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Passion and Entrepreneurial Performance: An Empirical Analysis of Italian SMEs.

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"The present work is original and has not already been submitted, in whole or in part, for the achievement of an academic qualification in other Italian or foreign universities. The candidate declares that all the materials used during the preparation of the thesis have been indicated in the text and in the section "Bibliographical references" and that any textual quotations are identifiable through the explicit reference to the original publication ".

Signature:

Arkov Vladimir

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Executive summary.

PURPOSE OF DISSERTATION. Success always occupies people's minds and the cult of those entrepreneurial icons, including Elon Mask of Tesla and Space X, Steve Jobs of Apple, Michael Dell of Dell, Mark Zuckerberg of Facebook, and others is a clear example of entrepreneurs nowadays stars of the modern civilization. For many decades, scientists have been working on various research to decipher the parts of success and give people the recipe for that. Over this time, not only the definition of success has changed significantly but also the factors we consider while trying to achieve the knowledge of triumph. Recent trends try to take into account more and more factors about personal traits and how these traits define not only the propensity to become an entrepreneur but even their following achievements. Mental characteristics and health, personal formation, and education are more and more considered so we decide to focus on some of them regarding different approaches to such a definition as passion. How do young-age activities that individuals used to be passionate about define your current success? How about your present conditions? What sort of passion do you feel toward your own business? How it shapes its performance? Success and passion are our focus and we try to find some answers regarding their relationships.

EMPIRICAL RESEARCH. In our research, we focus on passion from different points of view. First, we consider the activities that future entrepreneurs used to be passionate about before they become real actors in the business scene. The link between personality and entrepreneurship is presented in many studies but we decide to look at the period when the formation of the personality is still going on. Sports and artistic activities at young ages from the future personal traits of people and thus considering these doings we wonder if they might be predictors to not only becoming a future entrepreneur but also becoming a successful one. It is a new page we try to open and write about how your previous ages might define your future. Additionally to that, we consider the education level and its moderation role in this relationship between young age activities and your performance as an entrepreneur. Second, we analyze passion impact from a well-elaborated existing theory point of view. To do so, we apply the Dualistic Model of Passion that was created by Vallerand and his teammates (2003) in which they present the two types of passion as harmonious and obsessive ones and measure entrepreneurial passion using the Passion scale. Additionally considering the direct effect on performance, we being motivated and inspired by previous studies decide to control the gender factor as a moderator for these categories of passion

and success. Eventually, performance was measured as the average ROE (return on equity) for the company over the observed period. The dataset for our study contains information about 202 Italian firms for the period from 2012 to 2015 that represent small and medium enterprises and it is collected from two different sources. The telephone survey was organized and done collectively by researchers from five different universities (the questionnaire about various personal entrepreneurial characteristics). AIDA provided data about these companies' performance for the mentioned period.

In our research, we considered five various hypotheses regarding the link between young-age activities that individuals were passionate about, current harmonious and obsessive passions, and entrepreneurial success. To test them we applied regression analysis theory using the SPSS statistics package. The results showed us that such activities as sports and art at young ages are positively related to the future entrepreneurial success of individuals. Moreover, the inverted relationship to the performance in moderation effect of education on sports activities was discovered. Surprisingly, the statistically significant negative link between success and the harmonious passion of an individual also takes place. Moreover, adding gender as a moderator, we still observed the negative relationship between that sort of passion and company performance. Obsessive passion eventually never appeared as a statistically significant variable in our models.

STRUCTURE OF THE THESIS. We include three main chapters in our study. The first one contains the definitions and relevant literature review regarding entrepreneurial success. We mostly focus on the idea of success being a multidimensional construct providing various points of view regarding that over the last decades. The same chapter contains the latest ideas about entrepreneurial personality. We are based on the Big Five traits model, collect relevant information in terms of entrepreneurial personalities and update the model adding a few latest characteristics from other research. Thus, we build the connection between entrepreneurial performance and personality which is the basement for our study.

The second chapter brings up more details about our hypotheses and their formalization building a theoretical framework. We focus our attention on various sorts of passion. Initially, we consider the activities that current entrepreneurs used to be passionate about at their young ages, such as sports or art. Further, we build the theoretical recap regarding the passion of our individuals nowadays and classify it according to a Dualistic Model of passion characterizing both harmonious

and obsessive types of passion. Eventually, considering the first chapter's elaborations and passion in various forms, we define five hypotheses that construct our final theoretical framework.

Finally, in the third one, we begin with the methodology and dataset sample details. We continue with testing our assumptions, explaining the models we use, and providing the results for each of the hypotheses. Further, we discuss the results and the most interesting observations that we have elaborated on in our research comparing them with already existing ones and enriching them with our thoughts. Eventually, in the last chapter, we report the limitation we faced, coupled with suggestions for future research, and end up with potential implications.

POTENTIAL IMPLICATIONS. Eventually, there are a few practical possible implications we would like to propose. In our work, we consider it in the education field where we focus on art activities for children and teenagers in case we would like to positively impact their potential future entrepreneurial performance. Human resources management could use the connections we elaborate over our research to analyze their future employees. Meanwhile, the results could be used for potential hiring and implementation in getting more and more popular intrapreneurial practices.

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Chapter 1. Entrepreneurial success and personality.

1.1. Introduction.

Entrepreneurship stimulates interest not only from the ruling elites, who see this phenomenon as an antidote to contemporary economic and social problems, but also from scientists whose approach to examining entrepreneurship is becoming increasingly sophisticated. Entrepreneurship also interests people seeking their own professional development as an alternative to salary-based employment and to exerting effort into accumulation of their employer's wealth. The reason behind this interest is that entrepreneurship is very beneficial from both societal and economic perspectives (Staniewski, 2016). Entrepreneurs are moved by idea of the success. However, due to the existence of a variety of entrepreneurs, the understanding of success also differs. One entrepreneur perceives success as, for example, higher income, whereas another entrepreneur might believe that success equals proving one's effectiveness (Vesper, 1990).

However, who are those ones who seek for that success and create new ventures? Their personalities recently have been a matter of much research. For example, Stewart and Roth (2001, 2004) found entrepreneurs to be significantly higher in risk propensity than managers, and Collins, Hanges, and Locke (2004) and Stewart and Roth (2007) found entrepreneurs to be significantly higher on achievement motivation. Zhao and Seibert (2006) performed a more comprehensive analysis by using the Five Factor model (FFM) of personality to categorize the diverse range of scales used in previous research on personality and entrepreneurial status.

