

Creativity and innovation in haute cuisine restaurants: factors affecting the creative process of Michelin-rated chefs

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Abstract

Purpose of the paper: Creativity and innovation in haute cuisine restaurants are being explored. The paper seeks to understand what factors influence the creative process in culinary activities.

Methodology: The exploratory analysis has been conducted by using a Principal Component Analysis (PCA) based on primary data obtained from a survey of 132 Italian Michelin starred Chefs.

Findings: Three key factors were found to stimulate creativity. The within-individual factor reflects the chef's personal inclination for creativity. The second factor consists of external sources beyond the individual chef that can significantly enhance or constrain creativity. Lastly, an important practical factor encompasses contextual components, such as the need to consider financial sustainability and cost control.

Research limits: The paper is focused on the Italian context and caution has to be used when generalizing the results of the study to different contexts. The research has an exploratory nature. Findings have to be confirmed by further analyses.

Practical implications: The paper concludes with a suggested set of management capabilities to support the success of efforts that transform novel ideas into new and desirable culinary experiences for competitive positioning of haute cuisine restaurants.

Originality of the paper: The first results of a work-in progress research help understanding how the approach to creativity influences the development of culinary innovations, which ultimately lead to the financial performance of restaurants.

Key words: chef; creativity; haute cuisine; innovation; Michelin guide; restaurants

1. Introduction

Creativity is largely conceptualized as the production of ideas that are either original, novel or useful (Amabile, 1996; Shalley *et al.*, 2004), and as having the potential to create value to the firm (George, 2007). Contributions to a firm's products and/or services are considered novel when they have distinctive and original features relative to what is already present in the firm, and they are useful when they are relevant to the strategy of the firm (Cummings and Oldham, 1997).

Prior literature concerning creativity consistently argues that creative ideas are effective precursors of innovation (e.g., George, 2007). Managing

creativity in order to generate, develop, accelerate and improve innovation is the key managerial challenge for every firm, especially when confronted with competition pressures (Stierand *et al.*, 2016). Consequently, firms are forced to be creative and to introduce innovative products and solutions, or innovation in processes, organization and marketing (Damanpour, 1987) in order to ensure sustained competitive advantages (Lampel *et al.*, 2000). In this respect, Cohendet and Simon (2015, p. 6) assert that “embodying creative leadership, reinventing customer relationships, engaging customers as individuals and communities, building operational dexterity, empowering employees, amplifying innovation through partnerships, and unlocking a sense of community within the organization, are some of the emerging priorities put forward to transform existing organizations into creative and resilient businesses”.

A global study of CEOs by IBM, cited by Nikravan (2012), concluded that creativity is now the most important leadership quality for success in business, outweighing competencies such as integrity and global thinking. While in the past creativity may have been perceived as an optional feature of leadership, today it is no longer optional because leaders who lack creativity are unlikely to move their organizations into the future (Sternberg, 2007). This is particularly critical for cultural industries (e.g., literature, music, visual arts, etc.). These industries are designed to generate and exploit ideas and knowledge that are originated in individual or team creativity (i.e., DeFillippi *et al.*, 2007). In this sense, within the context of cultural industries, also haute cuisine, observed as a form of artistic expression (Slavich *et al.*, 2014) and as the high-end of restaurant industry, has to explore because it generates continuous flows of novel ideas, by combining symbolic, sensory and experiential content with traditions, creative methods, technique and knowledge (Messeni Petruzzelli and Savino, 2015).

Haute cuisine has been defined as a “crafts industry composed of professional organizations in which chefs typically undergo long and arduous practical training that involves the development of their five senses for the purpose of professional cooking” (Gomez *et al.*, 2003, p. 107). In 2010, the United Nations Educational, Scientific, Cultural Organization (UNESCO) formally acknowledged haute cuisine as a creative and cultural industry by adding the French gastronomic meal to its “Representative List of the Intangible Cultural Heritage of Humanity”.

