



# Article Moderating Effect of Proactivity on Firm Absorptive Capacity and Performance: Empirical Evidence from Spanish Firms

Rafael Sancho-Zamora <sup>1,\*</sup>, Isidro Peña-García <sup>1</sup>, Santiago Gutiérrez-Broncano <sup>2</sup>, and Felipe Hernández-Perlines <sup>3</sup>

- <sup>1</sup> Department of Business Administration, Faculty of Law and Social Science, University of Castilla-La Mancha, Calle de las Cuadras, 2, 13003 Ciudad Real, Spain; Isidro.Pena@uclm.es
- <sup>2</sup> Department of Business Administration, Faculty Social Science, University of Castilla-La Mancha,
- Avda. Real Fábrica de Seda, s/n, 45600 Talavera de la Reina, Spain; Santiago.Gutierrez@uclm.es <sup>3</sup> Department of Business Administration, Faculty of Law and Social Science, University of Castilla-
- <sup>3</sup> Department of Business Administration, Faculty of Law and Social Science, University of Castilla-La Mancha, Cobertizo de San Pedro Mártir, s/n, 45071 Toledo, Spain; Felipe.HPerlines@uclm.es
- \* Correspondence: Rafael.Sancho@uclm.es

Abstract: The purpose of this study was to understand how proactivity can affect the relationship between absorptive capacity and organisational performance. Most previous studies have ignored the role of proactivity in this relationship and have not considered the multidimensional nature of absorptive capacity. A questionnaire was sent to 800 CEOs of Spanish companies from different sectors, procuring a response rate of 38.25%. A structural equation model was applied to test the hypothesis. This study confirms the positive effect that absorptive capacity has on business performance and the moderating role of proactivity in this relationship. Companies that develop their capacity to absorb information from the environment achieve better results. Furthermore, if they engage in proactive behaviour within their company, this relationship is stronger. Future research should include more capacities that are related to knowledge and business performance (i.e., learning capability, innovation capacity, etc.). This study contributes to the understanding of how to manage a company's knowledge in an appropriate way. It sheds new light on how knowledge management should be conducted, emphasising not only the gathering of information but also the promotion of a proactive attitude on the part of employees to achieve the goal of better performance.

**Keywords:** proactivity; absorptive capacity; potential absorptive capacity; realised absorptive capacity; structural equation modelling

## 1. Introduction

Business success is currently determined by the ability to innovate and adapt to changes in the environment. In an environment in which organisations must confront new challenges, and against a backdrop of volatility and uncertainty, the ability to adapt and display a disruptive attitude on the part of each and every member of the organisation are what makes the difference [1].

Knowledge is a key aspect in this context [2,3], and it has consequently become necessary for management to use external sources of information in order to provide a more appropriate response to the complexities of a rapidly changing dynamic environment [4,5]. Having external knowledge is paramount if a company's performance is to be ensured [6,7]. Moreover, merely acquiring knowledge is not sufficient; it is necessary to use that knowledge correctly, and companies must, therefore, invest in this process [8].

This path from knowledge acquisition to its productive use is far from easy, and many companies have difficulties with the process [9,10]. In order to achieve this, companies must develop their absorptive capacity (ACAP) [11], a notion that is increasingly recognised by researchers as a source of competitive advantage [12–17].



Citation: Sancho-Zamora, R.; Peña-García, I.; Gutiérrez-Broncano, S.; Hernández-Perlines, F. Moderating Effect of Proactivity on Firm Absorptive Capacity and Performance: Empirical Evidence from Spanish Firms. *Mathematics* 2021, *9*, 2099. https://doi.org/ 10.3390/math9172099

Academic Editors: María del Carmen Valls Martínez and Pedro Antonio Martín Cervantes

Received: 26 July 2021 Accepted: 24 August 2021 Published: 30 August 2021

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



**Copyright:** © 2021 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/). ACAP is an ability that companies must develop in order to maintain a competitive advantage, as it favours adaptation to the changes occurring in their increasingly competitive and complex environments [18]. It refers to a company's ability to recognise the value of new information, assimilate it and apply it for business purposes [19]. According to Kale et al. [20], it enables enterprises to creatively use all the external information it gathers, which serves to provide a better performance in terms of new product development, market share and profitability.

Numerous studies on business performance have been conducted in the field of business management, strategy, knowledge management and other related fields since the authors of [19] first introduced the concept of ACAP in 1990 [21]. However, despite the existence of a large number of studies addressing them, the literature on this topic is confronted with an "ambiguity problem" mainly about conceptualisation as well as measurement. This is because researchers have used ACAP as a general-purpose construct, overlooking previous studies on the topic that have presented, for example, its multidimensional nature, among other relevant theories, and because of the lack of understanding of the nature of the construct itself [18,21]. Furthermore, few studies examine ACAP in depth [20], despite that, of all the dynamic capabilities, ACAP is among the so-called high-level capabilities, as it serves to explain both the success and failure of a company, in addition to favouring the creation of wealth and participation in the creation of a competitive advantage over time [22].

Studies have found that ACAP is related to competitive advantage, innovation [23], value creation [24], customer loyalty and satisfaction [8], etc. However, few studies conduct in-depth research into the functioning of ACAP in regard to unravelling the complexities of organisational and knowledge management capabilities [22]. Despite the fact that many scientific papers have developed the theoretical foundations of ACAP since the 1990s, there is still clearly a lack of empirical research [25–27].

Moreover, in order to achieve high business performance in this complex, dynamic and volatile business environment faced by modern organisations, it forces management and employees not only to adapt and adjust to the major demands of the environment but also to act proactively to prevent conflict from arising. Now more than ever, the knowledge economy, with its inherent ambiguity, novelty and complexity, has dictated that organisations and their most successful members must embrace a less structured organisational environment in which autonomy, self-governance, opportunity recognition, personal initiative and capitalisation, collaboration and adaptation are in greater demand [28–30].

Due to the aforementioned, it has become necessary to acquire and use knowledge as well as to have a modern and proactive organisation. Organisations that are able to acquire and use relevant external knowledge and, in addition, have proactive behaviour that anticipates changes in the environment and promotes internal changes, will contribute to organisational effectiveness [31,32] and the achievement of better results. These proactive companies are the first to notice the early signs of change in their environment, able to see the opportunities for competitive advantage arising from these changes and can turn them into reality. The proactive strategic posture supports communication and knowledge sharing within the company and positively influences knowledge acquisition and utilisation [33], which supports engagement and employment initiatives [34].

Organisations that have this external information but lack employees who can proactively and collaboratively address complex and unexpected issues will, conversely, have greater difficulty in achieving the expected business performance [35].

For this study, our objective was to analyse the effect of ACAP on business performance from a multidimensional point of view. In addition, we endeavoured to discover the role played by proactive behaviour within this relationship, differentiating companies that are proactive from those that are not. In order to achieve this, we considered the different dimensions of ACAP and their relationships with business performance. We also analysed the moderating effect that proactivity has on this relationship. Finally, conclusions and practical recommendations for companies were established, along with the limitations and future lines of research that are included at the end of this work, together with the references used.

