get_organized”	
Openness to experience *		
OP11	“I_often_try_new_things”	Spence et al. (2012) Teng et al. (2011)
OP12	“I_often_enjoy_playing_with_theories_or_abstract_ideas”	
OP13	“I_have_little_interest_in_speculating_on_the_nature_of_the_universe_or_the_human_condition”	

Table A1. *Cont.*

Abbr	Scales and Items	Authors
Neuroticism *		
NE14	“I often feel inferior to others”	Spence et al. (2012) Teng et al. (2011)
NE15	“When I am under a great deal of stress, sometimes I feel like I am going to pieces”	
NE16	“I seldom feel lonely or blue”	
Enterprise performance		
EP17	“Overall performance of the organization” 1 means significantly worse off and 5 means significantly better off.	Kachali et al. (2012)
EP18	“Level of debt” 1 indicates very negative and 5 means very positive	
EP19	“Organization’s cash flow” 1 means very poor and 5 equals excellent	
EP20	“Organization’s level of profitability” 1 means very poor and 5 equals excellent	

* 1 equals strongly disagree and 5 equals strongly agree.

Appendix B

Table A2. KMO, Total Variance Explained and Cronbach Alpha.

Measured Variable	KMO	TVE	α
Agreeableness	0.794	77.705	0.849
Extroversion	0.861	74.841	0.827
Conscientiousness	0.817	72.126	0.871
Openness to experience	0.759	86.195	0.920
Neuroticism	0.701	58.709	0.985
Enterprise performance	0.833	45.885	0.817

References

Ahmad, Sayed Z. 2015. Entrepreneurship in the small and medium-sized hotel sector. *Current Issues in Tourism* 18: 328–49. [CrossRef]

Aljarodi, Abdullah. 2020. Female Entrepreneurial Activity in Saudi Arabia: An Empirical Study. Ph.D. thesis, Universitat Autònoma de Barcelona, International Doctorate in Entrepreneurship and Management, Bellaterra, Spain.

Alkahtani, Nasser Saad, M. M. Sulphay, Kevin Delany, and Anass Hamad Elneel Adow. 2020. The Influence of Psychological capital on Workplace Wellbeing and Employee Engagement among Saudi Workforce. *Humanities and Social Sciences Reviews* 8: 233–45. [CrossRef]

Al-Mamary, Yasser Hassan, and Mohammad Alshallaqi. 2022. Impact of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness on students’ intention to start a new venture. *Journal of Innovation & Knowledge* 7: 100239.

Al-Mamary, Yaser Hasan Salem, Mohammed Abdulrab, Mohammed A. Alwaheeb, and Naif Ghazi M. Alshammari. 2020. Factors Impacting Entrepreneurial Intentions among University Students in Saudi Arabia: Testing an Integrated Model of TPB and EO. *Education and Training* 62: 779–803. [CrossRef]

Aloulou, Wassim J. 2021. The Influence of Institutional Context on Entrepreneurial Intention: Evidence from the Saudi Young Community. *Journal of Enterprising Communities: People and Places in the Global Economy* 16: 677–98. [CrossRef]

Alshebami, Ali, and Abdullah Seraj. 2021. The Impact of Intellectual Capital on the Establishment of Ventures for Saudi Small Entrepreneurs: GEM Data Empirical Scrutiny. *Review of International Geographical Education Online* 11: 129–42.

Antonic, Jasna Auer, Bostjan Antonic, Darja Kobal Grum, and Mitja Ruzzier. 2018. The big five personality of the SME manager and their company’s performance. *Journal of Developmental Entrepreneurship* 23: 1850021. [CrossRef]

Aragón-Sánchez, Antonio, and Gregorio Sánchez-Marín. 2005. Strategic orientation, management characteristics, and performance: A study of Spanish SMEs. *Journal of Small Business Management* 43: 287–308. [CrossRef]