Even though haute cuisine restaurants and their chefs are a limited proportion of the overall restaurant sector (roughly 0.5%), they assume a relevant role as benchmarks for others (Ottenbacher and Harrington, 2007). Their economic and cultural importance is underpinned by their value-creation through aesthetic and symbolic work (Svejenova *et al.*, 2007), which makes haute cuisine heavily reliant on the reputation, craftsmanship and personal creativity of their chefs (Balazs, 2002).

In haute cuisine, creativity has been contemplated as a relevant strength to build a competitive advantage through innovation (Ottenbacher and Harrington, 2007). It is strongly based on the chef, its capacity to bring novelty to the market (Capdevila *et al.*, 2015), to develop new languages and methods/practices in the culinary profession (Albors-Garrigós *et al.*,

2018) and to organize time, dedicated space and team work/resources (Svejenova *et al.*, 2007). By extension, extraordinary dishes are an important opportunity for demonstrating the chef's excellence and defending their competitive position in the field of international gastronomy (Bouty and Gomez, 2013). Due to the increasing competitiveness in the sector, chefs are under pressure to generate original dishes, menus and ingredients for their customers, by seeking and developing memorable and extraordinary gastronomic experiences. In this respect, Ottenbacher and Harrington (2007, p. 3) suggest that "chefs must be able to adapt and evolve if they want to be successful in the short- and long-term". This situation seems likely for the chefs of fine-dining restaurants, recognized as the leaders of innovation in culinary products and services (Stierand and Lynch, 2008). Haute cuisine chefs can be described as being "extraordinary chefs" (Stierand and Dörfler, 2012) because they develop new ideas and/or combinations of existing ingredients, apply new processes/techniques, develop culinary scientific approaches, and exploit new talent and continuously experiment (Fauchart and von Hippel, 2008; Arboleya *et al.*, 2008; Braun and Ihl, 2013). These observations imply that most of the success of haute cuisine restaurants depends on the chefs' creativity, recognizing that heterogeneous components - both within and outside the individual - have an impact on their creative process (Amabile, 1983, 1996). Notwithstanding this recognition, there is considerable controversy surrounding the factors and origins of creativity in the haute cuisine context (Capdevila *et al.*, 2015; Lane and Lup, 2014; Messeni Petruzelli and Savino, 2014; Stierand and Lynch, 2008; Svejenova *et al.*, 2007; Gomez *et al.*, 2003).

With this in mind, the paper aims to fill this gap in literature. Specifically, it intends to investigate the creativity and innovation in the haute cuisine, by examining the main factors that influence the creative process in the haute cuisine segment. Two are the main reasons that support the choice of the context of creativity in haute cuisine. First, haute cuisine assumes a relevant role in defining and influencing trendsetting and quality standards for the culinary industry when it comes to culinary innovations (i.e., Surlemont and Johnson, 2005; Harrington, 2004). Additionally, the haute cuisine segment is nowadays highly institutionalized (Gomez and Bouty, 2011) and mainly internationalized (Svejenova *et al.*, 2007). Even though the haute cuisine restaurants and their chefs represent a relatively small proportion of the gastronomy sector, their growing economic and socio-cultural dimensions are mainly dictated by their differentiation in terms of innovation into products and services, and also their capacity to create value for developing an inimitable competitive advantage. Second, the ability to generate such differentiated aesthetic and symbolic haute cuisine is largely reliant on the reputation, craftsmanship and personal creativity of the chefs. They are expected to have a basic knowledge, an open-minded curiosity about the foods, cooking techniques from around the world and of all different cultures.

The paper is organized as follows. The next section introduces the concept of creativity and the main dimensions that have an influence on the creative process in the context of haute cuisine. Then, a description of research methodology is provided, including sample and data collection. In

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the fourth section, findings are presented and discussed. In the fifth section, conclusions are underlined. At the end, the paper provides theoretical and managerial implications and proposes suggestions for future research.