In this chapter, we look at the evolution of criteria for an entrepreneurial success – a crucial point of our research – over the years, and talk about entrepreneurial personalities who are the central actors in here, mostly considering the FMM, but having some additional characteristics to be viewed.

1.2. Entrepreneurial success.

Success is the state or condition of meeting a favorable or desired outcome (Merriam-Webster dictionary), sometimes seen as opposed to a fiasco. The criteria for success are relative to a particular observer or belief system and usually depend on context (Wikipedia). It is relative and while one individual might consider it a success another one considers it a failure.

Research suggests that success is a multidimensional construct Combs et al. (2005). Venkatraman and Ramanujam (1986) classified enterprises' performance from financial and operational points of view. The same company could be analyzed in terms of indicators of financial performance to talk about economic achievements, while indicators of operational performance (for instance, innovativeness) are factors that may lead to financial performance measures.

Moreover, Combs et al. (2005) presented in their article the evolution of performance measurement. The table 1 taken from that source represents the consolidated results. Here is an overview of the performance dimensions and measures defined previously. Thus, Murphy et al. (1996) identified four main performance dimensions such as efficiency, liquidity, profit and size. They also suggested survival as an additional dimension. Woo and Willard (1983) factor analyzed 14 performance measures and similarly underlined four main dimensions. Rowe and Morrow (1999) used confirmatory factor analysis to show another possible classification based on financial, market and their personally developed subjective dimension that includes a measure based on so-called fortune reputation survey. Additionally, Tosi et al. (2000) factor analyzed 30 performance measures to recognize eight dimensions that are mostly centered on financial measures in various context. Finally, Maltz et al. (2003) considered senior managers to define five performance dimensions, in addition to financial dimension they considered market/customer with a company relation, processing, employees development and future prospective in terms enterprise strategy. Eventually, all these studies confirmed and agreed on the point that performance is a multidimensional structure. However, depending on the qualitative or quantitative analytical method, data source, and measures examined, the dimensions are defined distinctly.

Table 1. Organizational Performance Studies.

Study	Dimensions Identified	Measures
Woo and Willard (1983)	Profitability	ROI, ROS, Cash flow to investment
	Relative market position	Product quality, new product development, and costs vis-à-vis competitors, product R&D, process R&D
	Change in profitability and cash flow	Variation in ROI and cash flow to investment ratio
	Growth in sales and market share	Revenue growth, market share, market share gain
Murphy, Trailer, and Hill (1996)	Efficiency	ROE, ROI
	Liquidity	Quick ratio, current ratio
	Profit	EPS, net income
	Size	Net sales, number of employees
Rowe and Morrow (1999)	Subjective	*Fortune* reputation survey on management quality, financial soundness, value as long term investment, wise use of corporate assets
	Financial (accounting)	ROA, ROI, cash flow over equity
	Market	Sharpe, Treynor, Jensen's alpha/ unsystematic risk
Tosi, Werner, Katz, and Gomez-Mejia (2000)	Absolute financial performance	Pre-tax profits, net income, stock price change
	Change in financial performance	Change in pre-tax profits, change in ROE, changes in net income
	Stock performance	EPS, 5 year average EPS, 5 year average EPS vs. industry average
	Return on equity – short term	ROE, ROE vs. industry average
	Return on assets	ROA, ROA vs. industry average
	Return on equity – long term	5 year average ROE, 5 year average ROE vs. industry average
	Market returns	2 year average market return, market return
	Internal performance indicators	Changes in working capital, market to book
Maltz, Shenhar, and Reilly (2003)	Financial	Sales revenue, profit margin, revenue growth
	Market/customer	Customer satisfaction index, customer retention rates, service quality
	Process	Time to market, quality of NPD and project management processes
	People development	Retention of top employees, quality of leadership development
	Future	Depth of quality of strategic planning, anticipating/preparedness for environmental changes

Source: James G. Combs et al. (2005)

There are some more ways to measure and define entrepreneurial success. For instance, Shane et al. (2010) use some tangible indicators such as business survival, growth, and profitability. Powell

and Eddleston (2013) measured success in terms of business performance and growth in employment. Six financial indicators were selected to do so: sales growth, profitability growth, return on equity, return on assets, profit margin, and self-financing. Davidsson and Honig (2003) suggested to control it by evaluating entrepreneurial achievements and activities conducted to manage the business successfully. Meanwhile, researchers started to talk more and more about psychological factors to describe success: Masuo et al. (2001) viewed performance as being successful based on the achievement of personal goals, or even reaching social welfare (Leutner et al., 2014). Shane et al. (2010) proposed that entrepreneurial success encompasses any behavior that contributes to business innovation and growth (corporate entrepreneurship) or social welfare (social entrepreneurship). Similarly, the final stage of Baron and Henry's (2011) process model of entrepreneurship, focused on entrepreneurial genesis, includes aspects that describes performance in two ways. Organizational outcomes represented by firm performance and survival. While founder outcomes seen as career satisfaction and health. Moreover, within the same research on women's entrepreneurship, five categories of success/performance outcomes have been studied:

- successful venture launch;
- psychological and health outcomes;
- firm profitability/founder income;
- firm growth;
- firm survival.

Having considered and talked about different concepts and approaches to measure entrepreneurial success and seeing that now it is not only about the financial measures, we would also consider the personality of a modern entrepreneur analyze the main characteristics that are intrinsic to them and their profession.

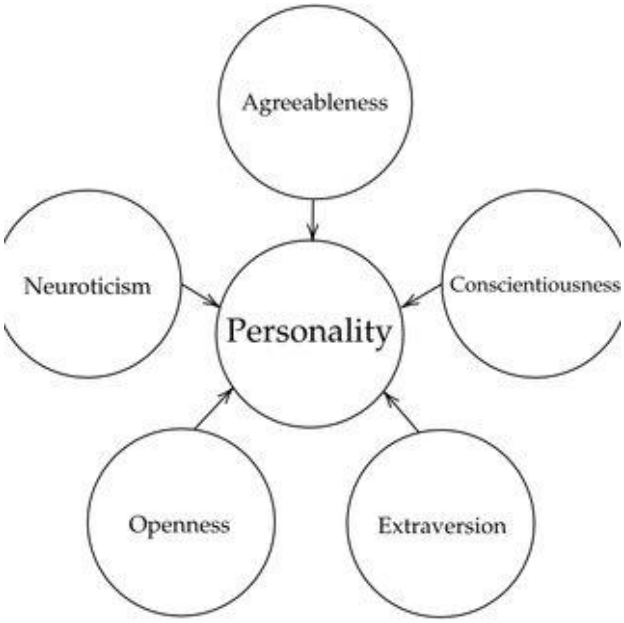
1.3. Entrepreneurial personality.