## 2. Absorptive Capacity and Performance

As mentioned above, ACAP refers to the ability to locate new ideas and incorporate them into an organisation's processes, mainly in regard to those aspects that are considered most important for organisational competitiveness [17,19].

ACAP was initially defined as the ability to recognise the value of new information, assimilate it and apply it for business purposes [19]. Absorptive capacity, when understood in this manner, incorporates both the need to value and acquire knowledge from the external environment and the internal processes of learning from past experience and current actions [36].

However, Sakhdari [37] highlighted the great scarcity of theories analysing how organisational mechanisms can affect different aspects of ACAP. The focus of this study was on what ACAP predicts, and it is related to fields such as dynamic capability [38,39], organisational learning [40,41] and knowledge management [42,43].

ACAP plays a central role in research, following the company's knowledge-based view [44]. One part of a company's knowledge is developed internally, and another part is acquired from different external sources [45,46].

Taking the resource-based view as a basis, ACAP can be seen as a strategically valuable capability [47,48]. This capability is a socially complex routine by which companies acquire, assimilate, transform and exploit knowledge with the intention of creating value and gaining a competitive advantage [49].

ACAP can, therefore, improve a company's performance by exploiting firm-specific internal and external competencies to cope with changes in the environment [38]. ACAP allows companies to develop skills with which to detect knowledge and information from outside the organisation that may be useful to them. They can then internalise and adapt that information to their specific needs and exploit it for their business objectives, converting it into business results. Organisations that have a substantial knowledge base in a particular field, therefore, tend to have a high ACAP and will be able to evaluate and act on new information or ideas that develop within that field of knowledge [17,50]. ACAP is undoubtedly a key intangible asset for companies' competitiveness [19,50,51] and, consequently, it improves business performance.

The existing literature presents a multitude of studies that have analysed the positive effect ACAP has on different business variables. Companies that are able to assimilate new knowledge intensify their learning and become more efficient, have an easier time creating new products [52], better exploit technological advances that are closely linked to innovative behaviour [53] and improve their financial performance [17]. After conducting a meta-analysis, Song et al. [54] found that ACAP has a significant positive effect on companies' performance. However, there were also studies [55,56] that found an inverted U-shaped relationship between these variables, qualifying that ACAP increases a company's financial performance but only to a certain extent, and there is a point at which a higher ACAP is associated with lower levels of new product development.

Nevertheless, this higher capacity to acquire and exploit new knowledge is expected to influence the company's innovation and, hence, superior performance. The reason offered to explain this direct and positive relationship is that companies must continually strive to develop their knowledge bases if they are to thrive and remain competitive [57].

Although this relationship has been examined in previous research [26,58,59], few studies have considered its multidimensional character and thus have analysed each particular dimension of ACAP [60]. Zahra and George [17] distinguish between the potential ACAP and the realised ACAP discussed in Lichtenthaler [56], stating that the potential ACAP is related to realised absorptive capacity, which is in turn related to organisational performance [61].

As stated above, Zahra and George [17] established that ACAP has two subsets and four dimensions: potential ACAP (comprising knowledge acquisition and assimilation capabilities) (PACAP) and realised ACAP (focusing on knowledge transformation and exploitation capabilities) (RACAP), which may have different influences on the creation and maintenance of a company's competitive advantage. Although the authors of one study expressed a contrary argument to that of Zahra and George, stating certain ambiguities and omissions regarding some important research contributions [62], we understand that these are small contributions that do not add excessive value.

However, this distinction has been used in subsequent research [14,63–68] and clarifies the different dimensions included in absorptive capacity. Acquisition refers to a company's ability to identify and acquire external knowledge about itself from surrounding information [67]. Assimilation also refers to a company's ability to develop useful processes and routines with which to analyse, interpret and understand externally acquired knowledge [66]. Transformation means developing and refining these routines in order to combine existing knowledge with acquired and assimilated knowledge for future use [17].

Companies that wish to improve their performance must develop and manage all these dimensions simultaneously [17]. That is, companies that invest only in the capacity to acquire and assimilate external knowledge (i.e., PACAP) will succeed in generating a new and expanded knowledge base, but this alone will not necessarily lead to superior performance unless the new knowledge is exploited in new products and processes [69–71]. Otherwise, the costs of acquiring this new information may easily outweigh the resulting benefits [19]. Conversely, companies that limit themselves solely and exclusively to transforming and exploiting new knowledge (i.e., RACAP) will achieve short-term benefits but will not develop a new and innovative knowledge base [72], thus harming the company's competitiveness in the future. A multidimensional approach is important for a detailed understanding of the effects of ACAP on companies' performance [73].

We therefore argue that having external information alone may not have an impact on a company's performance, but it is a necessary first step for an organisation to have ACAP. This is a dimension (PACAP) that is of the utmost importance for the realisation of ACAP (RACAP). Acquiring information and applying the use dimension, which includes the assimilation, transformation and exploitation of the information, was found to affect a company's performance [20]; thus, we proposed the following two hypotheses:

#### **Hypothesis 1a (H1a).** *Potential ACAP is positively related to business performance.*

#### **Hypothesis 1b (H1b).** *Realised ACAP is positively related to business performance.*

#### 3. Proactivity as a Moderating Factor: Proactive Firms

Venkataraman [74] defines proactivity as the processes with the objective of anticipating and operating on future needs by "seeking new opportunities that may or may not be related to the usual course of action, introducing new products and brands ahead of the competition and eliminating operations that are strategically in the maturity or decline stages of the life cycle".

Proactivity has emerged as an extremely important behaviour in organisations and was shown to correlate with positive organisational and individual outcomes [35]. In organisational literature, proactivity, or the proactive behaviour companies engage in, involves actions related to anticipatory or change-oriented behaviour [75]. This type of proactive behaviour means that individuals can promote, change and contribute to organisational effectiveness in an anticipatory manner [31]. Proactive behaviour involves acting in advance of a future situation, rather than merely reacting or adapting when problems arise. It means making things happen rather than just watching things happen or waiting for something to happen [35].

Proactive companies have a vision of the future and aim to anticipate and act on future needs to shape their environment rather than reactively adapting to changes in the environments in which they operate [76]. Proactive companies are characterised by

anticipating social changes and adjusting their internal structures in order to achieve congruence with future needs [77]. These companies, in addition to being proactive, are also more likely to enjoy learning curve effects than non-proactive companies are, signifying that, although a company does not need to be proactive to be innovative and competitive, proactivity may foster the relationship between ACAP and the company's performance.

This can be understood as a future perspective from which companies seek opportunities to develop and introduce new products in order to obtain the advantages of being the pioneers capitalising on emerging opportunities and, thus, of being able to shape the direction of their environment.

Delmas, Hoffman and Kuss [65] found that a company's ability to generate competitive advantage is directly related to its competitors' ability to imitate its strategy. As ACAP and proactivity are difficult to imitate (because they depend on complex and often tacit processes), these elements must, therefore, have an impact on business performance. In a study of 246 Spanish technology companies, García-Morales et al. [78] analysed how technological ACAP and technological proactivity influence organisational learning and innovation and demonstrated how these dynamic capabilities affect organisational performance.