2. Theoretical background

2.1 Creative process and haute-cuisine chefs

Creativity has been generally acknowledged as a relevant foundation of value creation in contemporary organizations and environments (Amabile *et al.*, 1996). Creativity has been studied across several disciplines including social sciences, psychology, economics, education and the creative and cultural industries. Specifically, creativity has been conceptualized as “the production of novel and useful ideas” (Amabile *et al.*, 1996, p. 1155) and it can occur at different stages and with regard to a large variety of topics, from products and services, to processes, structures, work and tools (George, 2007).

Amabile (1983, 1988, 1996) claims that creativity is variously influenced by three different within-individual components: domain-relevant skills (i.e., expertise, knowledge, technical skills, intelligence, etc.), creativity-relevant processes (i.e., cognitive style, personality processes characteristics that are conducive to novel thinking, risk-taking, and taking new perspectives on problems), and task motivation (i.e., the intrinsic motivation to engage in the activity out of interest, enjoyment, passion, personal sense of challenge). Specifically, individuals are generally most creative when they feel motivated mainly by the passion, interest, enjoyment, satisfaction, and challenge of work (Amabile, 1988).

While individual creativity is the most relevant element for organizational innovation, “it is not, by itself sufficient” (Amabile, 1988, p. 125). Beyond the individual, the external social environment can serve to stimulate or deter intrinsic motivation and creativity - a sense of positive challenge in the work itself, operating in collaborative teams, and having mechanisms to encourage the development of new ideas. Therefore, creativity may be seen as a confluence of a wide variety of components that is highest when an intrinsically motivated individual with high domain expertise and high skill in creative thinking works in an environment designed to stimulate and to sustain creativity (Amabile, 1996).

Research has traditionally distinguished two generic types of creativity: the everyday creativity inherent in the average person (Richards, 2007), and the creative genius linked to talents in certain fields (Simonton, 1997). From this perspective, haute cuisine may be described as a creative industry (Svejenova *et al.*, 2013; Messeni Petruzzelli and Savino, 2015). Creative industries are defined as those that have “their origin in individual creativity, skills and talent, and which have the potential for wealth and job creation through the generation and exploitation of intellectual property” (DCMS, 2001, p. 5). In haute cuisine, the necessity of linking creativity, innovation and competitive advantage is becoming more relevant because creativity is now seen as crucial to obtaining the highest levels of distinction - the second and third Michelin stars.

Lampel *et al.* (2000) assert that creativity in gastronomic activities can be used to introduce novelty for product differentiation and/or to develop a market innovation that may defy current norms and practices. New dishes are the result of novel and atypical combinations, where old ingredients and innovative or familiar techniques are mixed to create new combinations and unusual recipes that are constantly changing, and require working very long and often anti-social hours (Capdevila *et al.*, 2015). The result is substituting, combining, and modifying different ingredients of a particular dish and typically cooking several versions of it (Svejenova *et al.*, 2010).

This process highlights how the activity is extremely iterative and fluid. It requires effort and energy to screen, test, and validate activities and procedures. The screening activity consists of the selection of different criteria, such as product quality, availability, seasonality, fit with the personal style of cooking, cost, pricing strategy, balance of the dish itself and fit with the rest of the menu, maintenance of standards, etc. Finally, testing, experimentation and validation are iterative activities that result in accumulating knowledge and ultimately determine the value based on customer acceptance.

Several different factors influence the process of nurturing creativity. Certain of these factors are directly connected to the chef, while others are related to the ecosystem in which the chef exists (Ottenbacher and Harrington, 2007; Pedersen, 2012; Vargas-Sanchez and López-Guzman, 2015). Therefore, chefs make use of personal experience, appropriate methods and techniques, as well as competences and capabilities to generate the idea for a new dish in their mind and utilize tacit knowledge to produce it. The development of new dishes, recipes and menus requires intuitive thinking, technical knowledge, cooking techniques, going beyond the rules and accepted processes, experimenting and searching for the best or better ingredients, making adjustments based on experimental results, and accepting mistakes and failures. These realities of creativity mean that successful products must be continually adjusted and improved by considering the chef's knowledge, accumulated experiences, and complementary technical skills/competences (Ottenbacher and Harrington, 2007).