There are various models could be considered to describe personality types nowadays. Among the main options are the six-factor HEXACO model, the Supernumerary Personality Traits, a psychobiological model of personality, the Dark Tetrad traits, and others (Feher and Vernon, 2021). However, in terms of entrepreneurial personality, the most developed one is the Big Five traits model (Costa and McCrae, 1992). In that section, we describe and add some extra personal traits regarding entrepreneurs and the modern perception of that model.

1.3.1. The Big Five traits model.

To talk about entrepreneurial personality we choose the Big Five traits model that the researchers at the National Institutes of Health, the University of Michigan at Ann Arbor, and the University of Oregon identified after surveying thousands of people. In the following section, we descried these five components and a few additional personal factors regarding entrepreneurs.

Figure 1. Big Five personality dimensions and personal traits of entrepreneurs



Source: Personal elaboration, based on McCrae and Costa research (1987).

Conscientiousness. Conscientiousness is a personality dimension that describes an individual's level of achievement, work motivation, organization and planning, self-control and acceptance of traditional norms, and virtue and responsibility toward others (Costa and McCrae, 1992; Roberts et al., 2005). Already in the early second half of the last century, McClelland (1961) argued on achievement motivation. According to her people who are more motivated for achievement are mostly involved to work conditions in which they have personal control over outcomes, experience the reasonable risk of failure, and practice direct and timely feedback on their performance. Since entrepreneurship offers more of these conditions that type of personality would be attracted to that more than to other traditional employment forms. Additionally, work goal orientation and perseverance are also likely to be associated with the entrepreneurial role being typically a part of the conscientiousness element. Thus, perseverance is supposed to be demanded by entrepreneurial activities (Markman and Baron, 2003), and motivation, persistence, and hard work are especially

emphasized (Baum and Locke, 2004). Work goal orientation, hard work, and perseverance in the face of daunting obstacles to achieve one's goals are closely associated with entrepreneurship in the popular imagination (Locke, 2000). Conscientiousness is considered the main work motivation factor in many studies (Costa and McCrae, 1992; Gellatly, 1996) being the best predictor of successful work performance for any sort of job and occupation (Barrick and Mount, 1991). Particularly, enterprise growth was confirmed to be provoked by motivational traits as antecedents of specific entrepreneur behaviors (Baum et al., 2001).

Openness to experience. Openness to experience is a personality trait that describes someone who is intellectually curious, imaginative, and creative; someone who seeks out new ideas and alternative values and aesthetic standards. McCrae (1987) argued that it is empirically distinct from mental ability. However, it is linked with sides of intelligence related to creativity (e.g., divergent thinking).

Creativity and the tendency to innovate are always connected to entrepreneurial activity and their perception. They bring innovative change and a person who invented the definition of the entrepreneur (Schumpeter) said 'creative destruction'. In the popular imagination, entrepreneurs are regarded as heroes who pursue their creative vision even in the face of overwhelming resistance from more conventional thinkers (Locke, 2000). The fact of being self-employed is already showing the tendency to be non-conventional and creative in comparison with a traditional way of being employed in an enterprise.

The possibility and capacity to recognize the early opportunity are related to imagination, creativity, and openness to new ideas (Ciavarella et al., 2004; Morrison, 1997). Entrepreneurs also count on their creative skills to face daily problems, or define the company strategies considering various conditions and often-limited resources available (Baron, 2007; Zhao and Seibert, 2006).

Neuroticism. Emotionally stable people are described as calm, steady, even-tempered, and hardy. Similarly, entrepreneurs are usually described in the same manner as hardy, optimistic, and steady dealing with social pressure, stress, and uncertainty (Baron, 1999; Locke, 2000). Emotional stability is demanded in conditions of a constant physical and emotional burden they take still moving forward in sort of situation where others would be discouraged by obstacles, setbacks, or self-doubt. Entrepreneurs face a high level of individual responsibility for the success or failure of their companies. It contains a heavy personal workload, critical decision-making with little precedent as a guide, and often considerable financial consequences at stake. Opposite personalities

with a low level of emotional stability are usually not eager to face the personal responsibilities and anxieties connected with the entrepreneurial role. Meta-analysis showed emotional stability being consistently and positively related to job performance (Barrick and Mount, 2001).

Entrepreneurship in comparison with the traditional types of employment is typically more challenging and stressful. The decision to begin and operate a new enterprise often includes unpredicted challenges and outcomes provoking a high level of uncertainty. Thus, emotional stability is positively related to leadership emergence and effectiveness in entrepreneurship which was shown in the meta-analysis by Judge et al. (2002). Entrepreneurs high in emotional stability are more likely to cope with problems and high stress through positive thinking and direct action (Costa and McCrae, 1992). They behave calmly and confidently and focus on the tasks at hand even under stress leading to better entrepreneurial performance.

Extraversion. Gregarious, outgoing, warm, and friendly people are classified as extroverts. They are usually energetic, active, assertive, and dominant in social situations. Moreover, optimism, positive emotions, excitement, and stimulation seeking are typical of them. In line with this idea, Baron (1999) and Locke (2000) claimed that people's perception of entrepreneurs contains Assertiveness, energy, a high activity level, and optimism. Costa et al. (1984) argued using Holland's vocational typology that extroverts are attracted to entrepreneurial activities. It seems to be stimulating and exciting in comparison with traditional occupations which makes it more attractive to extroverts. The possibility of appearing as a leader of the new enterprise is another convincing factor for that type of personality (Vecchio, 2003).

Many various entrepreneurial duties are directly associated with the extroverted type of personality. They are commonly involved in social interaction, including the communication of vision and enthusiasm, building networks with outside backers and other constituents, establishing relationships among employees and partners, and negotiating deals with suppliers and customers (Markman and Baron, 2003). Leadership and entrepreneurship are likely predicted with the stronger extraversion personality that was shown with the meta-analysis of Judge and coauthors (2002).

Agreeableness. Agreeableness is a dimension that assesses one's attitude and behavior toward other people. Individuals with a high level of it are usually described as trusting, altruistic, cooperative, and modest. Additionally, they are characterized by sympathy, concern for other's needs, and a tendency to defer to others in the face of conflict. Oppositely to them, people are named being

manipulative, suspicious, or ruthless. Barrick et al. (2003) claimed that they tend to be occupied by social work and teaching, rather than entrepreneurship since it gives a lot of social interactions and creates benefits for that others. Cable and Shane (1997) argued that agreeableness is helpful to build a trustful connection with venture capitalists and among founders (Eisenhardt and Schoonhoven, 1990) considering it crucial for success.