Proactivity, as mentioned above, refers to a company's ability to anticipate future needs, seek new opportunities and take initiative [79]. When these companies also have relevant external information because they have a potential absorptive capacity, they are more likely to become leaders rather than followers and thus are more likely to make substantial changes to their environment by introducing new products, technologies or management techniques [76]. Proactive companies that are also the first to notice the early signs of change in their business environment are pioneers in discovering the potential opportunities for competitive advantage that arise from these changes.

Furthermore, two principal views of dynamic capabilities [38,80] are similar but have a notable discrepancy in regard to the question of whether dynamic capabilities have the potential to explain sustainable competitive advantage in rapidly changing business environments [81]. Nevertheless, Peteraf et al. [81] were able to reconcile both perspectives by considering contingent relevant factors [82]. Holding a proactive strategic position, therefore, supports communication and knowledge sharing within the company and positively influences the relationship between ACAP and performance [33]. Therefore, we proposed the following hypotheses (see Figure 1):



Figure 1. Theoretical Model.

**Hypothesis 2a (H2a).** *The influence of potential ACAP on business performance will be greater for proactive firms.* 

**Hypothesis 2b (H2b).** *The influence of realised ACAP on business performance will be greater for proactive firms.* 

#### 4. Methodology

4.1. Data Collection

The data were obtained from a questionnaire mailed to 800 randomly selected smalland medium-sized enterprises in the Spanish autonomous community of Castilla–La Mancha. The information was collected directly from the company's managing director. The contacts were obtained from the SABI database, and active companies belonging to different sectors of activity in both the industrial and service sectors were selected. A total of 315 questionnaires were obtained, of which 9 were rejected as incomplete (see Table 1).

Table 1. Technical data employed in this research.

Sample size	15,853 companies
Sample Size	800 companies randomly selected
Unit of analysis	Company
Scope	Castilla–La Mancha (Spain)
Valid responses/response rate	306/38.25%
Confidence level	95%
Error rate	5.55%
Informant	CEO
Data	October-December 2019

Table 2 shows the sectors and the activity to which the companies that participated in this study belong.

Sectors (CNAE)	Code	Activity	Number	Percentage	
62, 69, 70, 71, 73	1	Specialised consulting services	75	24.50%	
41, 43	3	Construction Retail and	65	21.24%	
55, 56, 46, 47, 68	2	accommodation services	96	31.37%	
10, 11, 14, 18, 21, 23,25, 26, 27, 28, 31	4	Manufacturing	70	22.87%	

Table 2. Sector and activity of the companies analysed.

The statistical power of the sample used in this study was 0.998 and was calculated using Cohen's retrospective test [83], which can be obtained using the G\* Power 3.1.9.2 programme [84]. The value obtained affirms that the sample used in this study had an adequate statistical power, as it was above the threshold of 0.80 established by Cohen [83].

#### 4.2. Measurement of Variables

All the variables were measured using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The following specific variables were used in this study:

(a) Measurement of potential absorptive capacity. PACAP was operationalised as a second-order A-type composite based on the acquisition capacity (3 items) and the assimilation capacity (4 items). The measurements were performed using the scales proposed by Cohen and Levinthal [19] and Lane et al. [25]. This scale was validated by Flaten et al. [66] and by Hernández-Perlines et al. [85]. ("Management expects employees to have information beyond/outside our industry/sector.")

- (b) Measurement of realised absorptive capacity. RACAP was operationalised as a second-order A-type composite on the basis of the transformation capacity (4 items) and the exploitation capacity (3 items). The measurements were conducted using the scales proposed by Cohen and Levinthal [19] and Lane et al. [25]. This scale was validated by Flaten et al. [66] and by Hernández-Perlines et al. [85]. ("Our employees are able to apply the new knowledge in their workplace.")
- (c) Performance measurement. Performance was measured by employing an overall measure of a company's performance that assesses the perception of that company's performance in relation to that of its competitors [86]. The use of perception or satisfaction measures as determinants of a company's performance is increasingly common in research [87]. Performance was operationalised as a first-order A-type composite. The 4 items used in this research were sales growth, profit growth, market share growth and return on equity growth, all of which were extracted from a combination of the scales proposed by [88–92]. This scale was validated by Hernández-Perlines et al. [93].
- (d) Control variables. Size (number of employees), sector and age (number of years in operation), as proposed by Chrisman et al. [94] and validated by Ibarra-Cisneros and Hernández-Perlines [95], were used as control variables in this research. All the control variables were operationalised as first-order A-type composites.

#### 4.3. Methodology

To analyse the results and test both the direct and moderating hypotheses proposed in this paper, the multivariate partial least squares (PLS) quantitative structural equation technique was employed. The choice of this data analysis method is justified for the following reasons:

- (a) It is an appropriate analysis method when research is in the early stages of developing new theoretical constructs [96,97];
- (b) It is an analysis method that is characterised by its predictive nature, thus allowing it to address the research questions posed [98,99];
- (c) This analysis method makes it possible to observe the different causal relationships between the variables analysed [100,101];
- (d) It is a suitable data analysis method when the sample is not large [102,103];
- (e) It is a method that allows for the analysis of complex relationships among models [104], and PLS-SEM can handle non-normal data.

## 5. Results

The software employed for data analysis using PLS-SEM was SmartPLS v.3.3.3 [97]. The results were analysed following the recommendations of Barclay, Higgins and Thompson [105] and Hair Jr., Sarstedt, Ringle and Gudergan [106], who advised to first evaluate the measurement model and then evaluate the structural model.

To follow the evaluation process of both the measurement model and the structural model, the variables of this study were modelled following the method described by Sarstedt [99] to analyse them with PLS:

- (a) The PACAP was operationalised as a second-order A-type compound;
- (b) The RACAP was operationalised as a second-order A-type compound;
- (c) Performance was operationalised as a first-order A-type composite;
- (d) The three control variables (age, sector and size) were operationalised as a first-order A-type composite.

To evaluate the measurement model, the variables were checked for reliability and adequate levels of convergent and discriminant validity, following the recommendations of [106]. The following indicators were used for this purpose [105–107]:

(a) Composite reliability: composite reliability should, according to [108], have values above 0.7, with appropriate values between 0.7 and 0.9 [98]. All the model indi-

cators had acceptable composite reliability values (see Table 4). Furthermore, the composite reliability had no redundancy problems because no value was higher than 0.95 [109,110];

- (b) Cronbach's alpha: Cronbach's alpha values above 0.7 [108]. In our case, Cronbach's alpha was higher than this value for all the variables (see Table 4);
- (c) Rho A: the Rho A must be greater than 0.7 [111] and must lie between the values of composite reliability and Cronbach's alpha [98]. This condition was met for all the variables (see Table 4);
- (d) Average variance extracted (AVE) can be used to assess the convergent validity of each composite. [108] recommend a value higher than 0.5 for the AVE. This condition was valid for our data (see Table 4);
- (e) Heterotrait-monotrait ratio (HTMT): this ratio enables the measurement of discriminant validity, and it is necessary to check that the correlation between each pair of constructs is not greater than the square root value of the AVE of each construct. For discriminant validity to hold, HTMT values must be less than 0.85 [103]. Discriminant validity is confirmed when the indicated values are met (see Table 4).
- (f) Cronbach's alpha, composite reliability and average variance extracted (AVE) of the first order composites are listed (see Table 3).