Albors-Garrigos *et al.* (2013, p. 2) assert that “these chefs usually have their own space and time for creativity and rely on networking with an extensive social context”, by underscoring the importance of external sources for information and inspiration that lead to innovative activities. Other researchers have also emphasized the impact of external factors on the culinary creativity process. For example, Harrington (2004) described, *inter alia*, the influence of customer and competitor behaviors on culinary innovations. Among the plethora of sources, most often cited is the involvement and interaction with customers (listening to their needs/preferences) as well as restaurant staff, colleagues, and suppliers of raw materials and ingredients (Bockelmann and Braun, 2014; Paris and Lang, 2015). In addition, feedback can be obtained from presentations at gastronomy and culinary conferences, exhibitions and trade fairs. Gomez and Bouty (2009) add that there are chefs who base their inspiration on

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3. Research methodology

3.1 Sample

The research setting is the Italian haute cuisine, as defined by the Michelin Red Guide. The success of fine-dining restaurants is institutionally demarcated according to the restaurants' ratings by major guidebooks (Rao *et al.* 2003). Of these guidebooks, the famous Michelin Red Guide is internationally acknowledged as the most thorough (Ottenbacher and Harrington, 2010), and is recognized as one of the most important culinary books (Bouty and Gomez, 2013). It is a series of annual publications addressing tourism and gastronomy, and represents the largest global benchmark for assessing the quality of restaurants and hotels at national and international levels (Di Stefano *et al.*, 2015). In detail, the Michelin Guide provides a well-written description of each restaurant and a variety of other symbols to give readers insights into an establishment's ambiance, type of cuisine, specialty dishes, wine list, complementary services, etc.

Obtaining a Michelin star rating is a sign of creativity, quality and innovation, and it is considered one of the top achievements a chef can attain. In particular, the star symbols judge only what is on the plate, meaning quality of products, mastering of flavors and cooking, personality of the cuisine, value for the money and consistency of what the restaurant offers to its customers both throughout the menu and the year. Michelin star ratings are valued by the most relevant stakeholders, including restaurant owners, customers and critics (Durand *et al.*, 2007). The number of stars awarded assesses the chef's quality of craftsmanship (Svejenova *et al.*, 2010). For this reason, the Michelin rating (expressed on a one- to three-star scale) can dramatically affect the reputation and economic well-being of a restaurant (Woodward and Stierand, 2014). Stars are given to the restaurant and not to the chef. However, the success of the restaurant depends largely on the chef's work. Hence, when a chef leaves a restaurant, the stars are "suspended" until the next examination by the Michelin experts. A major criterion for awarding stars to a restaurant is "renewal" - the ability to offer creative and new recipes on a regular basis. The study of Michelin star chefs is therefore asking to focus on chefs who have engaged in frequent innovation as part of their professional success (Fauchart and von Hippel, 2006). The focus on the chef is regardless of whether he/she was the owner of the restaurant or an employee.

3.2 Measurements

The empirical analysis is based on primary data obtained from a survey of 132 Italian Michelin Star Chefs. In this context, Michelin status works as a proxy for a chef's successful generation and implementation of creative ideas. In fact, Michelin's criteria for awarding stars are the originality or the

individual signature dishes of a chef, together with consistent high quality. Thus, these criteria refer to both creativity and successful implementation of creative ideas (Lane and Lup, 2014).

To enhance external validity, the questionnaire was pretested at two levels. The first level of pretesting was conducted sequentially by three academic experts in the field of hospitality. The second level of testing was based on feedback from one Italian 3-star Michelin Chef. Feedback from the chef was obtained iteratively in two separate interviews (ranging from 20 to 40 minutes each).