However, it is not always fruitful to have a high level of agreeableness since it could lead to gullibility and exploitation by others. Likely, there is no long-term experience to develop strong business relations with their clients, partners, investors, and other stakeholders, multiplied by typically limited resources and a little margin for error. The ability to drive hard bargains, look out for one's interests, and even manipulate others may be more important skills for survival and growth (Zhao and Seibert, 2006).

1.3.2. Additional characteristics.

In studies about entrepreneurship, a few additional characteristics are usually connected with entrepreneurial personality and help framing the issue in a more nuanced way.

Risk propensity. Risk propensity can be defined as a personality trait involving the willingness to pursue decisions or courses of action involving uncertainty regarding the success or failure outcomes (Jackson, 1994). It is considered a separate personality trait, from the five-factor model that was defined by Paunonen and Jackson (1996). Many researchers claim a propensity to risk is a significant part of the entrepreneurial character (Baron, 2007; Markman and Baron, 2003; Stewart and Roth, 2001), sometimes stating the risk-taking propensity as a 'hallmark of the entrepreneurial personality (Begley and Boyd, 1987). Baron (1999) and Chen et al. (1998) found risk propensity as a part of people's stereotypes about entrepreneurship. No doubts that it is a crucial part of their personalities.

However, it is worthy to mention that some scholars define entrepreneurs distinctly as those who are people who manage, minimize, or reduce risk (Miner, 2008). Chen et al. (1998) argued both "risk taker" and "risk reducer" roles for entrepreneurs, whereas McClelland (1961) claimed a moderate preference for risk among successful entrepreneurs. Risk propensity to entrepreneurial status reflects these conflicting points of view also by empirical results (Miner and Raju, 2004; Stewart and Roth, 2004).

Need for achievement. Finogenow (2017) described it as a desire to achieve excellent results by establishing high standards and striving to attain them. That need often defines individual actions and decisions in a workplace context provoking people to get involved in uncertain tasks and pick the more difficult uncertain goals. Usually, these people get satisfaction only in case of achieving them. Quite many researches showed that entrepreneurs usually have a high level of need for achievement (McClelland, 1965; Korunka et al., 2003; Wu et al., 2007). People with a high need for achievement tend to be usually more habitually stressed than others but at the same point, they are more able to experience positive effects while facing complex and uncertain tasks even better dealing with negative feedback (Yang et al., 2015). Thus, they also tend to stress and even look for that kind of situation.

Locus of control. In 1954, Julian Rotter presented his concept of a locus of control explaining people's ability to influence and control their own destiny. It is described using two main dimensions: external (outside) locus of control, and an internal (inside) one. There is no separated measure for the locus and it is presented as a continuum that goes from a completely external end from one side to an absolutely internal end at another pole. There is nobody having an extreme 100% of internal or external locus of control. Usually, individuals have their locus of control degree somewhere in between.

Figure 2. Locus of control continuum

Source: Personal elaboration, based on Rotter research (1954).

A better understanding of the differences between two categories could be found in the figure below. In detail, an external locus of control means that person believes that outcomes and circumstances are made and defined by external reasons and they believe in fate and environmental features. They are sure that success depends on chance, luck, and powerful individuals or institutions. Moreover, success of a new venture is far away from your own efforts, skills and capabilities. Krause and Stryker (1984) argued that in case of moderate external locus people are exposed more to impacts of economic stress and jobs. DuCette and Wolk (1972) argued that those who are more tend to external locus are usually attached to such characteristics as extreme risk

preference, low persistence, fluctuations in aspiration level and finally are more extreme in success estimation when they talk about academic, occupational or cognitive activities.

Oppositely, the internal locus of control individuals are so-called go-getters. They believe that success or failure depend on their own actions and efforts, typically undertaking responsibility for their job and behaviors. People with an internal locus of control have lower job stress levels and perceive higher job satisfaction level as well as job performance (Chen and Silverthorne, 2008). They usually more convinced about their control and ability to keep it for everything, therefore when something undesirable happens they might feel more frustrated and disappointed. These people may perceive too much personal responsibility for some stressful event and it may lead then to a higher level of anxiety and even depressive reactions. Thus, they lose the ability to handle with changing situations and difficulties that appear constantly during lifetime.

Entrepreneurs are more resilient to knock-backs and are characterized with a significant but mild internal locus of control (Fowle, 2019). Krause and Stryker (1984) claimed that individuals with a moderate internal locus of control orientations handle more effectively with stressful conditions than their counterparts whose locus of control is described as extreme internal, extreme external or moderate external.

Figure 3. Characteristics of a dominant internal or external locus of control

Internal Locus of Control	External Locus of Control
Take responsibility for their own actions	Blame outside forces for their circumstances
Less influenced by the opinions of others	Credit luck or change for any success
Work hard to achieve the things they want	Don't believe they can change their situation through their efforts
Feel Confident in the face of challenges	Feel hopeless or powerless in theface of difficult situations
Report being happier and more independent	More prone to experiencing learned helplessness

Source: *personal elaboration.*

1.4. Conclusion.

In this chapter, we have summarized the theoretical background and development for the definition of success over the last decades in various studies. We considered different dimensions for the entrepreneurial performance approaches starting with traditional financial factors and finishing with modern psychological theories.

Considering these modern studies for success, we additionally provided actual analysis for the entrepreneurial personality mostly based on the Big Five traits model. We talk in detail about conscientiousness, openness to experience, neuroticism, extraversion, and agreeableness in a business context. Moreover, we elaborated this concept by bearing in mind three other personal characteristics regarding entrepreneurs such as risk propensity, need for achievement, and locus of control. In the next chapter, we finalize a theoretical framework for our thesis defining the hypotheses to be analyzed.

Chapter 2. Theoretical framework.

2.1. Introduction.

In the first chapter, we gave the review for the definition of success in an entrepreneurial context and considered the personality traits of those who usually tend to, and are involved in, entrepreneurial activities. Therefore, our next step is to connect these personalities and their performance considering specific conditions that might shape and define their relationship.