**Table 3.** Cronbach's alpha, composite reliability and average variance extracted (AVE) of the first order composites.

	Path Coefficient	Cronbach's Alpha	Composite Reliability	AVE
Acquisition capacity	0.942	0.871	0.921	0.795
Assimilation capacity	0.893	0.917	0.915	0.800
Transformation capacity	0.911	0.844	0.895	0.683
Exploitation capacity	0.905	0.891	0.930	0.820

**Table 4.** Correlation matrix, composite reliability, convergent and discriminant validity, heterotraitmonotrait ratio (HTMT) and descriptive statistics.

Construct	AVE	Composite Reliability	PACAP	RACAP	PROAC	PERF
1. Potential ACAP (PACAP)	0.874	0.935	0.934 *			G
2. Realised ACAP (RACAP)	0.891	0.942	0.622	0.9 *		
3. Proactivity (PROAC)	0.764	0.785	0.382	0.342	0.860 *	
4. Performance (PERF)	0.723	0.913	0.270	0.194	0.206	0.850 *
Heterotrait-Monotrait ra	tio (HTMT	`)				
1. Potential ACAP (PACA	AP)					
2. Realised ACAP(RACA	.P)		0.223			
3. Proactivity (PROAC)			0.703	0.627		
4. Performance (PERF)			0.106	0.192	0.211	
Cronbach's alpha			0.880	0.888	0.795	0.875
Rho A			0.877	0.890	0.789	0.845
Mean			4.16	4.20	4.10	3.96
SD			1.24	1.31	1.05	0.99

Note: the mean and standard deviation values of each of the second-order composites have been calculated from the mean values of the different first-order composites of which they are composed. (\*) The values of the diagonal have been obtained from the square root of the AVE of each compound.

To complete the verification of the discriminant validity, we also computed the HTMT inference from the bootstrapping option (5000 subsamples). When the resulting interval contains values of less than 1, discriminant validity exists, and our data meet this requirement (see Table 5).

Table 5. HTMT inference.

	Original Sample (O)	Sample Mean (M)	5.0%	95.0%	Sample Mean (M)	Bias	5.0%	95.0%
PACAP-> PERF	0.228	0.394	0.118	0.542	0.209	0.009	0.085	0.577
RACAP-> PERF	0.344	0.752	0.050	0.624	0.347	0.003	0.026	0.606
PROAC-> PERF	0.201	0.421	0.009	0.340	0.201	0.000	0.177	0.314

Once the convergent and discriminant validity of the measurement model had been ensured, we proceeded to check the relationships between the different variables in order to conduct an analysis of the structural model.

The analysis of the structural model confirmed that PACAP has a positive impact on performance since the path coefficient is 0.228 (higher than 0.2, which [112] established as the minimum limit). Moreover, this effect is significant (the t value is 3.976 when using the one-tailed t (4.999) and p < 0.001 as a basis) (see Table 6 and Figure 2). The first hypothesis is, therefore, confirmed.

 Table 6. Structural model.

Model	<b>R</b> <sup>2</sup>	ß	t Malue	Hypothesis
Direct model:				
PACAP > PERF	0.245	0.228	3.979	H <sub>1a</sub> : Supported
RACAP > PERF		0.381	4.527	H <sub>1b</sub> : Supported
Moderation model:				
Moderation of PROAC in PACAP > PERF	0.336	0.216	4.041	H <sub>2a</sub> : Supported
Moderation of PROAC in RACAP > PERF	0.363	0.350	4.598	H <sub>2b</sub> : Supported



Figure 2. Structural Equation Model. t values are in parentheses.

Furthermore, RACAP positively and significantly influences performance (the path coefficient is 0.381 and the t value is 4.527 when using the one-tailed t at t (4.999) and p < 0.01 as a basis) (see Table 6 and Figure 2). The second hypothesis is, therefore, confirmed.

PACAP and RACAP have a positive effect on performance and explain 24.5% of the variance.

The moderating effect of proactivity was determined by first calculating its influence on PACAP and performance. In this case, the moderating effect is positive and significant, as the path coefficient is 0.216 and the t value is 4.041. The moderating effect of proactivity increases the influence of PACAP on performance to explain 33.6% of its variance (see Table 5 and Figure 2). Finally, the moderating effect of proactivity on the influence of PACAP on performance is large, with an f2 value of 0.44 [112].

We subsequently calculated the moderating effect of proactivity on the influence of RACAP and performance. In this case, the moderating effect is positive and significant, as the path coefficient is 0.350 and the t value is 4.598. The moderating effect of proactivity increases the influence of PACAP on performance to explain 36.3% of its variance (see Table 6 and Figure 2). Henseler, Fassott, Dijkstra and Wilson [113] recommend estimating the effect size (f2) to determine the strength of the moderating effect. According to these authors, values of 0.02, 0.15 and 0.35 correspond to weak, moderate and strong moderating effects, respectively. In our case, the moderating effect of proactivity on the ratio of potential absorptive capacity to performance is 0.25 for f2 (moderate effect) while the moderating effect of proactivity on the ratio of realised absorptive capacity is 0.33 for f2 (moderate effect, almost strong). The explanation for this higher intensity of the moderating effect of proactivity on realised capacity may be that, in this case, there is greater tangibility and, therefore, it is more perceptible than in the first case.

None of the control variables have an influence that can be considered relevant (the path coefficients are less than 0.2), and they are not significant (their value is less than the recommended value, p < 0.001) (see Table 7).

Table 7. Control variables.

Variable	ß	t Value
Age Sector	$-0.046 \\ -0.082$	0.670 0.423
Size	-0.029	0.547

In order to complete the analysis of the structural model, the goodness of fit of the model was calculated by employing the standardised root mean square residual (SRMR) proposed by Hu and Bentler [114] and Henseler et al. [103]. In our case, the SRMR value was 0.063 (lower than 0.08 is adequate, as recommended by Henseler et al. [103]).

#### 6. Discussion

This study raises awareness about the importance of ACAP in business performance. Using the most recent literature on dynamic capabilities and performance as a basis, we conducted a study to empirically demonstrate the importance of absorption capacity. The results of this study provide important evidence supporting the interplay between ACAP and proactivity and their contribution to business performance improvements. The results obtained indicate that companies that have managed to accompany their effort to engage with external knowledge with a proactive attitude should expect a better performance.