The survey was addressed to the chefs of Michelin Star restaurants, including a cover letter oriented to explain the purpose of the research. The analysis was conducted from January to May of 2016. In January, an email was sent to all the chefs listed in the Italian Michelin Red Guide. After one month, those that had not replied were contacted directly by phone.

As the 2016 Guide includes 334 chefs (<http://www.scattidigusto.it/2015/12/10/guida-michelin-2016-tutte-le-stelle-dei-migliori-ristoranti-italia/>), the sample (of 132 chefs) represents 39.5% of the entire population of Michelin Chefs in Italy. Within the sample, 88% are male and 12% are female; 40% of the respondents are between 40 and 49 years old; 33% are over 50, while chefs under 40 comprise the rest of the sample (27%). The distribution of Michelin stars among sampled chefs is as follows: 83% have received one star, 11% two stars, and 6% three stars.

The questionnaire was developed and administered in Italian, the mother tongue of the target chefs. It consists of two parts. In the first part, questions are designed to provide chefs' demographic profile (such as age and gender) and their Michelin rating (number of Michelin stars and year of assignment of the first star). In the second part, questions are related to factors influencing the creative process and are presented as statements to which respondents indicated their level of agreement or disagreement by using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Appendix 1 provides a summary of the statements used in the survey.

3.3 Data Analysis Procedure

To determine the principal factors that influence the creative process in culinary activities, a preliminary exploratory analysis has been conducted by performing a Principal Component Analysis (PCA) on the items related to two groups - idea generation and idea transformation. The items identified for each group were selected based upon a literature review and interviews with experts in the field (academics and chefs).

The idea generation group is comprised of 16 items that measure the main dimensions of the idea generation stage by using a Likert rating scale from 1 (strongly disagree) to 5 (strongly agree). An example item is "Awareness about who we are and who we want to be". Four items specifically measure chefs' personal opinions regarding the characteristics of the idea generation process. An example item is the following: "The creative process is spontaneous and informal".

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The idea transformation group consists of 6 items. These items are measured by using a Likert rating scale ranging from 1 (strongly disagree) to 5 (strongly agree). An example item is: “The relationship with suppliers is a priority”.

PCA is a mathematical procedure that seeks to convert a set of correlated variables into a set of values of linearly uncorrelated variables called principal components. This technique is widely used in data processing and dimensionality reduction (Hair *et al.*, 1989). PCA redistributes all variance into orthogonal components where each principal component is a linear combination of all the original variables. PCA reorganizes variance into a new set of components that is equal to the number of original variables. The first component is a linear combination of variables, which maximizes component score variance and, therefore, captures most of the variance. In this study, PCA is employed by using a varimax rotation method.

4. Results and discussion

Results of the exploratory analysis reveals the factors that foster activities, actions and behaviors leading to a continuous flow of novel and useful ideas that can be turned into valuable and innovative products/services/solutions or procedures/methods and processes. The understanding of these factors provides useful insights to properly manage firms’ innovation processes and serves as a mainspring for the beginnings of innovation.

The PCA analysis, performed using STATA Version 14.1, identified eight components, all of them reporting eigenvalues greater than one. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (to establish the adequacy of the components extracted) was calculated. The KMO is an index (between 0 and 1) that indicates the proportion of variance among the variables that might have common variance. A value between 0.50 and 1.00 implies a satisfactory analysis (Kaiser, 1974). The computed index of 0.72 indicates that the analysis was satisfactory. However, in this analysis, only the first three variables (components) are retained and extracted as they displayed acceptable Cronbach’s alpha levels (employed to test the internal consistency of each factor). To further check to what extent the items included into the factor actually measure the same construct, the Spearman’s correlation index and the R²-adjusted are employed (Al-Osail *et al.*, 2015). The former takes into account the strength and direction of a bivariate relationship. The latter provides a measure of internal consistency in terms of the proportional change in the dependent variable (i.e. the factor score as a continuous variable) compared to the changes in the independent variables (i.e. the items included into the factor), correcting for the number of parameters within the model.