First, we will talk about the young ages of future entrepreneurs, and consider two categories of activities that might have shaped their personal traits, and thus be significant for their future entrepreneurial success. Researchers actively study the question of sport as a factor defining your entrepreneurial future. For example, an emerging stream of literature on sports entrepreneurship takes place, which has primarily focused on conceptually examining entrepreneurial activity during and after an athlete's career (Ratten, 2015, 2018; Pidduck et al., 2020; Wang et al., 2021). We will try to widen the category from professional athletes who are usually studied to those entrepreneurs who used to be passionate about sports in their before entrepreneurship ages and see how sport and success are connected in that case. Moreover, another sort of activity we will discuss is the art and creative ones in young ages of future entrepreneurs. We talk about a long-lasting topic of creativity and entrepreneurship analyzed together. Thus, already in 1990, McMullan and Long argued about creativity affecting the ability of new venture creation. Discussion about how to measure the impact of design on a firm's performance (Penaluna and Penaluna, 2009) is always in the air. Therefore, we also try to contribute here.

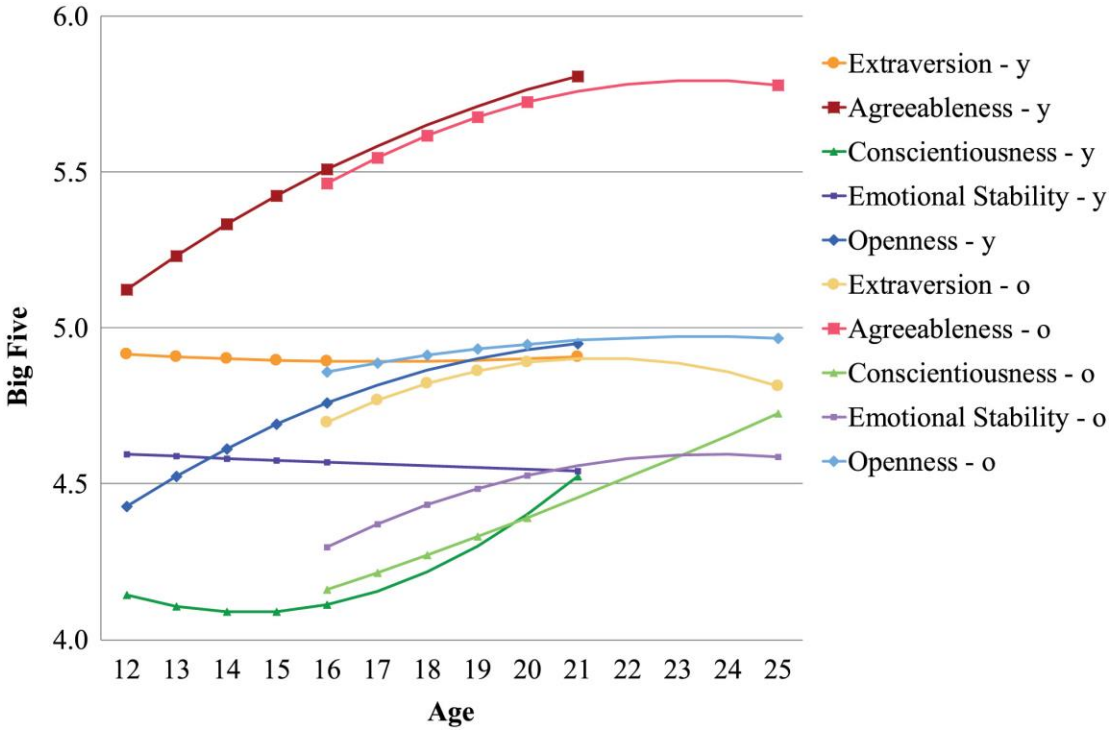
Second, moving our attention from the past shaping personality period, we consider the current conditions of entrepreneurs talking about their passion for their businesses. We talk about the Dualistic Model of passion proposed by Vallerand and his colleagues (2003) and see the link between entrepreneurial performance and different stages of passion in the Italian context.

Eventually, in this chapter, we present five hypotheses we want to focus on in our research and will test and discuss in the next chapters.

2.2. Childhood passions, success, and their moderation.

Because personality traits play important role in entrepreneurial activity, in couple with the knowledge that these traits shaped at in early age (see fig. 4), we first look at activities that could shape these traits and are described as a passion by individuals themselves.

Figure 4. Personality development and life transition



Source:Van Dijk et al. (2020).

2.2.1. Entrepreneurs as athletes.

In a chapter one we described in details the personal traits typical to entrepreneurs but researches paid lot of attention to analyze athletes' personal traits as well. Communalities related to both sports and entrepreneurial activities have been observed previously. Such qualities include the need for achievement, innovativeness, stress tolerance, the need for autonomy, and a proactive personality (Rauch and Frese, 2007). Zhao and Seibert (2006) described entrepreneurs as emotionally stable, similarly extroverted, open to new experiences, and conscientious. Meanwhile, Tok (2011) published the next features for the regular sports participants having a lower level of neuroticism, higher level of extraversion, and openness. Athletes and entrepreneurs are faced with uncertainty constantly and need to address that by tapping into emotional stability. Thus, Bryan et al. (2019) explained a systematic review of work and sport as a reason to reveal the relevance of resilience.

Their performance under pressure and ability to deal with failure in time and resource-limited conditions are making similarities undoubted (Gottschling et al., 2016). Moreover, they predominantly have a greater propensity for risk (Zhao et al., 2009; Diehm and Armatas, 2004). This risk includes the social risks related to the limited time that could lead to social isolation from friends and families (Fernet et al., 2016). Additionally, the health risk in terms of physiological and psychological strains comes with the continuous necessity of being available multiplied by the great responsibilities (Dijkhuizen et al., 2016). That gives us the idea of personal similarities between both.

