The relationship between creativity and performance in entrepreneurial teams in Tunisia

Zouari Soufien (a) *

(a) Ph.D., The University of Economic and Management of SFAX, Tunisia

Abstract
This paper examines the correlation between originality and success within entrepreneurial teams operating in Tunisia. In order to achieve this objective, it is imperative to emphasize the factors that impact the effectiveness of entrepreneurial teams. Previous research has elucidated the notion of creativity within entrepreneurial teams through the examination of trust and information sharing among team members, as well as the influence of the industry in which the team operates. This article posits that there exists an assumption regarding the positive impact of creativity on the performance of entrepreneurial teams. This assumption forms the basis for the reciprocal link between these two variables. The primary aim of this study was to investigate the influence of entrepreneurial team innovation on performance outcomes. The objective of this study was to conduct an empirical examination of the relationship between creativity and performance within entrepreneurial teams, with the purpose of determining if this relationship is unidirectional, recursive, or perhaps simultaneous.

Introduction
The entrepreneurial team is a dynamic entity, wherein the behaviors of its actors undergo changes as the organization's size expands. Entrepreneurship is often regarded as a crucial mechanism for enhancing competitiveness, promoting economic expansion, and augmenting job prospects.

The initiation of the entrepreneurial team represents the initial stage within the process of forming an entrepreneurial team and holds significant significance as it determines the ultimate outcome of the project, whether it be successful or unsuccessful. There exist two distinct forms of team building, each comprising a pair of sequential phases. The initial category encompasses the "leader" entrepreneur, a prevalent archetype observed in university spin-offs. In this context, the entrepreneur independently identifies an opportunity and subsequently endeavors to capitalize on it. Subsequently, individuals may opt to establish their own enterprise independently or, alternatively, choose to assemble a team. This particular manifestation of invention invokes the archetype of the heroic entrepreneur. In essence, it involves an individual entrepreneur who initially identifies an opportunity and subsequently assembles a team to acquire the necessary resources for its exploitation and transformation into a strategic vision. The second style might be characterized as a collective approach, wherein the team coalesces around a central concept. Multiple entrepreneurs collaboratively make a joint decision to capitalize on a business opportunity.

The second model aligns with other research studies and demonstrates that the main factors contributing to the development of entrepreneurial teams are solid relationships, friendship, and homophily. In the economic literature, two distinct perspectives on homophily can be identified. According to Jackson (2014), the first viewpoint holds that homophily develops as a result of team members' unique preferences. On the other hand, according to Kets and Sandroni (2016)'s research, the second perspective contends that homophily is a result of members' strategic decisions to reduce uncertainty. The divergent perspectives mentioned above are expected to have varying consequences for the establishment and effectiveness of teams (Feihou et al., 2021). According to Forbes...
et al. (2006), the establishment of entrepreneurial teams is a significant challenge, whether it is influenced by instrumental factors, interpersonal factors, or a combination of both. Undoubtedly, the second form has a higher degree of relationality compared to the first form.

Neergaard (2005) posits that team members possess a collective desire to capitalize on a shared concept, hence constituting a cohort of individuals seeking to develop a venture subsequent to identifying a commercial prospect. This remark prompts a series of inquiries: in the event that the team was constituted as a result of a project, what were the mechanisms through which the idea was collaboratively generated? Who was responsible for initiating the collaborative project? How does the process of seeking out this opportunity work for team members who don't currently have a project? Prior research has not yielded conclusive findings about these inquiries, and the exclusively communal methodology employed thus far can be characterized as anecdotal. The formation of an entrepreneurial team is contingent upon the presence of an initiator who effectively assembles individuals to collaborate on a certain project (Levy-Tadjine and Paturel, 2008; Ben Hafaïdh-Dridi, 2010, 2011; Condor and Chabaud, 2011).

Our proposal aims to expand upon existing research and offer a critical analysis of the criteria employed, which may not accurately reflect performance. According to Nothcraft and Neal (1999), a team that exhibits heterogeneity in terms of skills, knowledge, ability, past experience, training, or functional area possesses the potential for fostering innovation.

Scholars have posited that a robust correlation exists between the diversity of entrepreneurial teams and the performance of firms. Ensley and Pearce (2000) argue that shared leadership can be utilized as a method for assessing the effectiveness of entrepreneurial teams. Gartner (1985) posits that there exists a positive relationship between the creativity of entrepreneurial teams and their overall performance. Eisenhardt and Schoonhoven (1990) posited a robust correlation between the achievement of a firm and the entrepreneurial team, albeit without providing an in-depth analysis of the underlying processes that fostered this association.

Exclusively depending on financial data, while important, is inadequate. Expanding the scope of the notion is essential to incorporate qualitative and subjective factors pertaining to the satisfaction levels of stakeholders, whether they are part of the entrepreneurial team or external to it. Hence, it is unsurprising to encounter intersections between performance, creativity, and entrepreneurship within the domains of our research. Consequently, it becomes imperative to scrutinize the assessment of treatments, considering the empirical evidence that suggests entrepreneurial teams exhibit more success in initiating a business compared to solitary individuals.