- Arkorful, Helen, and Sam Kris Hilton. 2021. Locus of Control and Entrepreneurial Intention: A Study in a Developing. *Journal of Economic and Administrative Sciences* 38: 333–44. [[CrossRef](#)]
- Barbero, José L., José C. Casillas, and Howard D. Feldman. 2011. Managerial capabilities and paths to growth as determinants of high-growth small and medium-sized enterprises. *International Small Business Journal* 29: 671–94. [[CrossRef](#)]
- Barrick, Murray R., and Michael K. Mount. 1993. Autonomy as a moderator of the relationships between the Big Five personality dimensions and job performance. *Journal of Applied Psychology* 78: 111–18. [[CrossRef](#)]
- Barrick, Murray R., Greg L. Stewart, and Mike Piotrowski. 2002. Personality and Job Performance: Test of the mediating effects of motivation among sales representatives. *Journal of Applied Psychology* 87: 43–51. [[CrossRef](#)] [[PubMed](#)]
- Barrick, Murray R., Laura Parks, and Michael K. Mount. 2005. Self-monitoring as a moderator of the relationships between personality traits and performance. *Personnel Psychology* 58: 745–67. [[CrossRef](#)]
- Barrick, Murray R., Michael K. Mount, and Rashmi Gupta. 2003. Meta analysis of the relationship between the five-factor model of personality and Holland's occupational types. *Personnel Psychology* 56: 45–74. [[CrossRef](#)]
- Basri, Weal. 2020. Examining the impact of artificial intelligence (AI)-assisted social media marketing on the performance of small and medium enterprises: Toward effective business management in the Saudi Arabian context. *International Journal of Computational Intelligence Systems* 13: 142. [[CrossRef](#)]
- Baum, J. Robert, and Edwin A. Locke. 2004. The relationship of entrepreneurial traits, skill, and motivation to subsequent venture growth. *Journal of Applied Psychology* 89: 587–92. [[CrossRef](#)]
- Baum, J. Robert, Michael Frese, and Robert A. Baron. 2007. *The Psychology of Entrepreneurship*. Mahwah: Lawrence Erlbaum Associates, Inc.
- Baum, J. Robert, Edwin A. Locke, and Ken G. Smith. 2001. A multidimensional model of venture growth. *Academy of Management Journal* 44: 292–303. [[CrossRef](#)]
- Bentler, Peter M., and Douglas G. Bonett. 1980. Significance Tests and Goodness-Of-Fit in the Analysis of Covariance Structures. *Psychological bulletin* 88: 588–600. [[CrossRef](#)]
- Bistrova, Julia, Natalja Lace, and Valentina Peleckienė. 2011. The influence of capital structure on baltic corporate performance. *Journal of Business Economics and Management* 12: 655–69. [[CrossRef](#)]
- Boyle, Gregory J., Gerald Matthews, and Donald H. Saklofske, eds. 2008. Personality theories and models: An overview. The Sage Handbook of Personality Theory and Assessment. *Personality Measurement and Testing* 2: 1–29.
- Buhalis, Dimitrios. 1995. The Impact of Information Telecommunication Technologies on Tourism Channels: Implications for the Small and Medium-Sized Tourism Enterprises. Ph.D. thesis, University of Surrey, Guildford, UK.