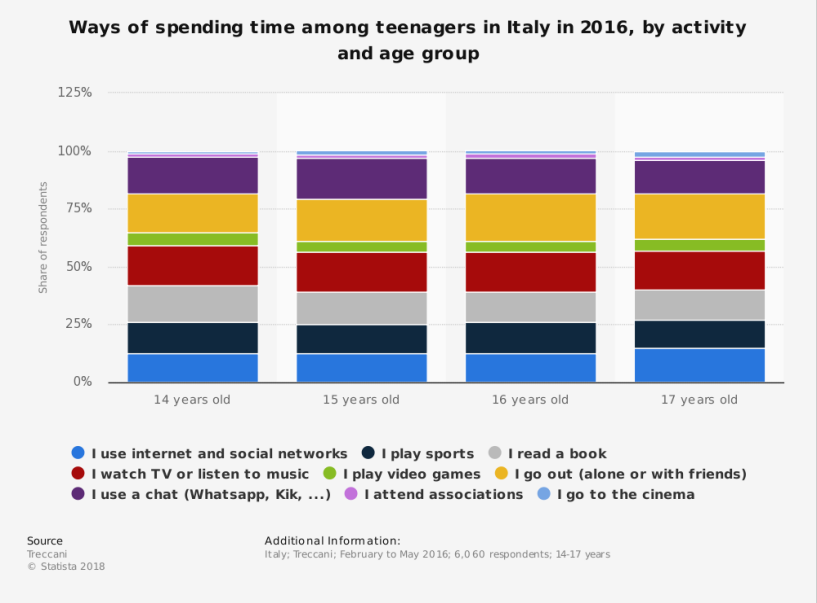
Different categories of people were researched regarding sports and entrepreneurship relations. Team sport participation leads to solid skills in leadership and teamwork (Astin, 1977; Cotteril and Fransen, 2016) and in external relationship management and development (Loughead et al., 2006) that are beneficial in the entrepreneurial processes. Additionally, team sports improve communication, coordination, and information processing, especially for young athletes (Reimer et al., 2006), and eventually are useful in the team formation phase and the enterprise functioning in general (Klotz et al., 2014). The link between sports students and entrepreneurship was previously studied. In Slovakia, the Global University Entrepreneurial Spirit Students' Survey claimed sports students be, after the students of the science of art, the second most intensively involved in entrepreneurial activity (Holienka et al., 2018). According to Jones and Jones (2014) sports students are enterprising by nature due to their prior experience connected to coaching and training constantly already being in an environment similar to the entrepreneurial one. Holienka et al. (2018) compared sports students and pedagogy ones in their tendency to become entrepreneurs. The first ones have a significantly higher propensity in all five components of personality traits. Steinbrink et al. (2019) examined the athletes' personality traits to match the detected directions for entrepreneurial intention and success. Thus, in terms of personalities and differences involved in sports people, it was studied to some extent.

Just very little research tried to examine early life activities and the individual's propensity to become an entrepreneur. A recent study by Pervun et al. (2022) analyzes the involvement of individuals in competitive sports during their formative years and the likelihood of the sequent new venture creation in adulthood. Sports play a crucial role in childhood personality shaping, both mentally and physically. Moreover, sports are extremely widespread among people in modern society and thus many adolescents are involved in them. Having found the link between sports at young ages and entrepreneurial activity later would allow us to predict better the way to provoke

entrepreneurial propensity. These research findings support the hypothesis about individuals practicing competitive sports in their youth are more intended to create new ventures in comparison with adults who were not practicing sports at their young ages.

Moreover, in an Italian context, we can argue that sports activities are always among the most popular for teenagers. Even nowadays when the internet, social media, and other virtual options occupy teenagers' minds, statistics say (Treccani, 2016) that around 13% of adolescents from 14 to 17 years old are actively involved in sports.

Figure 5. Ways of spending time among teenagers in Italy by activity and age group



Source: Treccani, 2018

However, the fact of becoming an entrepreneur after being interested and even passionate about sports does not mean becoming a successful one. Is there any chance that these individuals eventually fail, or maybe they usually achieve bigger success? There is no research found on these questions, so we naturally appear with that curiosity connecting the early ages' formation of personality and its future occupation success in entrepreneurship. As a next logical step, for presented above researches, we come up with the next

Hypothesis 1: *Entrepreneurs that have been passionate and involved in sport activities at young ages are more successful.*

2.2.2. Entrepreneurs as artists.

In addition to sports activities at a young age, it is a common thing to be into various artistic doings in that period of life. Performance and visual arts, music, and literature are always among the most common extracurricular activities. Therefore, in that part, we will talk about that side considering the future impact on entrepreneurial performance.

The word “creativity” did not exist in Ancient Greece; arts or works were not considered creative work but rather a form of imitation. It was only in the 18th century during the Age of Enlightenment that the concept of creativity emerged. William Durf, a Scottish Presbyterian minister and writer, was the first to identify imagination as a quality of genius. The word “creativity” comes from the Latin word “creo” which means to make or create something. Entrepreneurship is always about making or creating something so we cannot deny the link between these two definitions. There has always been a solid connection between creativity, imagination, and entrepreneurship.

Kirzner (2008) says that creative and imaginative action vitally shapes the entrepreneur’s perception and that it will be crucial for future market periods. The effective use of design contributes to business performance positively (Walsh et al., 1992). Whyte et al. (2005) claim that there is clear evidence of that contribution and so the design should be considered a competitive advantage for the firm. The word ‘creative’ is an inspiration and always a constructive characteristic for a successful company. Fruitful enterprises are described often as ‘entrepreneurial’, ‘innovative’, and usually subsequently ‘creative’ because they have implemented and grown a ‘creative’ workplace or climate (Goodman, 1995; Handy, 1985; Henry, 2001). It allows firms to take an advantage of possibilities for development as the result of changing environmental conditions (Shalley et al., 2004).

Entrepreneurship might be described as creating value processes for business and social communities. This creation has been seen as the construction of ideas and products with useful potential and novelty to some extent (Amabile, 1988). Baumol (2002) claims that creativity's impact on the entrepreneurial process is crucial for being a major contributor and employment creation eventually. The necessity of an environment where creativity and innovation can flourish is noted by Lee et al. (2004) emphasizing that it is required by entrepreneurial activity and that a productive and supportive climate is simply not enough. Creative thinking will lead the entrepreneur to strong leadership by shaping business strategy and motivating employees (Darling et. Al, 2007).

Nowadays creativity appears more important than ever before being considered one of the crucial factors for companies (Basadur and Hausdorf, 1996). A mix of technologies and creativity might lead to the commercialization of the idea, product, or service (Sternberg, 2004). It has been identified as a core organizational competence and for the decision-makers, it is a vital factor in shaping business success (Palus and Horth, 2002). As well as in the case of sports activities, there is no research on the impact of early age involvement or passion for creative doings and its link to future entrepreneurial success. Therefore, we are ready to define another

Hypothesis 2: *Entrepreneurs that have been passionate and involved in artistic activities at young ages are more successful.*

2.2.3. The influence of education.

The question of education's influence on entrepreneurial performance is always relevant for researchers and we do not want to be exceptional ones. Thus, in our research, we consider that factor in detail and bring it inside of our framework that is focused so far on young age activities. In this section, we review the studies about education and entrepreneurial success integrating them into our field of interest.