The theoretical framework employed in this study is focused on the theory of absorptive capacity, knowledge management and a resource and capabilities-based view. The relevant literature indicates that the relationship between performance and ACAP is positive, and improving ACAP will, therefore, increase business performance [3]. According to previous studies and the data analysed in this paper, we can state that companies with greater absorption capacity make much more effective use of all the information captured from exterior sources and improve their performance. In highly changing environments, this circumstance is fundamental for the improvement of their processes and products to improve their competitive position. The literature on ACAP postulates that greater investment in knowledge creation increases absorptive capacity, which ultimately helps the company to achieve higher innovative output and financial performance.

Furthermore, proactive sharing by companies will allow them to take advantage of market opportunities [115], thus anticipating future problems. Proactivity is ultimately the company's ability to engage resources by introducing new products and services ahead of competitors on the basis of predictions of future demand [116–118].

The main contribution of this paper to the existing literature is the discovery that absorption capacity becomes business performance mainly when proactivity is involved in this process. The role of proactivity in the relationship between ACAP and performance is a current topic in the literature. The results of this research on the moderating role played by proactivity in the effect of ACAP on firm performance contribute to the understanding of the effects of the use of strategically and rapidly absorbed and renewed information.

Although this work has made it possible to test the working hypotheses selected, it has some limitations that could provide opportunities for further research. Business performance, however, involves more capacities that could be analysed in the future. Another limitation lies in the regional nature of this work. Given the global nature of the economy, it is necessary to test its applicability in broader and more diverse contexts. Finally, as with all cross-sectional research, the testing of the hypotheses took place at a specific point in time. Although it is likely that the conditions under which the data were collected will not change substantially, there is no guarantee that this is definitively the case and researchers must, therefore, carefully interpret causality between constructs.

Author Contributions: Conceptualisation, R.S.-Z. and F.H.-P.; methodology, R.S.-Z. and F.H.-P.; software, I.P.-G., S.G.-B. and F.H.-P.; validation, R.S.-Z., F.H.-P. and I.P.-G.; formal analysis, R.S.-Z., I.P.-G. and S.G.-B.; investigation, I.P.-G. and S.G.-B.; resources, R.S.-Z. and S.G.-B.; data curation, R.S.-Z., F.H.-P., I.P.-G. and S.G.-B.; writing—original draft preparation, R.S.-Z., F.H.-P., I.P.-G. and S.G.-B.; writing—review and editing, R.S.-Z., F.H.-P., I.P.-G. and S.G.-B.; visualisation, R.S.-Z., F.H.-P., I.P.-G. and S.G.-B.; supervision, R.S.-Z.; project administration, R.S.-Z. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by the Faculty of Law and Social Sciences of the University of Castilla–La Mancha.

**Data Availability Statement:** The data presented in this study are available from the corresponding author upon request. The data are not publicly available due to the requirements of ethical approval.

**Acknowledgments:** The research team is grateful for the invaluable collaboration of the Business Administration Department of the University of Castilla–La Mancha.

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

### References

- 1. Randstad. La Gestión del Talento en Entornos VUCA. 2021. Available online: https://www.randstad.es/tendencias360/la-gestion-del-talento-en-entornos-vuca/ (accessed on 10 June 2021).
- Abecassis-Moedas, C.; Mahmoud-Jouini, S.B. Absorptive capacity and source-recipient complementarity in designing new products: An empirically derived framework. *J. Prod. Inn. Manag.* 2008, 25, 473–490. [CrossRef]
- Lane, P.J.; Salk, J.E.; Lyles, M.A. Absorptive capacity, learning, and performance in international joint ventures. *Strateg. Manag. J.* 2001, 22, 1139–1161. [CrossRef]
- 4. Lane, P.J.; Lubatkin, M. Relative absorptive capacity and interorganizational learning. *Strateg. Manag. J.* **1998**, *19*, 461–477. [CrossRef]
- O'Connor, G.C. Major Innovation as a Dynamic Capability: A Systems Approach. J. Prod. Innov. Manag. 2008, 25, 313–330. [CrossRef]
- 6. Shaw, G.; Williams, A. Knowledge transfer and management in tourism organisations: An emerging research agenda. *Tour. Manag.* **2009**, *30*, 325–335. [CrossRef]
- King, B.E.; Breen, J.; Whitelaw, P.A. Hungry for Growth? Small and Medium-sized Tourism Enterprise (SMTE) Business Ambitions, Knowledge Acquisition and Industry Engagement. *Int. J. Tour. Res.* 2012, 16, 272–281. [CrossRef]
- 8. Tzokas, N.; Kim, Y.-A.; Akbar, H.; Al-Dajani, H. Absorptive capacity and performance: The role of customer relationship and technological capabilities in high-tech SMEs. *Ind. Mark. Manag.* **2015**, *47*, 134–142. [CrossRef]
- 9. Hull, C.E.; Covin, J.G. Learning capability, technological parity, and innovation mode use. *J. Prod. Innov. Manag.* 2010, 27, 97–114. [CrossRef]
- 10. McGrath, R.G. Exploratory learning, innovative capacity, and managerial oversight. Acad. Manag. J. 2001, 44, 118–131.
- 11. Cohen, W.M.; Levinthal, D. Innovation and Learning: The Two Faces of R & D. Econ. J. 1989, 99, 569. [CrossRef]
- Adams, G.L.; Lamont, B.T. Knowledge management systems and developing sustainable competitive advantage. J. Knowl. Manag. 2003, 7, 142–154. [CrossRef]
- 13. Darroch, J. Knowledge management, innovation and firm performance. J. Knowl. Manag. 2005, 9, 101–115. [CrossRef]