- Cai, Li, Majid Murad, Sheikh Farhan Ashraf, and Shumaila Naz. 2021. Impact of dark tetrad personality traits on nascent entrepreneurial behavior: The mediating role of entrepreneurial intention. *Frontiers of Business Research in China* 15: 7. [[CrossRef](#)]
- Caliendo, Marco, Frank Fossen, and Alexander S. Kritikos. 2014. Personality characteristics and the decisions to become and stay self-employed. *Small Business Economy* 42: 787–814. [[CrossRef](#)]
- Carpenter, Jeremy David. 2008. Relating Proactive Personality and the Big Five to Organizational Citizenship Behaviors. Ph.D. thesis, University of Tennessee at Chattanooga, Psychology, Knoxville, TN, USA.
- Caspi, Avshalom, Brent W. Roberts, and Rebecca L. Shiner. 2005. Personality development: Stability and change. *Annual Review of Psychology* 56: 453–84. [[CrossRef](#)]
- Chell, Elizabeth, David E. Wicklander, Shane G. Sturman, and L. Wayne Hoover. 2008. *The Entrepreneurial Personality: A Social Construction*. New York: Routledge.
- Chollet, Barthélemy, Mickael Geraudel, Anis Khedhaouria, and Caroline Mothe. 2016. Market knowledge as a function of CEOs' personality: A fuzzy set approach. *Journal of Business Research* 69: 2567–73. [[CrossRef](#)]
- Ciavarella, Mark A., Ann K. Buchholtz, Christine M. Riordan, Robert D. Gatewood, and Garnett S. Stokes. 2004. The big five and venture survival: Is there a linkage? *Journal of Business Venturing* 19: 465–83. [[CrossRef](#)]
- Cogliser, Claudia C., William L. Gardner, Mark B. Gavin, and J. Christian Broberg. 2012. Big five personality factors and leader emergence in virtual teams: Relationships with team trustworthiness, member performance contributions, and team performance. *Group & Organization Management* 37: 752–84.
- De Jong, Ad, Michael Song, and Lisa Z. Song. 2013. How lead founder personality affects new venture performance: The mediating role of team conflict. *Journal of Management* 39: 1825–54. [[CrossRef](#)]
- De Zoysa, Anura, and Siriyama Kanthi Herath. 2007. The impact of owner/managers' mentality on financial performance of SMEs in Japan: An empirical investigation. *Journal of management Development* 26: 652–66. [[CrossRef](#)]
- Delmar, Frederic, and Johan Wiklund. 2008. The effect of small business managers' growth motivation on firm growth: A longitudinal study. *Entrepreneurship Theory and Practice* 32: 437–53. [[CrossRef](#)]
- Digman, John M. 1990. Personality structure: Emergence of the five-factor model. *Annual Review of Psychology* 41: 417–40. [[CrossRef](#)]
- Durand, Robert B., Rick Newby, and Jay Sanghani. 2008. An intimate portrait of the individual investor. *The Journal of Behavioral Finance* 9: 193–208. [[CrossRef](#)]
- Dyrenforth, Portia S., Deborah A. Kashy, M. Brent Donnellan, and Richard E. Lucas. 2010. Predicting relationship and life satisfaction from personality in nationally representative samples from three countries: The relative importance of actor, partner, and similarity effects. *Journal of Personality and Social Psychology* 99: 690. [[CrossRef](#)] [[PubMed](#)]