Such attributes as education, experience, knowledge, and skills, which form usually the definition of human capital, have long been claimed to be a critical resource for entrepreneurial success (Florin et al., 2003; Pfeffef, 1994). Management skills that are described often by the education level are the most frequently used selection criteria for venture capitalists (Zacharakis and Meyer, 2000). Various scientists have argued that human capital will play an even more significant role in the close future since we live in the constantly increasing knowledge-intensive activities in the absolute majority of work environments (Bosma et al., 2004; Sonnetag and Frese, 2002; Honig, 2001).

Pursuing education and seeking experience in certain activities or vocations may increase one's passion for that activity (Arshad et al., 2018). Considering education as one of the main components of human capital, we might focus on its impact in terms of success. Card (1995) and Soderbon et al. (2006) described similar wage returns to higher education in the USA and Kenya and Tanzania, respectively. It would appear that the level of educational attainment by entrepreneurs is significantly and positively linked with their performance and it is sufficiently proven (Dickson et

al., 2008). It is important to mention that some research (Lazear, 2004) emphasizes the differences between entrepreneurs and employees. To become an entrepreneur you have to handle a variety of different tasks to stay in business, which requires a wide set of skills. Meanwhile, employees might have a higher and more specialized education with entrepreneurs having a more generalized one. The general education and entrepreneurial performance in industrialized (Van der Sluis et al., 2004) and developing countries (Van der Sluis et al., 2005) was the topic of meta-analysis. They concluded that there is evidence to confirm a positive and significant linkage between entrepreneurial performance and general education.

However, some researchers have not found a relationship between education and success (Lerner et al., 1997). Moreover, the country's context is still significant and the choice of being an entrepreneur depends on the context. Thus, developing countries trigger more 'necessity' entrepreneurs (Reynolds et al., 2002) simply because the population is forced to become self-employed as long as they have no other options available. Thus, having considered the importance of education in entrepreneurial performance and taking into account our previously defined hypothesis, we can expect that education can be a moderator for the effect of young ages' passions on future entrepreneurial success. In other words, we are eager to examine whether education level will change the strength of the relationship between art or sports activities in youth and success. Therefore, our

Hypothesis 3: *The higher level of education moderates the effect of young passions in the case of art and sport on entrepreneurial success, such as when education level is higher the relation between young ages passion and success is stronger than when it is a lower level of education.*

Having talked in the previous part of the chapter about the passion individuals used to have in their previous ages before they started their entrepreneurial way, in the next paragraphs we will focus on the current days and discuss the Dualistic Model of passion further.

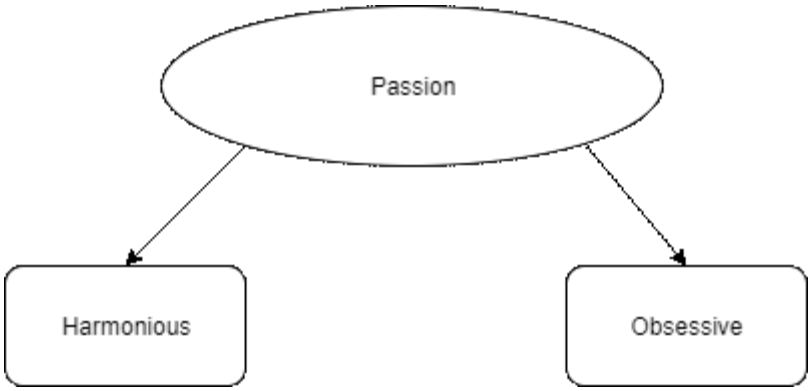
2.3. Dualistic Model of passion and its implementation.

The cognitive attributes of entrepreneurs are more and more recognized as significant reasons explaining entrepreneurial success but are still often overlooked (Acs et al., 2014). In that part, we try to focus on that and create some more practical hypotheses to be tested further.

Typically, entrepreneurs, especially successful high-profile entrepreneurs, are variously characterized in academic and even popular literature as being resilient. Moreover, they are obsessive and addicted to their ventures, accompanied by various types of passion. Baron (2008) and Cardon et al. (2005) argued that emotions and passion are a central component of entrepreneurial motivation and integral to following its success. Vallerand et al. (2007) said that passion is important motivational energy underlying the sustained intense practice of an activity, despite obstacles and challenges, for performance attainment, especially relevant to expert levels (Mageau et al., 2009). The passion presence changes the entrepreneurial perception and allows them to view an enterprise as something different from 'work' or 'task', but more connected to 'love' (Baum and Locke, 2004; Vallerand, 2008; Chen et al., 2009). An individual has a passion for an activity when they feel strongly about it, enjoy it, think it is significant in their lives, and consequently invest time and energy into that activity (Vallerand et al., 2003). Many researchers (Drnovsek et al., 2016; Mooradian et al., 2016; Stenholm and Renko, 2016) recognized passion as a crucial cognitive attribute of entrepreneurs that are connected to entrepreneurial growth, success, and survival. Additionally, the passion shown by entrepreneurs has been linked to success in gaining resources (Chen et al., 2009; Cardon, 2008; Murnieks et al., 2016), perceptions of success (Schindehutte et al., 2006), and one dimension of a predictor of success (Mooradian et al., 2016). Especially those who found their companies are suggested to experience high levels of passion for their ventures (Fisher et al., 2018).

The psychology theories of passion suggest that passion is multifaceted. In 2003 Vallerand et al. presented the model also known as a dualistic model of passion which is a theoretical model of the nature of passion. It incorporates two types of passion which are called harmonious and obsessive and are differentiated by how they are internalized into the identity. Cardon (2008), and Fisher et al. (2013) defined entrepreneurs as passionate and displaying obsessive behavior so this dualistic model provides a useful framework for analyzing the effect of entrepreneurial passion and performance.

Figure 6. Dualistic Model of passion



Source: Personal elaboration

2.3.1. Harmonious passion and entrepreneurial performance.

Having presented the model, we are ready to focus on both parts of that. Thus, harmonious passion (HP) is conceptualized as a passion that provides the motivational force to freely choose to engage in an important activity with which the individual identifies. This one comes from an autonomous internalization of the passionate activity into the identity, leading to flexible persistence in the activity (Vallerand et al., 2003). HP has positive correlations with the adaptive outcomes, facilitates concentration, flow, and positive emotions and affect during activity engagement (Vallerand et al., 2003, 2007). It has been found to lead and be associated with helpful outcomes for a person (Vallerand and Mark, 2010), linked to positive outcomes in the work field including well-being (Houlfort et al., 2014), work satisfaction (Houlfort et al., 2015). Generally, the literature describes HP as the dominant type of passion associated with positive outcomes (Ho and Pollack, 2014). We suppose to see the same effect in the case of the Italian context and expect entrepreneurial success to being that positive outcome. Therefore, we end up with the following hypothesis:

Hypothesis 4a: *Harmonious passion is positively related to entrepreneurial success.*

2.3.2. Obsessive passion and entrepreneurial performance.

Oppositely to HP, obsessive passion (OP) is defined as the one that compels the individual to engage in the activity that they identify until the passion runs its course. It develops from the controlled internalization of the passionate activity into the identity of the individual. As the result leads to persistence with the activity because of the contingencies attached to that (Vallerand, 2015; Vallerand and Houlfort, 2003; Vallerand et al., 2008). OP is correlated to less adaptive outcomes.