This article aims to explore the concept of the creativity-performance dual in entrepreneurial teams, with a focus on providing theoretical foundations and practical insights for team management. The objective is to make progress in the development of performance criteria for entrepreneurial teams.

The presence of creativity and performance is of utmost importance for the viability and longevity of entrepreneurial teams. Similarly, considering the input-process-output viewpoint employed to investigate team creativity, the presence of task-related resources inside a team has the potential to augment the team's creative capabilities (Feihou et al., 2021). In this context, the level of team creativity is expected to be greater when team members possess a wide range of distinct and non-overlapping resources. Nevertheless, as Vyakarnam and Handelberg (2005) argue, the primary concern for an entrepreneurial team is to attain enhanced performance, as it is an essential prerequisite for the enduring viability of the organization.

The objective of this study was to examine the correlation between originality and performance within an entrepreneurial team, specifically evaluating the performance of entrepreneurial teams in Tunisia. In order to achieve this objective, it is imperative to address inquiries pertaining to the factors influencing the performance of entrepreneurial teams. Specifically, it is crucial to examine the influence of entrepreneurial team diversity on performance outcomes. What is the impact of creativity on the performance of entrepreneurial teams? What are the essential attributes that individuals comprising an entrepreneurial team must possess?

**Literature Review**

Several research studies show that entrepreneurs affect technological innovation. Indeed, Schumpeter (1934) considers entrepreneurship the driving force of the "new capitalism" and indicates that the effect of the entrepreneur is to replace the old mode of production with a new one, achieving a lasting revolutionary change in the economic structure. In developing economies, the available literature on innovation and entrepreneurship is limited to exploring the determinants of innovation performance as well as innovation constraints (Jiao et al., 2010; Jiao et al., 2015; Gurrero et al., 2016; Hao et al., 2016). Shan et al. (2015) developed a conceptual model to examine how innovation speed tracks the relationship between entrepreneurial orientation and performance.

For a long time, business creation was considered to be the action of the solitary entrepreneur. This character is mobilized to describe the entrepreneur/owner-manager, who, through their ideas and dynamism, brings value and innovation, given that they are the only one responsible for the success or failure of the company.

Creating and developing one's project depends on one's ability to mobilize and develop the resources and acquire the skills necessary for the different phases of the project's development. Researchers' thoughts were oriented in another direction, considering that entrepreneurship is not exclusively dedicated to the isolated individual. A company can be the initiative of several people partnering for the business opportunity, hence the thinking about entrepreneurial team formation.
Studies on the formation of entrepreneurial teams are based on the advantages and disadvantages of these teams, their valuation, and, generally, their organizational process. Feihou et al. (2021) found that more diverse teams (race/gender intersection) perform at lower levels than homogeneous ones. Furthermore, due to the diversity of experience and skills, heterogeneous teams can produce ideas that homogeneous ones cannot, leading to higher creativity (Flatt, 2004). However, it is only recently that entrepreneurship researchers have taken an interest in this area, as creating a company is increasingly the act of a founding team rather than a single entrepreneur.

Eisenhardt and Schoonhoven (1990) claim that there is a strong link between the company’s success and the entrepreneurial team without explaining the dynamics that induce this link, which prompts us to reflect on the importance of teamwork and the determinants of its success.

Danjou (2004) reminds us that etymologically French “entreprendre” means "to take together"; therefore, the action is marked by exchange and reciprocity. Indeed, one undertakes (takes together) with others in an environment where there are many things and many people; thus, entrepreneurship is a fundamentally collective activity and a collective phenomenon by nature. This study allows us to understand the process of starting a business as a team in Tunisia and the problems entrepreneurs encounter. Launching companies is quite long after having had the idea of creation. What is remarkable is that the young Tunisian entrepreneur does not have a culture of association or establishing a project as a team. Entrepreneurs need training and preparation to equip them with the necessary skills to create, initiate, manage, sustain, and develop a project.

In Tunisia, the number of team-based projects is too low compared to that of countries on the same continent and other countries in South America and Asia. According to the study by global entrepreneurship monitor (2018), Uganda has the highest entrepreneurial rate per capita (28.1%), followed by Cameroun (13.7%), Angola (12.4%), Botswana (11.1%), and Burkina Faso (9.7%). However, Tunisia has an entrepreneurial rate of 2.32%. Other countries also have higher rates, e.g., South America, Asia, and Thailand (16.7%), Vietnam (13.3%), Philippines (10.5%), China (10.2%), Brazil (13.8%), and Guatemala (9%).