The proportion of the total variance explained describes the relative weight of each factor in the total variance and the cumulative variance indicates the amount of variance explained (Escoffier and Pagès, 1988).

As Table 1 illustrates, the three components accounted for the 31% of the total variance. The first factor accounts for the 11% of variance and has been labelled “within-individual components”, as it consists of items related to the chef’s contribution in terms of personal knowledge, skills,

competences and behavior. The second factor (“external sources/outside components” - explaining 10% of the variance) includes items related to the interaction between the chef and external sources such as customers and suppliers. The third factor (“environmental/contextual components” - also explaining 10% of the variance) contains attributes related to the company management as well as the business environment. The last two factors present a Cronbach’s alpha between 0.60 and 0.65 that could be considered questionable. Nevertheless, the two factors still present an internal consistency rather high in terms of R²-adjusted (equal to 0.93, for the first factor, and 0.86, for the second one) and, hence, both can be regarded as meaningful. Moreover, statistically significance Spearman’s bivariate correlation for all of the items, at the 1% level of significance, was found.

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Tab. 1: Factors contributing to the creative process

	Variable Contribution	Variance explained % (proportion)	Cumulative Variance % (cumulative)	Cronbach's alpha	Spearman's correlation	R-squared adjusted
Component 1: Within-Individual Components		0.11	0.11	0.77		0.85
I am aware about who I am and who I want to be	0.37				0.55*	
My creative process is spontaneous and informal	0.54				0.78*	
My creative process is influenced by my personal characteristics (emotional status, curiosity, observation)	0.46				0.86*	
Component 2: External Sources/Outside Components		0.10	0.21	0.60		0.93
In creating new products I often start by trying to improve existing products	0.43				0.70*	
My relationship with suppliers is a priority	0.32				0.58*	
The testing of a new product, through trial and error, is imperative	0.36				0.58*	
The accumulated learning and experience from customers and their behavior is essential	0.55				0.76*	
Component 3: Environmental/Contextual Components		0.10	0.31	0.65		0.86
I think that financial sustainability is achieved with cost control. In creating new products I often start by trying to improve existing products	0.57				0.81*	
I think that the willingness to utilize a variety of techniques is important	0.47				0.62*	
I think that it is important to adapt to the current situation (e.g. the economic crisis)	0.35				0.58*	

*statistically significant at the 1% level

Source: our elaboration

According to the respondents, the most important factors that contribute to the creative process are related to the within-individual components. In detail, these components are expressed in terms of awareness about themselves and their personal characteristics (emotional status, curiosity, observation, etc.) that lead to a spontaneous and informal creative process.

The contribution of the external sources/outside components reveals the importance of interaction with customers (to test new products) and suppliers and identifies the relevance of the analysis of existing products. The latter is seen as a fundamental step in proposing new products for the market. Lastly, the environmental/contextual component assumes a relevant practical role. Specifically, respondents attach importance to financial sustainability as well as the availability of adequate techniques. Another basic requirement captured in this component is the need to consider external conditions, such as the economic crisis, that may precipitate the need to pursue different strategies.

In summary, it is important to note that the three components are almost equally important in explaining the overall variance. Therefore, these components and the respective items contained within them are all important in influencing the creative process in haute cuisine.

5. Conclusions

The paper is focused on creativity in haute cuisine restaurants. It is inspired by the belief that creativity is a basic source for innovation processes in haute cuisine activities. The goal has been to explore the main factors influencing the creative process of Michelin starred chefs and ultimately culinary innovation.

The study is included in a work-in-progress research. The exploratory analysis reveals three main factors that affect creativity very differently. These three factors are viewed by chefs as important antecedents to a continuous and sustainable flow of novel and useful ideas that generate the innovative dishes, services, and technical procedures necessary for success in a challenging market where consumers are increasingly sophisticated, discerning and demanding.