- 14. Jansen, J.J.P.; Bosch, F.A.J.V.D.; Volberda, H. Managing Potential and Realized Absorptive Capacity: How do Organizational Antecedents Matter? *Acad. Manag. J.* 2005, *48*, 999–1015. [CrossRef]
- 15. Marqués, D.; Simón, P.F.J.G. The effect of knowledge management practices on firm performance. *J. Knowl. Manag.* 2006, 10, 143–156. [CrossRef]
- 16. Tu, Q.; Vonderembse, M.A.; Ragu-Nathan, T.; Sharkey, T.W. Absorptive capacity: Enhancing the assimilation of time-based manufacturing practices. *J. Oper. Manag.* 2005, 24, 692–710. [CrossRef]
- 17. Zahra, S.A.; George, G. Absorptive capacity: A review, reconceptualization, and extension. *Acad. Manag. Rev.* 2002, 27, 185–203. [CrossRef]
- 18. Jiménez-Barrionuevo, M.M.; García-Morales, V.J.; Molina, L.M. Validation of an instrument to measure absorptive capacity. *Technovation* **2011**, *31*, 190–202. [CrossRef]
- 19. Cohen, W.M.; Levinthal, D. Absorptive Capacity: A New Perspective on Learning and Innovation. *Adm. Sci. Q.* **1990**, *35*, 128. [CrossRef]
- Kale, E.; Aknar, A.; Başar, Ö. Absorptive capacity and firm performance: The mediating role of strategic agility. *Int. J. Hosp. Manag.* 2018, 78, 276–283. [CrossRef]
- 21. Cordero, L.; Ferreira, J.J. Absorptive capacity and organizational mechanisms. Rev. Int. Bus. Strateg. 2019, 29, 61–82. [CrossRef]
- Garay, L.; Font, X.; Pereira-Moliner, J. Understanding sustainability behaviour: The relationship between information acqui-sition, proactivity and performance. *Tour. Manag.* 2017, 60, 418–429. [CrossRef]
- 23. Thomas, R.; Wood, E. Innovation in tourism: Re-conceptualising and measuring the absorptive capacity of the hotel sector. *Tour. Manag.* **2014**, *45*, 39–48. [CrossRef]
- 24. Valentina, N.; Passiante, G. Impacts of Absorptive Capacity on Value Creation. Anatolia 2009, 20, 269–287. [CrossRef]
- 25. Lane, P.J.; Koka, B.R.; Pathak, S. The Reification of Absorptive Capacity: A Critical Review and Rejuvenation of the Construct. *Acad. Manag. Rev.* **2006**, *31*, 833–863. [CrossRef]
- 26. Lichtenthaler, U. Absorptive capacity, environmental turbulence, and the complementarity of organizational learning processes. *Acad. Manag. J.* **2009**, *52*, 822–846. [CrossRef]
- 27. Murovec, N.; Prodan, I. Absorptive capacity, its determinants, and influence on innovation output: Cross-cultural validation of the structural model. *Technovation* 2009, 29, 859–872. [CrossRef]
- 28. Parker, S.K.; Wang, Y. Helping people to make things happen: A framework for proactivity at work. *Int. Coach. Psychol. Rev.* 2015, 10, 62–75.
- 29. Strauss, K.; Griffin, M.A.; Parker, S.K.; Mason, C.M. Building and Sustaining Proactive Behaviors: The Role of Adaptivity and Job Satisfaction. *J. Bus. Psychol.* 2013, *30*, 63–72. [CrossRef]
- Wihler, A.; Blickle, G.; Ellen, I.B.P.; Hochwarter, W.A.; Ferris, G.R. Personal Initiative and Job Performance Evaluations: Role of Political Skill in Opportunity Recognition and Capitalization. *J. Manag.* 2014, 43, 1388–1420. [CrossRef]
- Griffin, M.; Neal, A.; Parker, S. A New Model of Work Role Performance: Positive Behavior in Uncertain and Interdependent Contexts. Acad. Manag. J. 2007, 50, 327–347. [CrossRef]
- 32. Min, B.H.; Oh, Y. How Do Performance Gaps Affect Improvement in Organizational Performance? Exploring the Mediating Roles of Proactive Activities. *Public Perform. Manag. Rev.* **2020**, *43*, 766–789. [CrossRef]
- Bierly, P.E.; Damanpour, F.; Santoro, M.D. The Application of External Knowledge: Organizational Conditions for Exploration and Exploitation. J. Manag. Stud. 2009, 46, 481–509. [CrossRef]
- 34. Tuppura, A.; Toppinen, A.; Jantunen, A. Proactiveness and corporate social performance in the global forest industry. *Int. For. Rev.* **2013**, *15*, 112–121. [CrossRef]
- 35. Joo, B.K.B.; Bennett, R.H., III. The influence of proactivity on creative behavior, organizational commitment, and job perfor-mance: Evidence from a Korean multinational. *J. Int. Interdisc. Bus. Res.* **2018**, *5*, 1–20.
- Easterby-Smith, M.; Graça, M.; Antonacopoulou, E.; Ferdinand, J. Absorptive Capacity: A Process Perspective. *Manag. Learn.* 2008, 39, 483–501. [CrossRef]
- 37. Sakhdari, K. Absorptive capacity: Review and research agenda. J. Org. Stud. Inn. 2016, 3, 34–50.
- 38. Teece, D.J.; Pisano, G.; Shuen, A. Dynamic Capabilities and Strategic Management. Strateg. Manag. J. 1997, 18, 509–533. [CrossRef]
- 39. Zollo, M.; Winter, S.G. Deliberate Learning and the Evolution of Dynamic Capabilities. Organ. Sci. 2002, 13, 339–351. [CrossRef]
- 40. Akgün, A.E.; Lynn, G.S.; Byrne, J.C. Organizational Learning: A Socio-Cognitive Framework. *Hum. Relat.* 2003, 56, 839–868. [CrossRef]
- 41. Easterby-Smith, M. Disciplines of Organizational Learning: Contributions and Critiques. *Hum. Rel.* **1997**, *50*, 1085–1113. [CrossRef]
- Chiva, R.; Allegre, J. Organisational Learning and Organizational Knowledge: The Integration of Two Approache. *Manag. Learn.* 2005, *36*, 49–68. [CrossRef]
- Oshri, I.; Pan, S.L.; Newell, S. Managing Trade-offs and Tensions between Knowledge Management Initiatives and Expertise Development Practices. *Manag. Learn.* 2006, 37, 63–82. [CrossRef]
- 44. Grant, R.M. Toward a knowledge-based theory of the firm. Strateg. Manag. J. 1996, 17, 109–122. [CrossRef]
- Fleck, J.; Howells, J. Technology, the technology complex and the paradox of technological determinism. *Technol. Anal. Strateg. Manag.* 2001, 13, 523–531. [CrossRef]