Research hypotheses

We formulated the two main hypotheses, which would be subdivided into sub-hypotheses:

H1: the degree of trust and knowledge sharing trust between team members are the main determinants of creativity

H2: Entrepreneurial team creativity positively affects the performance of entrepreneurial teams (Gartner, 1985)

Research Methodology

To estimate the creativity-performance relationship of the entrepreneurial team, we used a questionnaire to quantify the items and the variables in question. The questionnaire was based on a sample of 40 Tunisian entrepreneurial teams.

In the first phase, two PCAs were applied, one for the different exogenous determinants of creativity and the second for the exogenous and endogenous determinants of performance. In the second phase, a two-stage least squares (2SLS) was applied in which creativity was explained by the variables of creativity of differentiation synergy (CREAT syn-diff) and creativity in leadership skills (CREAT Abi-dir), and performance was explained by the variables performance-creativity (PERCRE) and performance-synergy (PERSYN).

The conceptual model

We recall that the variables selected are: creativity with its various exogenous determinants and the performance of the entrepreneurial team with its exogenous and endogenous explanatory variables.

According to our hypotheses, the variables retained must be defined: Creativity built from items, such as trust and knowledge sharing between entrepreneurial team members. The second important variable is the performance of entrepreneurial teams. It is worth noting that the performance referred to is not calculated from the balance sheets but from the adequacy between the strategic objectives initially defined and the results achieved. To measure the variable 'performance', several items, such as team composition, collective leadership, team diversity, and the mode of financing of the team activities, were defined; Therefore, several Principal Component Analyses (PCA) were conducted to approximate the variables of the theoretical model which relate creativity and performance of entrepreneurial teams.

We assume that the creativity of the entrepreneurial team positively affects its performance (H1) and that this performance depends on a significant number of explanatory variables external and internal to the entrepreneurial team (H2).

The theoretical model of the creativity-performance relationship of the entrepreneurial team

The organizational structure of the firm is the foundation of its strategic choices. Indeed, some authors, such as Ben Hafaiedh (2006) and Guenguen (2014), talk about "multi-stakeholder entrepreneurship". Thus, quantifying the creativity and performance of entrepreneurial teams requires a significant number of items.
Table 1: Ex-ante distribution of the sample by sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Workforce</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural and food industry</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td>Textile and clothing</td>
<td>6</td>
<td>15.0</td>
</tr>
<tr>
<td>Leather and Shoes</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td>Electrical and Electronic Machines</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td>Metallurgy and Metals</td>
<td>4</td>
<td>10.0</td>
</tr>
<tr>
<td>Chemical Industry</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Rubber and Plastic</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Non-Metallic Minerals</td>
<td>3</td>
<td>7.5</td>
</tr>
</tbody>
</table>

**Measuring the variables of the theoretical model: principal component analysis**

Let us begin by recalling the variables object of our theoretical causal model. The exogenous explanatory variables, i.e., trust and knowledge sharing between team members, determine creativity, which in turn explains, among other exogenous variables, the performance of the entrepreneurial teams.

The variable "Performance" is a multi-item variable, and as such, it is obtained by performing a PCA on the highly correlated items. The 5-point Likert scale is used to quantify them. For all the other variables, we also used the Likert scale, i.e., a dichotomous coding for several items to approximate companies' structure and creative strategy.

To quantify our items, we relied on existing measures of previous studies on the subject of interest (Summers and Hendrix, 1991). In what follows, we will present the different items for the unobservable variables, i.e., creativity and performance.

**Scale of measurement of the variable "Performance"**

To approximate the variable "Performance", we borrowed the three definitions of Chandler and Hanks (1993), who identified three approaches to measuring company performance: an objective category, frequently used in the literature (growth, turnover, etc.), a subjective category, linked to the entrepreneur's satisfaction, and a category of subjective measures agreed upon by comparison with competitors. Following these authors, we integrated into the performance measure the entrepreneur's feelings about this performance in objective and subjective terms. Thus, we consider questions that give rise to quantitative and qualitative items to introduce the economic and psychological dimensions in evaluating entrepreneurial team performance.

The choice of the Poisson scale is explained by the fact that this scale of measurement used by Poisson et al. (2005) was tested with manufacturing SMEs in an emerging country, Tunisia, and gave good empirical results for the construction of constructs, especially for firms working in manufacturing sectors, as is our case.

Our objective was to test the possible effect of creativity with its different dimensions on the performance variable, which is often broken down in theory into two groups: economic performance (quantifiable) and performance approximated in terms of the feeling of the managers of the entrepreneurial teams with regard to the performance achieved (not directly quantifiable). Performance is approximated by eight items: IT1 to IT8.