- Elshaer, Ibrahim A., and Abu Elnasr E. Sobaih. 2022. I Think I Can, I Think I Can: Effects of Entrepreneurship Orientation on Entrepreneurship Intention of Saudi Agriculture and Food Sciences Graduates. *Agriculture* 12: 1454. [\[CrossRef\]](#)
- Fietze, Simon, and Britta Boyd. 2017. Entrepreneurial intention of Danish students: A correspondence analysis. *International Journal of Entrepreneurial Behavior & Research* 23: 656–72.
- Franco, Mário, and Maria Prata. 2019. Influence of the individual characteristics and personality traits of the founder on the performance of family SMEs. *European Journal of International Management* 13: 41–68. [\[CrossRef\]](#)
- Fujianti, Lailah. 2018. Top management characteristics and company performance: An empirical analysis on public companies listed in the Indonesian stock exchange. *European Research Studies Journal* 21: 62–76. [\[CrossRef\]](#) [\[PubMed\]](#)
- Goldberg, Lewis R. 1992. The development of makers for the Big-Five factor structure. *Psychological Assessment* 4: 26–42. [\[CrossRef\]](#)
- Goldberg, Lewis R., John A. Johnson, Herbert W. Eber, Robert Hogan, Michael C. Ashton, C. Robert Cloninger, and Harrison G. Gough. 2006. The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality* 40: 84–96. [\[CrossRef\]](#)
- Greenly, Gordon. 1986. Does Strategic Planning Improve Company Performance? *Long Range Planning* 19: 101–9. [\[CrossRef\]](#)
- Hachana, Rym, Sarra Berraies, and Zied Ftiti. 2018. Identifying personality traits associated with entrepreneurial success: Does gender matter? *Journal of Innovation Economics Management* 3: 169–93. [\[CrossRef\]](#)
- Hansen, Bridget, and Robert Hamilton. 2011. Factors distinguishing small firm growers and non-growers. *International Small Business Journal* 29: 278–91. [\[CrossRef\]](#)
- Hair, Joseph F., William C. Black, Barry J. Babin, and Rolph E. Anderson. 2014. *Multivariate Data Analysis*. Hoboken: Pearson Education.
- Holt, Daniel T., Matthew W. Rutherford, and Gretchen R. Clohessy. 2007. Corporate entrepreneurship: An empirical look at individual characteristics, context, and process. *Journal of Leadership and Organizational Studies* 13: 40–54. [\[CrossRef\]](#)
- Hurtz, Gregory M., and John J. Donovan. 2000. Personality and job performance: The big five revisited. *Journal of Applied Psychology* 85: 869–79. [\[CrossRef\]](#) [\[PubMed\]](#)
- Ibrahim, Mona Mohamed Sayed, and Amina Ahmed Amari. 2018. Influence of the Psychological Capital and Perceived Organizational Support on Subjective Career Success: The Mediating Role of Women's Career Adaptability in the Saudi Context. *International Journal of Business & Management* 13: 1833–8119.
- John, Oliver P., and Sanjay Srivastava. 1999. The big five trait taxonomy: History, measurement, and theoretical perspectives. In *Handbook of Personality: Theory and Research*. Edited by Lawrence A. Pervin and Oliver P. John. New York: Guilford.
- Johnson, Jean L., Ruby Pui-Wan Lee, Amit Saini, and Bianca Grohmann. 2003. Market-focused strategic flexibility: Conceptual advances and an integrative model. *Journal of the Academy of Marketing Science* 31: 74–89. [\[CrossRef\]](#)