The three factors are found to be nearly equally important. Slightly more important than the other two is the within-individual factor, which captures the chef's personal contribution to creativity in terms of relevant knowledge and creative-thinking skills, observation, ability (e.g. divergent thinking), personality (e.g. self-esteem), motivation, emotional state, values, and social influences (e.g. rewards). Most important from the within-individual factor is that the creative process is kept spontaneous and informal allowing for unconstrained thinking and experimentation.

Another factor (external sources/outside components) confirms that creativity is enhanced or constrained by different items/components beyond the chef. This is consistent with the assertion of Amabile (1983, 1996) and Shalley *et al.* (2004) that the surrounding environment (e.g. the interactions between the individual and the social context as well as the physical environment) prominently increases or inhibits creativity. An

important component of the external environment factor is the receptivity of customers to the innovative ideas/products. While seemingly obvious, respondents stress that understanding receptivity to a new dish (innovation) requires accurate analysis and interpretation of customer behavior. Also important externally, perhaps more incrementally, is the analysis of ways to improve existing products or combinations of products/services. Finally, the interactions and the relationships with diverse suppliers are described as catalysts in the early stages of idea creation and development. In fact, these external parties are viewed as direct or indirect sources of information and knowledge that contribute to the generation of ideas and ultimately lead to new and improved products, services or ways of doing things.

The last factor (environmental/contextual components) represents the need to monitor financial sustainability and control costs. Without this significant necessary analysis, even innovative ideas/products which are well-received by customer target groups and by haute cuisine critics, may not be financially viable to develop, implement, and consequently sell. This also leads to the consideration of the availability of adequate techniques to produce a particular innovation.

6. Theoretical and practical implications

The present research contributes to the existing literature in two ways. First, it extends knowledge regarding how creativity is influenced by different factors in cultural and creative industries. More specifically, in the restaurant sector and the broader hospitality industry, creativity is increasingly attracting the interest of scholars because it is recognized as crucial for maintaining a strong position in the market that must be sustained over time. This is also consistent with the findings of Presenza *et al.* (2017) where successful innovation processes are shown to arise from a trial-and-error approach, which is only possible if the chef has a genuine entrepreneurial spirit. In this sense, entrepreneurial spirit refers to the drive towards identifying business opportunities and persistently taking risks to pursue them.

Second, it contributes to the academic debate on creativity and innovation in haute cuisine activities. It suggests key factors that effectively stimulate actions and behaviours leading to a continuous flow of novel and useful ideas that can be turned into innovations. Moreover, it empirically identifies factors that have a significant influence on chef creativity allowing for experimentation with original dishes aimed at providing valuable culinary experiences to customers. These findings are aligned with those of Amabile (1983, 1996) who, in other settings, finds that the creative process is influenced by within-individual components, the surrounding environment, and external components. Results of this study have straightforward implications for managerial capabilities. Specifically, managers must be capable of understanding both the influence of individual characteristics and environmental context as having the potential to either hinder or foster creativity. That is, managers should pay attention to the

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influence of individual-context interaction on individual creativity. For example, managers should give chefs the time, resources and mandate to constantly experiment. This allows the restaurant to fully benefit from the chefs' personal talent, creativity and desire to innovate.

Managers should also encourage and facilitate interactions and relationships between the chef and other restaurant staff as well as with external parties, such as suppliers and critics. These interactions are seen as fundamental to gaining exposure to new ideas and information that lead to innovation and the creation of novel combinations of products, services, and experiences. Thus, it is important for managers to facilitate an organizational culture within the restaurant that encourages spontaneity, free thinking and communication.

The study has limitations that offer scope for further research. The analysis is limited to the Michelin Star Chefs of Italy. Therefore, further research on haute cuisine in various and different countries could be useful to understand the geographic generalizability of the observed patterns and findings and to avoid size bias. Additional research could include other hospitality sectors and the broader creative and cultural industry in order to assess the generalizability across industries as to what stimulates creativity and innovation processes and, consequently, the success of organizations in these settings.

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