**Table 2: Items of the variable “Performance”**

<table>
<thead>
<tr>
<th>IT1</th>
<th>Type of performance you consider more important</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT2</td>
<td>Knowledge sharing among entrepreneurial team members</td>
</tr>
<tr>
<td>IT3</td>
<td>Line-up</td>
</tr>
<tr>
<td>IT4</td>
<td>Collective leadership</td>
</tr>
<tr>
<td>IT5</td>
<td>Team Diversity</td>
</tr>
<tr>
<td>IT6</td>
<td>Method of financing the activities of the collective project</td>
</tr>
<tr>
<td>IT7</td>
<td>Entrepreneurial team creativity</td>
</tr>
<tr>
<td>IT8</td>
<td>Policy of the entrepreneurial team in research and innovation</td>
</tr>
</tbody>
</table>

After a correlation study between the items, we deemed it necessary to proceed with two PCAs. The first involves items IT2 to IT5, whose first principal axis is supposed to express the degree of cohesion of the entrepreneurial team. The second PCA deals with items IT6 to IT8 and whose first principal axis, i.e., degree of entrepreneurial team creativity, is supposed to boost team performance.

First, we applied PCA on the items (from IT2 to IT5). The correlation matrix between the variables and the individuals shows strong correlations between the different variables and the components of the first principal axis. In other words, it is an iterative process of
eliminating items uncorrelated with the different principal axes. It should be recalled, however, that an item must have a representation quality higher than 0.5 and have no high factorial contributions on more than one axis. If at least one of these conditions is not met, the item is eliminated. Items with a Kaiser-Meyer-Olkin (KMO) index < 0.5 must also be questioned. Thus, item IT2 was eliminated due to its low quality of representation, while all items were retained outside the second PCA.

Table 3: Performance “PCA”

<table>
<thead>
<tr>
<th>Items</th>
<th>Correlation of the Item with the Factor</th>
<th>Quality of Representation</th>
<th>Individual KMO</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT3</td>
<td>.814</td>
<td>.188</td>
<td>.831</td>
</tr>
<tr>
<td>IT4</td>
<td>.045</td>
<td>.789</td>
<td>.814</td>
</tr>
<tr>
<td>IT5</td>
<td>.212</td>
<td>.751</td>
<td>.689</td>
</tr>
<tr>
<td>IT6</td>
<td>.245</td>
<td>.671</td>
<td>.785</td>
</tr>
<tr>
<td>IT7</td>
<td>.857</td>
<td>.118</td>
<td>.805</td>
</tr>
<tr>
<td>IT8</td>
<td>.701</td>
<td>.235</td>
<td>.601</td>
</tr>
<tr>
<td>Cronbach’s α</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KMO</td>
<td>.798</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explained variance</td>
<td></td>
<td></td>
<td>65.25%</td>
</tr>
</tbody>
</table>

Table 3 indicates a clustering of items around two factors. The KMO index is 0.798, and Cronbach’s α associated with each dimension are 0.712 and 0.725, respectively. These values show the reliability of the measurement scale of the variable “performance”. Moreover, they indicate that it is bi-dimensional. The individuals are well projected on the principal plane, given the significant values of the representation quality.

The first dimension, defined by the items IT3, IT4, and IT5, describes “synergy-performance” (SYNPER) coming from the correlation between the different items expressing the situation of the different entrepreneurial teams. The second dimension, ‘Creativity Performance’ (CREPER), is defined by items IT6, IT7, and IT8. This result shows that the entrepreneurial teams in question have focused on the search for differentiation and, thus, on creativity.

Second, we determined the approximation of the “creativity” variable through one or more PCAs on a set of items defined based on our previous theoretical analyses. The deductive method is also used to determine the items. Thus, we used the hypothetico-inductive approach method to approach the items. This scientific approach was applied in the approximation of the performance of entrepreneurial teams.

Measurement scale of the variable ‘Creativity’

The variable “creativity” of entrepreneurial teams is captured through six items relating to creativity in the entrepreneurial team to leaders’ experience and ability to innovate and have a sense of creativity. We define six items that we note CT1 through CT6.

Table 4: Items of the variable “Creativity”

<table>
<thead>
<tr>
<th>Items</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT1</td>
<td>Executives are called upon to position their companies among those seeking to differentiate themselves.</td>
</tr>
<tr>
<td>CT2</td>
<td>Leaders show an ability to innovate and have a sense of creativity</td>
</tr>
<tr>
<td>CT3</td>
<td>Sharing knowledge within the team facilitates creativity.</td>
</tr>
<tr>
<td>CT4</td>
<td>Trust among entrepreneurial team members helps create differentiation</td>
</tr>
<tr>
<td>CT5</td>
<td>Entrepreneurial team diversity in educational and social levels helps differentiation</td>
</tr>
<tr>
<td>CT6</td>
<td>Collective leadership helps differentiation</td>
</tr>
</tbody>
</table>