- Jöreskog, Karl G. 1988. Analysis of Covariance Structures. In *The Handbook of Multivariate Experimental Psychology*. Edited by Raymond B. Cattell and John R. Nesselroade. New York: Plenum Press, pp. 207–30.
- Kachali, Hlekiwe, Joanne R. Stevenson, Zachary Whitman, Erica Seville, John Vargo, and Tom Wilson. 2012. Organisational resilience and recovery for Canterbury organisations after the 4 September 2010 earthquake. *Australasian Journal of Disaster and Trauma Studies* 1: 11–19.
- Kline, Rex B. 2015. *Principles and Practice of Structural Equation Modeling*. New York: Guilford Publications.
- Lai, Jung-Ho, Wen-Chun Lin, and Li-Yu Chen. 2017. The influence of CEO overconfidence on ownership choice in foreign market entry decisions. *International Business Review* 26: 774–85. [\[CrossRef\]](#)
- Leutner, Franziska, Gorkan Ahmetoglu, Reece Akhtar, and Tomas Chamorro-Premuzic. 2014. The relationship between the entrepreneurial personality and the Big Five personality traits. *Personality and Individual Differences* 63: 58–63. [\[CrossRef\]](#)
- Li, Cai, Majid Murad, Fakhar Shahzad, Muhammad Aamir Shafique Khan, Sheikh Farhan Ashraf, and Courage Simon Kofi Dogbe. 2020. Entrepreneurial Passion to Entrepreneurial Behavior: Role of Entrepreneurial Alertness, Entrepreneurial Self-Efficacy and Proactive Personality. *Frontiers in Psychology* 11: 1611. [\[CrossRef\]](#)
- Liu, Dong, and W. Keith Campbell. 2017. The Big Five personality traits, Big Two metatraits and social media: A meta-analysis. *Journal of Research in Personality* 70: 229–40. [\[CrossRef\]](#)
- Lumpkin, G. T., and Gregory G. Dess. 1995. Simplicity as a strategy-making process: The effects of stage of organizational development and environment on performance. *Academy of Management Journal* 38: 1386–407. [\[CrossRef\]](#)
- Luthans, Fred, Bruce J. Avolio, James B. Avey, and Steven M. Norman. 2007. Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology* 60: 541–72. [\[CrossRef\]](#)
- Martin, Mabunda Baluku, Fred Kikooma Julius, and Milly Kibanja Grace. 2015. Does personality of owners of micro enterprises matter for the relationship between startup capital and entrepreneurial success. *African Journal of Business Management* 10: 13–23. [\[CrossRef\]](#)
- Mazzarol, Tim, Sophie Reboud, and Geoffrey N. Soutar. 2009. Strategic planning in growth orientated firms. *International Journal of Entrepreneurial Behaviour & Research* 15: 320–45.
- McCrae, Robert R. 2011. Personality theories for the 21st century. *Teaching of Psychology* 38: 209–14. [\[CrossRef\]](#)
- Mitchelson, Jacqueline K. 2005. *Personality and Leadership Style: The Abridged Big Five Circumplex (AB5C) of Personality Traits as Predictor of Transformational Leadership Factors*. Detroit: Wayne State University, vol. 11, pp. 121–28.
- Murphy, Gregory B., Jeff W. Traylor, and Robert C. Hill. 1996. Measuring performance in entrepreneurship research. *Journal of Business Research* 36: 15–23. [\[CrossRef\]](#)