- 46. Flor, M.L.; Oltra, M.J. An exploratory analysis of the relationship between absorptive capacity and business strategy. *Technol. Anal. Strateg. Manag.* **2013**, *25*, 1103–1117. [CrossRef]
- 47. Collis, D.J. Research Note: How Valuable are Organizational Capabilities? Strateg. Manag. J. 1994, 15, 143–152. [CrossRef]
- 48. Hall, R. The Strategic Analysis of Intangible Resources. Strateg. Manag. J. 1992, 135–144. [CrossRef]
- 49. George, G.; Zahra, S.A.; Wheatley, K.; Khan, R. The effects of alliance portfolio characteristics and absorptive capacity on per-formance: A study of biotechnology firms. *J. High Technol. Manag. Res.* **2001**, *12*, 205–227. [CrossRef]
- 50. Dyer, J.; Singh, H. The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Acad. Manag. Rev.* **1998**, 23, 660–679. [CrossRef]
- 51. Haro-Domínguez, M.C.; Arias-Aranda, D.; Lloréns-Montes, F.J.; Moreno, A.R. The Impact of absorptive capacity on techno-logical acquisitions engineering consulting companies. *Technovation* **2007**, *27*, 417–425. [CrossRef]
- 52. Zander, U.; Kogut, B. Knowledge and the Speed of the Transfer and Imitation of Organizational Capabilities: An Empirical Test. *Organ. Sci.* **1995**, *6*, 76–92. [CrossRef]
- 53. Van den Bosch, F.; Volberda, H.; de Boer, M. Coevolution of firm absorptive capacity and knowledge environment: Organiza-tional forms and combinative capabilities. *Org. Sci.* **1999**, *10*, 551–568. [CrossRef]
- 54. Song, Y.; Gnyawali, D.R.; Srivastava, M.K.; Asgari, E. In Search of Precision in Absorptive Capacity Research: A Synthesis of the Literature and Consolidation of Findings. *J. Manag.* **2018**, *44*, 2343–2374. [CrossRef]
- 55. Stock, G.N.; Greis, N.P.; Fischer, W.A. Absorptive capacity and new product development. *J. High Technol. Manag. Res.* 2001, 12, 77–91. [CrossRef]
- 56. Lichtenthaler, U. Absorptive capacity and firm performance: An integrative framework of benefits and downsides. *Technol. Anal. Strateg. Manag.* **2015**, *28*, 664–676. [CrossRef]
- 57. Griffiths-Hemans, J.; Grover, R. Setting the stage for creative new products: Investigating the idea fruition process. *J. Acad. Mark. Sci.* **2006**, *34*, 27–39. [CrossRef]
- 58. Bergh, D.D.; Lim, E.N.-K. Learning how to restructure: Absorptive capacity and improvisational views of restructuring actions and performance. *Strateg. Manag. J.* **2008**, *29*, 593–616. [CrossRef]
- 59. Yeoh, P.-L. Realized and Potential Absorptive Capacity: Understanding Their Antecedents and Performance in the Sourcing Context. *J. Mark. Theory Pract.* 2009, 17, 21–36. [CrossRef]
- 60. Volberda, H.W.; Foss, N.J.; Lyles, M.A. PERSPECTIVE—Absorbing the Concept of Absorptive Capacity: How to Realize Its Potential in the Organization Field. *Organ. Sci.* 2010, *21*, 931–951. [CrossRef]
- 61. Bolívar-Ramos, M.T.; García-Morales, V.J.; Martín-Rojas, R. The effects of information technology on absorptive capacity and organizational performance. *Technol. Anal. Strateg. Manag.* 2013, 25, 905–922. [CrossRef]
- 62. Todorova, G.; Durisin, B. Absorptive capacity: Valuing a reconceptualization. Acad. Manag. Rev. 2007, 32, 774–786. [CrossRef]
- 63. Ali, M.; Kan, K.A.S.; Sarstedt, M. Direct and configurational paths of absorptive capacity and organizational innovation to successful organizational performance. *J. Bus. Res.* 2016, *69*, 5317–5323. [CrossRef]
- 64. Camisón, C.; Forés, B. Knowledge absorptive capacity: New insights for its conceptualization and measurement. *J. Bus. Res.* **2010**, 63, 707–715. [CrossRef]
- 65. Delmas, M.; Hoffmann, V.H.; Kuss, M. Under the Tip of the Iceberg: Absorptive Capacity, Environmental Strategy, and Competitive Advantage. *Bus. Soc.* 2011, *50*, 116–154. [CrossRef]
- 66. Flatten, T.; Greve, G.I.; Brettel, M. Absorptive Capacity and Firm Performance in SMEs: The Mediating Influence of Strategic Alliances. *Eur. Manag. Rev.* 2011, *8*, 137–152. [CrossRef]
- 67. Fosfuri, A.; Tribó, J.A. Exploring the antecedents of potential absorptive capacity and its impact on innovation performance. *Omega* **2008**, *36*, 173–187. [CrossRef]
- 68. Thérin, F. Absorptive capacity: An empirical test of Zahra and George's contribution in small business settings. *Gestion* 2000 **2007**, 24, 17–30.
- 69. Baker, T.; Miner, A.S.; Eesley, D.T. Improvising firms: Bricolage, account giving and improvisational competencies in the founding process. *Res. Policy* **2003**, *32*, 255–276. [CrossRef]
- 70. Morgan, R.E.; Turnell, C.R. Market-based Organizational Learning and Market Performance Gains. *Br. J. Manag.* 2003, 14, 255–274. [CrossRef]
- 71. Murray, S.; Peyrefitte, J. Knowledge Type and Communication Media Choice in the Knowledge Transfer Process. *J. Man. Issues* **2007**, *19*, 111–133.
- 72. Ahuja, G.; Lampert, C. Entrepreneurship in the large corporation: A longitudinal study of how established firms create breakthrough inventions. *Strateg. Manag. J.* **2001**, *22*, 521–543. [CrossRef]
- 73. Brettel, M.; Greve, G.I.; Flatten, T.C. Giving up linearity: Absorptive capacity and performance. J. Manag. Issues 2011, 23, 164–189.
- 74. Venkatraman, N. Strategic Orientation of Business Enterprises: The Construct, Dimensionality, and Measurement. *Manag. Sci.* **1989**, *35*, 942–962. [CrossRef]
- 75. Grant, A.M.; Ashford, S.J. The dynamics of proactivity at work. *Res. Organ. Behav.* 2008, 28, 3–34. [CrossRef]
- 76. Miller, D.; Friesen, P.H. Archetypes of Strategy Formulation. Manag. Sci. 1978, 24, 921–933. [CrossRef]
- 77. Sethi, S.P. A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. *Acad. Manag. Rev.* **1979**, *4*, 63–74. [CrossRef]