The results of the PCA show that all the items are correlated with each other and that it will be interesting to keep them all since the KMO index is 0.814. The empirical results show a first approximation of the entrepreneurial team ‘creativity’ constructed from the items CT1 to CT6 noted as ‘CREATSyn-Diff’. To enrich the empirical results, it is pertinent to have a second construct of creativity based on the items strongly correlated to the first principal axis. As can be seen in Table 5, items CT1, CT2, and CT6 have correlation coefficients close to 1, hence the need to approximate creativity a second time, only with these three items. The empirical results confirm our observation since the first main design brought back by these three items (51.4%) is close to the one with six items (71.5%). The second construct is noted as ‘CREATAbi-Dir’ (see Table 6).
In Tables 5 and 6, Cronbach's alpha values for the two dimensions are satisfactory and indicate that the two-dimensional scale meets the reliability criterion. In other words, the constructs from the two PCAs accurately represent the variable 'Creativity'. The quality of the representation of the individuals is satisfactory, as shown by the values depicted in the table above, which are very close to 1. Therefore, the passage from one space to several dimensions (six in Table 7 and three in Table 8) does not lead to losing much information. These satisfactory results are also explained by the strong correlations between the items, as indicated by the KMO values of 0.814 and 0.774. All these elements allow us to accept the constructs found from the PCA on items CT1 to CT6 or part of these items (CT1, CT2, and CT3). These constructs can approximate the variable 'Creativity'.

Estimation of the theoretical model of the effect of creativity on performance

It is worth noting that our theoretical model analyzes the effect of creativity on entrepreneurial teams' performance: Exogenous variables (trust between team members, knowledge sharing, entrepreneurial team composition, collective leadership, team composition) → Creativity of entrepreneurial teams → Performance of entrepreneurial teams. Given the results of the principal component analyses performed in the previous paragraph and the evidence of the multi-dimensionality of the latent variables in our basic model, the model must be re-specified and the general hypotheses reformulated and broken down into sub-hypotheses.

Restatement of Hypotheses

Given the results of identifying the dimensions inherent in the different variables of the analysis model, the initial hypotheses had to be reformulated and divided into sub-hypotheses to integrate the dimensions identified by the PCA carried out in this empirical section.

Hypothesis (H1) relates to the impact of certain exogenous variables (trust between team members, knowledge sharing, team composition, collective leadership, team diversity, etc.) on entrepreneurial team creativity with reference to several previous works, including Mussche (1974) and Fredrickson (1986). This hypothesis was divided into four sub-hypotheses as follows:

H1.1: Trust among team members positively influences creativity (Miller, 1988)
H1.2: Knowledge sharing among team members positively influences creativity (Miller, 1988).
H1.3: Team composition influences creativity (Blankenship and Miles, 1968)
H1.4: Collective leadership influences creativity (Blankenship and Miles, 1968)
Hypothesis (H2) on the effect of creativity on performance was broken down into two sub-hypotheses to reflect the two main determinants of creativity and, thus, the performance of entrepreneurial teams.

First, we emphasize the direct and positive effect of creativity on performance. This hypothesis is broken down into two sub-hypotheses:

H2.1: Creativity positively influences the performance of entrepreneurial teams (Poisson et al., 2005; Sauvé et al., 2007).

H2.2: Trust and knowledge sharing positively influence the performance of entrepreneurial teams (Poisson et al. 2005; Sauvé et al. 2007).

Estimation of the recursive model of Entrepreneurial team performance

The structure of the entrepreneurial team performance model is recursive in the econometric sense. In other words, the creativity variable that explains the entrepreneurial team performance is explained by exogenous variables. Thus, we have two equations to estimate: the first for creativity and the second for entrepreneurial team performance. In this latter, there is a problem of non-erogeneity of the creativity variable, which leads us to use the 2SLS method to estimate it and consequently avoid econometric problems (bias and non-convergence of estimators).

In the first step, we explain creativity, proxied by the variables 'CREATSyn-Diff' and 'CREATAbi-Dir', by variables related to the organizational structure of the firm that are considered exogenous, namely trust between team members (Trust), knowledge sharing (share), collective leadership (LEADER), team diversity (TEADIV), team composition (COMPET), and by the financing method of firm’s activities (FUNMETH). As we have already explained, the following specification is a first attempt to explain the entrepreneurial team’s creativity:

\[
CREAT\_{Syn-Diff} = \beta_1 + \beta_2 \cdot \text{TRUST} + \beta_3 \cdot \text{SHARE} + \beta_4 \cdot \text{LEADER} + \beta_5 \cdot \text{TEADIV} + \beta_6 \cdot \text{COMPET} + \beta_7 \cdot \text{FUNMETH} + \epsilon_{i=1\rightarrow30}
\]

\[
CREAT\_{bi-Dir} = \alpha_1 + \alpha_2 \cdot \text{TRUST} + \alpha_3 \cdot \text{SHARE} + \alpha_4 \cdot \text{LEADER} + \alpha_5 \cdot \text{TEADIV} + \alpha_6 \cdot \text{COMPET} + \alpha_7 \cdot \text{FUNMETH} + \eta_{i=1\rightarrow30}
\]