- Myszkowski, Nils, Martin Storme, Andrés Davila, and Todd Lubart. 2015. Managerial creative problem solving and the Big Five Personality traits: Distinguishing divergent and convergent Abilities. *Journal of Management Development* 34: 674–84. [\[CrossRef\]](#)
- Naffziger, Douglas W. 1995. Entrepreneurship: A person based theory approach. In *Advances in Entrepreneurship, Firm Emergence, and Growth*. Edited by Jerome A. Katz and Robert H. Broackhaus. Greenwich: JAI Press, vol. 2, pp. 21–50.
- Nave, Christopher S., Grant W. Edmonds, Sarah E. Hampson, Theresa Murzyn, and Kyle S. Sauerberger. 2017. From elementary school to midlife: Childhood personality predicts behavior during cognitive testing over four decades later. *Journal of Research in Personality* 67: 183–89. [\[CrossRef\]](#)
- Nunnally, Jum C. 1978. An overview of psychological measurement. *Clinical Diagnosis of Mental Disorders*, 97–146. [\[CrossRef\]](#)
- Nuseir, Mohammed T., and Hilda Madanat. 2017. The use of integrated management approaches and their impact on customers' satisfaction and business success. *International Journal of Business Excellence* 11: 120–40. [\[CrossRef\]](#)
- Patel, Pankaj C., and Sherry MB Thatcher. 2014. Sticking it out individual attributes and persistence in self-employment. *Journal of Management* 40: 1932–79. [\[CrossRef\]](#)
- Penney, Lisa M., Emily David, and L. A. Witt. 2011. A review of personality and performance: Identifying boundaries, contingencies, and future research directions. *Human Resource Management Review* 21: 297–310. [\[CrossRef\]](#)
- Persyn, Deborah. 2010. *Prospective Memory and the Big Five Personality Dimensions*. San Antonio: The University of Texas at San Antonio.
- Peterson, Mark. 2020. Modeling country entrepreneurial activity to inform entrepreneurial-marketing research. *Journal of Business Research* 113: 105–16. [\[CrossRef\]](#)
- Peterson, Randall S., D. Brent Smith, Paul V. Martorana, and Pamela D. Owens. 2003. The impact of chief executive officer personality on top management team dynamics: One mechanism by which leadership affects organizational performance. *Journal of Applied Psychology* 88: 795–808. [\[CrossRef\]](#)
- Pouncey, Von. Y. 2010. The Relational Component of the Psychological Contract: The Big Five Personality Traits & Violation Perception of the Temporary Employee. Ph.D. thesis, Capella University, Ann Arbor, MI, USA.
- Pouncey, Von, and Simon Medcalfe. 2010. The relational component of the psychological contract: The big five personality traits & violation perception of the temporary employee. *American Journal of Business Research* 3: 39–52.
- Pushpakumari, M. D. 2009. Owner-manager personal values and their impact on performance: An empirical analysis of manufacturing SMEs in Japan. Retrieved 10: 2011.
- Rajesh, Kumar Shastri, Tripathi Ravindra, and Ali Murad. 2011. Liberalization and its impact on small scale industries. *International Journal of Vocational and Technical Education* 3: 81–83.
- Ramadani, Veland, Robert D. Hisrich, and Shqipe Gërguri-Rashiti. 2015. Female entrepreneurs in transition economies: Insights from Albania, Macedonia and Kosovo. *World Review of Entrepreneurship, Management and Sustainable Development* 11: 391–413. [\[CrossRef\]](#)
- Ramanujam, Vasudevan, N. Venkatraman, and J. C. Camillus. 1986. Objectives-based" evaluation of strategic planning systems. *Omega* 14: 299–306. [\[CrossRef\]](#)
- Rauch, Andreas, and Michael Frese. 2007. Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology* 16: 353–85. [\[CrossRef\]](#)
- Reed, Mary Beth, Monroe A. Bruch, and Richard F. Haase. 2004. Five-factor model of personality and career exploration. *Journal of Career Assessment* 12: 223–38. [\[CrossRef\]](#)
- Reijonen, Helen. 2008. Understanding the small business owner: What they really aim at and how this relates to firm performance: A case study in North Karelia, Eastern Finland. *Management Research News* 31: 616–29. [\[CrossRef\]](#)
- Reynolds, Wal, Warwick Savage, and Alan Williams. 1994. *Your Own Business: A Practical Guide to Success*. Melbourne: Thomas Nelson.
- Richbell, Suzanne M., H. Doug Watts, and Perry Wardle. 2006. Owner-managers and business planning in the small firm. *International Small Business Journal* 24: 496–514. [\[CrossRef\]](#)
- Roccas, Sonia, Lilach Sagiv, Shalom H. Schwartz, and Ariel Knafo. 2002. The big five personality factors and personal values. *Personality and Social Psychology Bulletin* 28: 789–801. [\[CrossRef\]](#)
- Roussel, Patrice. 2005. Méthodes de Développement d'Échelles pour Questionnaires d'Enquête. In *Management des Ressources Humaines: Méthodes de Recherche en Sciences Humaines et Sociales*. Edited by Patrice Roussel and Frédéric Wacheux. Paris: De Boeck Supérieur, pp. 245–76.
- Salgado, Jesus F. 1997. The five-factor model of personality and job performance in the European Community. *Journal of Applied Psychology* 82: 30–43. [\[CrossRef\]](#)
- Sarwar, Danish, Bilal Sarwar, Muhammad Asif Raz, Hadi Hassan Khan, Noor Muhammad, Usman Azhar, Nadeem uz Zaman, and Mumraiz Khan Kasi. 2020. Relationship of the big five personality traits and risk aversion with investment intention of individual investors. *The Journal of Asian Finance, Economics and Business* 7: 819–29. [\[CrossRef\]](#)
- Sent, Esther-Mirjam. 2018. Rationality and bounded rationality: You can't have one without the other. *The European Journal of the History of Economic Thought* 25: 1370–86. [\[CrossRef\]](#)
- Schröder, Elke, Eva Schmitt-Rodermund, and Nicolas Arnaud. 2011. Career choice intentions of adolescents with a family business background. *Family Business Review* 24: 305–21. [\[CrossRef\]](#)
- Shafiro, Margarita. 2004. The Effects of Allocentrism, Idiocentrism, Social Support, and Big Five Personality Dimensions on Work-family Conflict. Ph.D. thesis, Portland State University, Ann Arbor, MI, USA.