- García-Morales, V.J.; Ruiz-Moreno, A.; Llorens-Montes, F.J. Effects of technology absorptive capacity and technology pro-activity on organizational learning, innovation and performance: An empirical examination. *Tech. Anal. Strateg. Manag.* 2007, 19, 527–558. [CrossRef]
- 79. Lumpkin, G.T.; Dess, G.G. Clarifying the entrepreneurial orientation construct and linking it to performance. *Acad. Manag. Rev.* **1996**, *21*, 135–172. [CrossRef]
- 80. Eisenhardt, K.M.; Martin, J.A. Dynamic capabilities: What are they? Strateg. Manag. J. 2000, 21, 1105–1121. [CrossRef]
- 81. Di Stefano, G.; Peteraf, M. The elephant in the room of Dynamic Capabilities: Bringing two diverging conversations together. *Acad. Manag. Proc.* **2012**, *34*, 1389–1410. [CrossRef]
- 82. Rodríguez, M.A.; Martín, E. Born-Global SMEs, Performance, and Dynamic Absorptive Capacity: Evidence from Spanish Firms. *J. Small Bus. Manag.* **2019**, *57*, 298–326. [CrossRef]
- 83. Cohen, J.A. Power primer. Psych. Bull. 1992, 112, 155. [CrossRef]
- Faul, F.; Erdfelder, E.; Buchner, A.; Lang, A.-G. Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behav. Res. Methods* 2009, 41, 1149–1160. [CrossRef]
- Hernández-Perlines, F.; Moreno-García, J.; Yáñez-Araque, B. Training and business performance: The mediating role of absorptive capacities. *SpringerPlus* 2016, 5, 1–16. [CrossRef]
- Olson, E.M.; Slater, S.F.; Hult, G.T.M. The Performance Implications of Fit among Business Strategy, Marketing Organization Structure, and Strategic Behavior. J. Mark. 2005, 69, 49–65. [CrossRef]
- 87. Manzano-García, G.; Ayala-Calvo, J.-C. Entrepreneurial Orientation: Its Relationship with the Entrepreneur's Subjective Success in SMEs. *Sustainability* **2020**, *12*, 4547. [CrossRef]
- Chirico, F.; Sirmon, D.G.; Sciascia, S.; Mazzola, P. Resource orchestration in family firms: Investigating how entrepreneurial orientation, generational involvement, and participative strategy affect performance. *Strateg. Entrep. J.* 2011, *5*, 307–326. [CrossRef]
- Kellermanns, F.W.; Eddleston, K.A.; Zellweger, T.M. Article Commentary: Extending the Socioemotional Wealth Perspective: A Look at the Dark Side. *Entrep. Theory Pract.* 2012, *36*, 1175–1182. [CrossRef]
- 90. Krauss, S.I.; Frese, M.; Friedrich, C.; Unger, J.M. Entrepreneurial orientation: A psychological model of success among southern African small business owners. *Eur. J. Work. Organ. Psychol.* **2005**, *14*, 315–344. [CrossRef]
- 91. Naldi, L.; Nordqvist, M.; Sjöberg, K.; Wiklund, J. Entrepreneurial orientation, risk taking, and performance in family firms. *Fam. Bus. Rev.* 2007, 20, 33–47. [CrossRef]
- 92. Wiklund, J.; Shepherd, D. Knowledge-based resources, entrepreneurial orientation, and the performance of small and medi-umsized businesses. *Strateg. Manag. J.* 2003, 24, 1307–1314. [CrossRef]
- 93. Hernández-Perlines, F.; Covin, J.G.; Ribeiro-Soriano, D.E. Entrepreneurial orientation, concern for socioemotional wealth preservation, and family firm performance. *J. Bus. Res.* **2021**, *126*, 197–208. [CrossRef]
- Chrisman, J.J.; Chua, J.H.; Sharma, P. Trends and Directions in the Development of a Strategic Management Theory of the Family Firm. *Entrep. Theory Pract.* 2005, 29, 555–575. [CrossRef]
- Ibarra-Cisneros, M.-A.; Hernandez-Perlines, F. Entrepreneurial orientation, absorptive capacity and business performance in SMEs. *Meas. Bus. Exce.* 2019, 24, 417–429. [CrossRef]
- 96. Gefen, D.; Rigdon, E.E.; Straub, D. Editor's comments: An update and extension to SEM guidelines for administrative and social science research. *Mis Q.* **2011**, *35*, 3–14. [CrossRef]
- 97. Ringle, C.M.; Wende, S.; Becker, J.M. Smart PLS Boenningstedt: SmartPLS GmbH. 2015. Available online: https://www.smartpls. com (accessed on 5 March 2021).
- 98. Hair, J.F.; Risher, J.; Sarstedt, M.; Ringle, C.M. When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.* 2019, 31, 2–24. [CrossRef]
- 99. Sarstedt, M.; Mooi, E.A. *A Concise Guide to Market Research: The Process, Data, and Methods Using IBM SPSS Statistics*; Springer: Berlin, Germany, 2019.
- 100. Jöreskog, K.G.; Wold, H.O. Systems Under Indirect Observation: Causality, Structure, Prediction; North Holland: Amsterdam, The Netherlands, 1982.
- 101. Astrachan, J.H.; Jaskiewicz, P. Emotional Returns and Emotional Costs in Privately Held Family Businesses: Advancing Traditional Business Valuation. *Fam. Bus. Rev.* 2008, *21*, 139–149. [CrossRef]
- 102. Reinartz, W.; Haenlein, M.; Henseler, J. An empirical comparison of the efficacy of covariance-based and variance-based SEM. *Int. J. Res. Mark.* **2009**, *26*, 332–344. [CrossRef]
- Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. J. Acad. Mark. Sci. 2014, 43, 115–135. [CrossRef]
- 104. Hair, J.F.; Sarstedt, M.; Ringle, C.M. Rethinking some of the rethinking of partial least squares. *Eur. J. Mark.* 2019, *53*, 566–584. [CrossRef]
- 105. Barclay, D.; Higgins, C.; Thompson, R. The partial least squares (PLS) approach to causal modeling: Personal computer adoption and use as an illustration. *Tech. Stud.* **1995**, *2*, 285–309.
- Hair, J.F., Jr.; Sarstedt, M.; Ringle, C.M.; Gudergan, S.P. Advanced Issues in Partial Least Squares Structural Equation Modeling; Sage Publications: Thousand Oaks, CA, USA, 2017.

- 107. Roldan, J.L.; Sanchez-Franco, M.J. Variance-based structural equation modeling: Guidelines for using partial least squares in information systems research. In *Research Methodologies, Innovations and Philosophies in Software Systems Engineering and Information* systems; Mora, M., Gelman, O., Steenkamp, A., Raisinghani, M., Eds.; IGI Global: Hershey, PA, USA, 2012; pp. 193–221.
- 108. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
- 109. Diamantopoulos, A.; Sarstedt, M.; Fuchs, C.; Wilczynski, P.; Kaiser, S. Guidelines for choosing between multi-item and single-item scales for construct measurement: A predictive validity perspective. *J. Acad. Mark. Sci.* **2012**, *40*, 434–449. [CrossRef]
- 110. Drolet, A.L.; Morrison, D.G. Do We Really Need Multiple-Item Measures in Service Research? J. Serv. Res. 2001, 3, 196–204. [CrossRef]
- 111. Dijkstra, T.K.; Henseler, J. Consistent Partial Least Squares Path Modeling. MIS Q. 2015, 39, 297–316. [CrossRef]
- 112. Chin, W.W. Commentary: Issues and Opinion on Structural Equation Modeling; Management Information Systems Research Center, University of Minnesota: Minneapolis, MN, USA, 1998.
- 113. Chin, W.W. How to Write Up and Report PLS Analyses; Springer: Berlin/Heidelberg, Germany, 2010; pp. 655–690.
- 114. Hu, L.T.; Bentler, P.M. Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychol. Methods* **1998**, *3*, 424. [CrossRef]
- 115. Kellermanns, F.W.; Eddleston, K.A.; Barnett, T.; Pearson, A. An Exploratory Study of Family Member Characteristics and Involvement: Effects on Entrepreneurial Behavior in the Family Firm. *Fam. Bus. Rev.* **2008**, *21*, 1–14. [CrossRef]
- 116. Covin, J.G.; Slevin, D.P. Strategic management of small firms in hostile and benign environments. *Strateg. Manag. J.* **1989**, *10*, 75–87. [CrossRef]
- 117. Rauch, A.; Wiklund, J.; Freese, M.; Lumpkin, G.T. Entrepreneurial orientation and business performance: Cumulative empirical evidence. Presented at the 23rd Babson College Entrepreneurship Research Conference, Glasgow, UK, 1 January 2004.
- 118. Ma, C.; Lin, X.; Chen, Z.X.; Wei, W. Linking perceived overqualification with task performance and proactivity? An examination from self-concept-based perspective. *J. Bus. Res.* 2020, *118*, 199–209. [CrossRef]