A priori, we estimated both models by the ordinary least squares (OLS) method, hence following empirical result:

\[
CREAT\_{Syn-Diff} = 0.04 + 0.05 \cdot \text{TRUST} + 0.85 \cdot \text{SHARE} + (1.2) \cdot (1.89)
\]

\[
CREAT\_{bi-Dir} = 0.09 + 0.08 \cdot \text{TRUST} + 1.99 \cdot \text{SHARE} + (1.2) \cdot (1.89)
\]

\[
BP\text{statistic} = 6.5 \quad R^2 = 0.84 \quad F^* = 185
\]

It is worth noting that the empirical results from the two estimated models are almost the same. In the two estimated equations, the variables ‘Team diversity’ and ‘Trust among team members’ have no significant effect on creativity. Although these two variables carry the right signs, they remain insignificant for the dynamics of differentiation and even innovation in entrepreneurial teams. The other variables remain largely significant for creativity activities in entrepreneurial teams. Indeed, the variable ‘Collective leadership’ remains the most pertinent factor in the innovation process, implying that the policy of those in charge of the company’s strategic policy in terms of innovation and differentiation remains a determining factor in the creativity dynamics of the entrepreneurial team.
The negative effect of the financing mode on creativity is explained by the fact that most companies are financed by banks, and this money is often destined for the realization of their production process to the detriment of differentiation and innovation. The positive and significant effect of the variable \( \text{COMPET} \) allows us to conclude that within the entrepreneurial teams in question, the team leader successfully weaved synergy among the team members, which could be exploited to boost creativity. In terms of statistical performance, the models have almost the same explanatory power (0.84 and 0.83), and the t-test highlights almost the same explanatory and non-explanatory variables of the creativity process but with a problem of heteroscedasticity that was corrected by White's estimator as shown by the Breusch-Pagan statistics in the above equations. The Fisher statistic allowed us to consolidate the empirical result obtained by the Student t-test since it shows that all the explanatory variables of the creativity dynamics affect the differentiation and innovation process within entrepreneurial teams significantly. This empirical result is consistent with the theoretical analysis of Eisenhardt and Schoonhoven (1990) that diversity is a stimulus for innovation and the creation of new ideas. The collaboration between members allows the emergence of a knowledge-creation and learning process.

In the two equations specified and estimated above, we find a large number of explanatory variables in relation to the number of entrepreneurial teams. This finding led us to consider the constructs of the different items; however, the study of the correlation between them prevented us from performing the PCA and consequently finding constructs that would have allowed us to determine the main explanatory variables within the framework of a more reduced model and with greater degrees of freedom (see the correlation matrix).

Finally, these empirical results largely confirm the sub-hypotheses of H2 relating to the determinants of creativity and thus corroborate the theoretical analyses of Gartner (1985), who assert that in team entrepreneurship, each member brings their resources and experiences which, by combining them, prove to be complementary: expertise, skills, previous experience, social network, and financial contribution. All these variables contribute to team diversity and highlight the value of such an association, thus promoting creativity. Our empirical results consolidate the analyses of Aldrich and Zimmer (1986), who opt for the relational nature of the entrepreneurial process and are against the thinking that conceives the entrepreneur as a single person operating in a "social vacuum"; De la Ville (2001) confirms that "we consider that it is the activation of networks of continuous social relations that founds the emergence of the entrepreneurial project", hence a whole process of production and a dynamic of differentiation on the part of the entrepreneurial team.

The question that arises at this level is whether the empirical data verify hypothesis H1: That the existence of a creative dynamic allows the entrepreneurial team to perform better than the one where this dynamic is absent or quasi-absent, hence the following theoretical model:

\[
\begin{align*}
\text{SYNPER}_i &= \delta_0 + \delta_1 \text{CREAT} \text{SYN}_{i} - \text{Diff f}_{i} + \delta_3 \text{TRUST}_i + \delta_5 \text{SHARE}_i \\
&+ \delta_6 \text{LEADER}_i + \delta_7 \text{TEADIV}_i + \theta_5 \text{COMPET}_i + \delta_8 \text{FUNMETH}_i + V_i, i = 1 \rightarrow 40
\end{align*}
\]

\[
\begin{align*}
\text{CREPER}_i &= \theta_0 + \theta_1 \text{CREAT} \text{SYN}_{i} - \text{Diff f}_{i} + \theta_3 \text{TRUST}_i + \theta_5 \text{SHARE}_i \\
&+ \theta_6 \text{LEADER}_i + \theta_7 \text{TEADIV}_{i} + \gamma_7 \text{COMPET}_i + \theta_8 \text{FUNMETH}_i + V_i, i = 1 \rightarrow 40
\end{align*}
\]