- Shane, Scott, and Nicos Nicolaou. 2013. The genetics of entrepreneurial performance. *International Small Business Journal* 31: 473–95. [\[CrossRef\]](#)
- Sharahiley, Sanawi M. 2020. Examining Entrepreneurial Intention of the Saudi Arabia's University Students. *Global Journal of Flexible Systems Management* 21: 67–84. [\[CrossRef\]](#)
- Shrader, Jonathan C., and Luke Singer. 2014. The impact of personality on pay satisfaction among small business managers in the United States and China. *Journal of Technology Management in China* 9: 123–32. [\[CrossRef\]](#)
- Singh, Gangaram, and Alex DeNoble. 2003. Views on self-employment and personality: An exploratory study. *Journal of Developmental Entrepreneurship* 8: 265–81.
- Smallbone, David, Roger Leig, and David North. 1995. The characteristics and strategies of high growth firms. *International Journal of Entrepreneurial Behaviour and Research* 1: 44–62. [\[CrossRef\]](#)
- Sobaih, Abu Elnasr E. 2011. *The Management of Part-Time Employees in the Restaurant Industry: A Case Study of the UK Restaurant Sector*. Saarbrücken: Lap Lambert Academic Publishing.
- Sobaih, Abu Elnasr E. 2018. Human resource management in hospitality firms in Egypt: Does size matter? *Tourism and Hospitality Research* 18: 38–48. [\[CrossRef\]](#)
- Sobaih, Abu Elnasr E., and Ibrahim A. Elshaer. 2022. Personal Traits and Digital Entrepreneurship: A Mediation Model Using SmartPLS Data Analysis. *Mathematics* 10: 3926. [\[CrossRef\]](#)
- Spence, Ruth, Matthew Owens, and Ian Goodyer. 2012. Item response theory and validity of the NEO-FFI in adolescents. *Personality and Individual Differences* 56: 801–807. [\[CrossRef\]](#)
- Sun, Jessie, Scott Barry Kaufman, and Luke D. Smillie. 2018. Unique associations between big five personality aspects and multiple dimensions of Well-Being. *Journal of Personality* 86: 158–72. [\[CrossRef\]](#)
- Teimouri, Hadi, Seyed Hasan Hosseini, Marzieh Imani, and Ensieh Bagheri. 2018. The effect of human resource management practices on organisational effectiveness (case study: Isfahan Petrochemical Company). *International Journal of Business Excellence* 15: 114–28. [\[CrossRef\]](#)
- Teng, Chih-Ching. 2008. The effects of personality traits and attitudes on student uptake in hospitality employment. *International Journal of Hospitality Management* 27: 76–86. [\[CrossRef\]](#)
- Teng, C. I., H. M. Tseng, I. C. Li, and C. S. Yu. 2011. International English Big-five mini-markers: Development of the traditional Chinese version. *Journal of Management* 28: 579–615.
- Tett, Robert P., Douglas N. Jackson, and Mitchell Rothstein. 1991. Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology* 44: 703–42. [\[CrossRef\]](#)
- Thomas, Rhodri, and Huw Thomas. 2005. Understanding tourism policy-making in urban areas, with particular reference to small firms. *Tourism Geographies* 7: 121–37. [\[CrossRef\]](#)
- Tripathi, Abhishek. 2019. SMEs in Saudi Arabia—An innovative tool for country's economic growth. *Science International (Lahore)* 31: 261–67.
- Van Ness, Raymond K., and Charles F. Seifert. 2016. A theoretical analysis of the role of characteristics in entrepreneurial propensity. *Strategic Entrepreneurship Journal* 10: 89–96. [\[CrossRef\]](#)
- Venkatraman, Natarjan, and Vasudevan Ramanujam. 1986. Measurement of business performance in strategy research: A comparison of approaches. *Academy of Management Review* 11: 801–14. [\[CrossRef\]](#)
- Vinchur, Andrew J., Jeffery S. Schippmann, Fred S. Switzer III, and Philip L. Roth. 1998. A meta-analytic review of predictors of job performance for salespeople. *Journal of Applied Psychology* 83: 586–97. [\[CrossRef\]](#)
- Yakubu, Justina Inusah Gideon, and B. Chima Onuoha. 2022. Entrepreneurial personality and performance of small and medium enterprises in rivers state. *African Journal of Business and Economic Development* 2: 61–75.
- Zeffane, Rachid, Shaker Bani Melhem, and Priya Baguant. 2018. The impact of job satisfaction, trust, gender and supervisor support on perceived organizational performance: An exploratory study in the UAE service sector. *International Journal of Business Excellence* 14: 339–59. [\[CrossRef\]](#)
- Zhang, Li-Fang. 2003. Does the big five predict learning approaches? *Personality and Individual Differences* 34: 1431–46. [\[CrossRef\]](#)
- Zhao, Hao, and Scott E. Seibert. 2006. The big five personality dimensions and entrepreneurial status: A meta-analytical review. *Journal of Applied Psychology* 91: 259–71. [\[CrossRef\]](#)
- Zhao, Hao, Scott E. Seibert, and G. Thomas Lumpkin. 2010. The relationship of personality to entrepreneurial intentions and performance: A meta-analytic review. *Journal of Management* 36: 381–404. [\[CrossRef\]](#)