We specified two equations, one to explain performance approximated by items related to creativity (\( \text{CREPER} \)) and one approximated by items related to the synergy among the members of the entrepreneurial team (\( \text{SYNPER} \)). In both specifications, we find the creativity variable expressed by 'CREAT' as a non-exogenous explanatory variable. Thus, the last two equations were estimated using the 2SLS method, which yielded the following econometric result:

\[
\begin{align*}
\text{SYNPER}_i &= -0.05 + 1.55 \text{CREAT} \text{SYN}_{i} - \text{Diff f}_{i} + 0.74 \text{TRUST}_i + 0.22 \text{SHARE}_i \\
&\quad (2.55)(1.88)(1.96)
\end{align*}
\]

\[
\begin{align*}
0.74 \text{LEADER}_i + 0.12 \text{TEADIV}_i + 0.11 \text{COMPET}_i - 0.14 \text{FUNMETH}_i \\
&\quad (2.55)(2.19)(1.98)(-1.22)
\end{align*}
\]

\[
R^2 = 0.86 \quad \text{Statistics of } BP = 1.2 \quad F^* = 85.5
\]

\[
\begin{align*}
\text{CREPER}_i &= -0.17 + 1.75 \text{CREAT} \text{SYN}_{i} - \text{Diff f}_{i} + 0.74 \text{TRUST}_i + 0.22 \text{SHARE}_i \\
&\quad (5.55)(1.48)(1.26)
\end{align*}
\]

\[
\begin{align*}
0.74 \text{LEADER}_i + 0.44 \text{TEADIV}_i + 0.11 \text{COMPET}_i - 0.14 \text{FUNMETH}_i \\
&\quad (1.78)(2.49)(1.28)(-1.22)
\end{align*}
\]

\[
R^2 = 0.87 \quad \text{BP statistics} = 2.8 \quad F^* = 125.2
\]

*The statistics in brackets are Student’s statistics*
From the above empirical results, we can say that the creativity process is a very significant determinant of the performance approximated by the synergy items as well as that approximated by the creativity items.

The variables 'TRUST', 'SHARE', 'LEADER', and 'COMPET' had a more significant effect than the other explanatory variables in explaining performance-synergy. This empirical result confirms the theoretical analyses of Pearce (1999) and Ensley and Pearce (2000), who claim that shared leadership is a means to determine team effectiveness. In this sense, several researchers assert that there is a link between team diversity and performance; however, positive and negative correlations have been found without clear evidence that diversity is the source of these correlations (e.g., Jackson, 1992; Milliken and Martins, 1996; O'Reilly et al., 1993). Also, the significance of the variable 'LEADER' confirms the theoretical analyses of (Naffakh and El-Andoulisi, 2009), who see that team decision-making is a participatory process in which several individuals collectively act, analyze problems or situations, examine and evaluate various courses of action, and choose among the alternatives one or more solutions, thus inducing and developing the spirit of creativity within the team.

The high significance of the variable 'TEADIV' in the second performance equation (CREPER) empirically shows the robustness of the theoretical analysis of Jehn et al. (1999). These authors assert that by taking into consideration a heterogeneous team in terms of variables such as skills, expertise, ability, previous experience, training, or the functional area in which the individual exercises their skills, these teams are capable of creativity, better problem-solving, and the generation of new ideas. Indeed, we believe that the ability of an entrepreneurial team to create and produce new and feasible ideas guarantees future performance for the team. Some researchers and theorists also define creativity according to the characteristics of the person (Amabile, 1996) as the constellation of personality and intellectual traits of an individual who, when given freedom, spends most of their time engaged in a creative process. Others have defined creativity in terms of the process itself, as the uncovering of a new relational product, born of the uniqueness of the individual on the one hand and the materials, events, people, or circumstances of their lives on the other; however, most theorists and researchers adopt a definition of creativity centered on the product itself: a useful novelty (Stein, 1974). All these theoretical analyses point in the same direction as the results found in our two performance explanation equations. This variable, whether taken from the perspective of the 'synergy' items or the 'creativity' items, presents student statistics that show its high contribution to explaining entrepreneurial team performance in its two aspects. Also, our empirical investigations show that the variable 'FUNMETH' played no role in this dynamic process of achieving team performance. This result is consistent with the reality of SMEs that encounter significant challenges when it comes to securing funding for their production activities. Thus, financing their differentiation and research activities will worsen, which explains our empirical result. Finally, the Fisher statistics in the above econometric equations show that overall, the explanatory variables in question significantly explain performance in its two aspects.

Our second hypothesis (H2) is largely validated. We find that creativity significantly influences the performance with its two components of entrepreneurial teams. Compared to the other estimated effects of the other explanatory variables, we find that the magnitude of creativity on entrepreneurial team performance is significantly larger (1.55 and 1.75 compared to the other estimated effects varying between 0.74 and 0.11). The variables 'TRUST' and 'LEADER' come in second place as the explanatory variables with the largest effects, even though they are not very significant. In both performance equations, the variable 'TEADIV' appears among the most significant variables, consistent with the theoretical analysis of Jehn et al. (1999).

It is worth noting that the creativity variable was approximated by a second variable, noted 'CREATAbi-Dir', constructed from items CT1, CT2, and CT6, whose meaning is reported in Table 6. We report the explanation of the two aspects of the performance variable by considering the variable 'CREAT2' instead of the variable 'CREAT1':

\[
\text{SYNPER} = -0.07 + 1.25\text{CREATAbi-Dir} + 0.45\text{TRUST} + 0.14\text{SHARE}
\]

\[
(2.01) (1.6) (1.77)
\]

\[
+ 0.66\text{LEADER} + 0.08\text{TEADIV} + 0.18\text{COMPET} - 0.25\text{FUNMETH}
\]

\[
(1.98) (1.85) (1.73) (-1.11)
\]

\[
R^2 = 0.76 \quad \text{BP statistics} = 0.5
\]

\[
\text{CREPER} = -0.08 + 1.44\text{CREATAbi-Dir} + 0.62\text{TRUST} + 0.14\text{SHARE}
\]

\[
(2.41) (1.22) (1.12)
\]

\[
+ 0.65\text{LEADER} + 0.42\text{TEADIV} + 0.09\text{COMPET} - 0.22\text{FUNMETH}
\]

\[
(1.63) (2.01) (1.08) (-1.02)
\]

\[
R^2 = 0.74 \quad \text{BP statistics} = 1.78
\]

*Values in parentheses are Student's statistics

The empirical results are far from acceptable compared to those found with the "CREATSyn-Diff" variable, even though these econometric results provide further evidence of the role of creativity in the performance of entrepreneurial teams. However, the estimators of the last two equations bear the signs expected by the hypotheses formulated under H1, which proves once again that all
the exogenous variables (TRUST, LEADER, TEADIV, COMPET, and FUNMETH) have a positive effect on creativity but are relatively less significant compared to the performance equations stated above.

These empirical results allow us to conclude that the creativity variable is best approximated by the 'CREATSyn-Diff' variable, i.e., all items (TC1 to TC6) should be considered for the approximation of creativity. This result contradicts, to some extent, the interpretation of Cronbach's $\alpha$ value (0.845), which indicates that the principal component found from the PCA in question gives us a construct that approximates creativity well. However, we find that the LEADER and TEADIV variables still retain a significant effect on the two forms of performance. These empirical results allow us to insist on the diversity in an entrepreneurial team as specified by Gartner (1985), who explains that the diversity of skills and expertise in an entrepreneurial team reduces the complexity of the creation process and has a direct impact on its success (Gartner, 1985). Indeed, in the framework of team entrepreneurship, each member brings their resources which, when combined, prove to be complementary: expertise, skills, previous experience, social network, and financial contribution. All these variables contribute to the diversity of the team and enhance the value of such an association. This finding leads us to talk about "job-related diversity" according to Pelled's model (1996), measured by variables such as initial training, technical expertise, and previous experience (Milliken and Martin, 1996).

Conclusion

This article aims to present a comprehensible framework for understanding the intricate concept of the entrepreneurial team. Numerous inquiries emerge in order to comprehend this phenomenon, encompassing its interdependency, intricacy of formation, and evolutionary aspects. Hence, a mechanism exists to facilitate the formation of a team and the acquisition of information by its members. In this context, we have introduced the notion of social networks and explored various motivations for establishing an entrepreneurial team, drawing upon three distinct perspectives.

When examining the establishment of an entrepreneurial team, it is imperative to emphasize the concept of diversity among team members and its influence on the team's efficacy and sustainability. The efficacy of an entrepreneurial team is influenced by the leadership style that is able to accommodate and harness the team's dynamic nature.

In accordance with our research purpose, the examination of the relationship between creativity and performance is conducted through a recursive analysis. This approach allows us to derive an assessment of the theoretical model that elucidates the impact of creativity on the performance of entrepreneurial teams.

The findings from the econometric analysis demonstrate that the process of creativity has a crucial role in determining performance, as indicated by the measures of synergy and creativity. Our research has revealed a considerable relationship between creativity and performance in entrepreneurial teams, specifically in relation to the two components of creativity. Hence, it can be observed that the impact of creativity on the entrepreneurial team's performance is considerably greater, while acknowledging that both diversity and leadership characteristics continue to exert a major influence on performance in their respective manifestations.

Acknowledgement

Author Contributions: Conceptualization, Methodology, Data Collection, Formal Analysis, Writing—Original Draft Preparation, Writing—Review And Editing by author. Author read and agreed to the published final version of the manuscript.

Institutional Review Board Statement: Ethical review and approval were obtained!

Data Availability Statement: The data presented in this study are available on request from the corresponding author. The data are not publicly available due to privacy.

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

References

Didier Chabaud & Roland Condor (2009). La formation des équipes entrepreneuriales, une étude exploratoire. PME, 27(1).
Haifa Naffakh, & Andoulsi. (2012). Le processus de leadership dans les équipes entrepreneuriales: les leviers d'influence sur le processus de prise de décision. NIMEC-Université de Caen Basse Normandie.

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