It entails a rigid persistence with an activity that potentially gives rise to positive outcomes even in case of having significant personal costs (Vallerand et al., 2003, 2008). Houlfort et al. (2015) argued that it is generally either negatively related or unrelated to positive outcomes. It has not been related to good financial outcomes either (Ho and Pollack, 2014). It evokes detrimental as well as beneficial processes and individuals could experience frustration not being able to engage in their activity, persisting at it to the detriment of themselves and close others (Vallerand, 2008, 2015).

Considering a dualistic concept of passion in the context of entrepreneurship, we also can challenge the understanding of the relationship between obsessive passion and perceived entrepreneurial success. Eventually, we come up with the

Hypothesis 4b: *Obsessive passion is negatively related to entrepreneurial success.*

Typically, gender is considered one of the main factors for entrepreneurial passion (Cardon et al., 2013). In the next paragraph, we will elaborate on the idea of the link between gender and passion and thus, eventually, its effect on entrepreneurial performance.

2.3.3. The effect of gender.

Gender may define the size of the enterprise and usually female ventures are smaller in terms of capital and size (Johnstone-Louis, 2017) and thus may influence the performance since the smallest firms are less successful. Moreover, the entrance obstacles for women are often bigger and we may expect that those who eventually start their companies have more passion for that than the average male individual. Researchers (Bird and Brush, 2002; Eddleston and Powell, 2008) argue that entrepreneurship is a gendered process. Additionally, they claim that the social environment does not treat both gender entrepreneurs equally (Ahl and Marlow, 2012; Eddleston et al., 2016; Patrick et al., 2016).

Despite the rich literature on the role of gender in entrepreneurship (Gicheva and Link, 2011), little is known about how gender moderates the association between personality traits and entrepreneurial success. Several studies compare the success of female entrepreneurs with males (Fairlie and Robb, 2008; Boden and Nucci, 2000; Du Rietz and Henrekson, 2000). Klapper and Parker (2011) found that female entrepreneurs underperform relative to males in both earnings and survival. Women tend to have particular attention to their quality of life, an aspect that may prevent

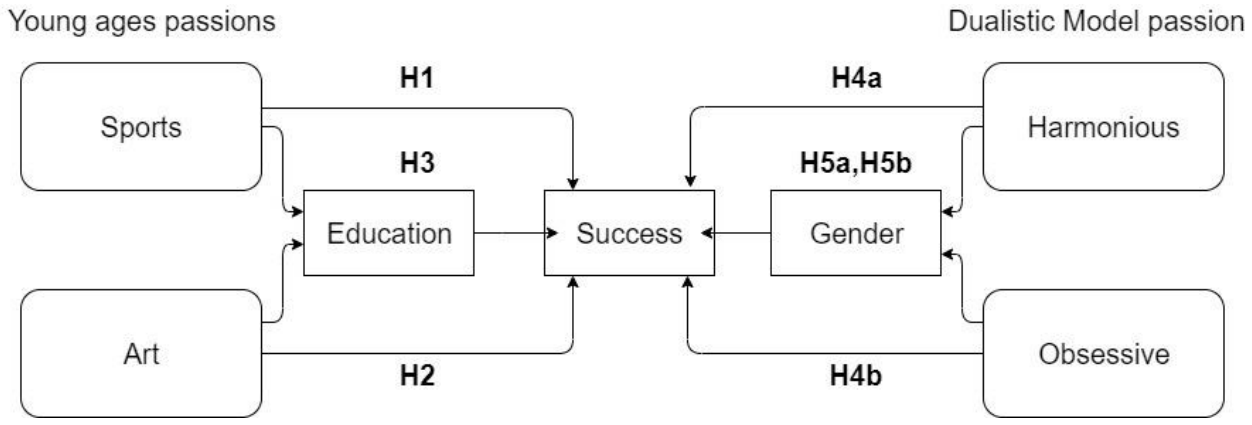
them from being deeply involved in the business and so experience an OP. They also might be more likely to refrain from being risky. Kalleberg and Leicht (1991) concluded that the effect of gender on new venture survival and success is minor, while Pablo-Marti et al. (2014) found that entrepreneurial women show higher commitment to product and service innovation. Some researchers, however, find no distinction between men and women in the entrepreneurship domain, considering that chances of success are not associated with gender (Gupta et al., 2014; Olakitan and Ayobami, 2011). Eventually, most of the research tends to find no difference or a little one in success between genders (Robb and Watson, 2012; Cliff, 1998). Therefore, considering different points presented in the literature we are also curious about the gender part as a factor for the entrepreneurial, but not only as a control variable. We could expect that gender is also significant in terms of moderating both types of passions and impacts the following entrepreneurial success. Thus, we define our last hypotheses

Hypothesis 5a: *Gender moderates harmonious passion and leads to higher entrepreneurial success, such that when gender is male than the relation between passion and success is stronger than when it is female.*

Hypothesis 5b: *Gender moderates obsessive passion and leads to higher entrepreneurial success, such that when gender is male than the relation between passion and success is stronger than when it is female.*

Therefore, we finish here with our theoretical framework for our research and below present the graphical interpretation of that.

Figure 7. Theoretical framework



Source: Personal elaboration.

2.4. Conclusion.

In sum, in this chapter, we considered factors that are continuously argued in the modern entrepreneurial performance context. We have described passion in different life periods of individuals. First, we represented a literature review and defined three hypotheses about sports and artistic activities for young ages of individuals that could potentially influence their personality formation and eventually their entrepreneurial activity propensity following success or failure. Second, we considered the Dualistic Model of passion firstly provided by Vallerand and his colleagues in 2003. Based on this model we elaborated two other hypotheses. It is worth saying that in formulated hypotheses we pay special attention to factors of education and gender regarding entrepreneurial success.

In the following parts of our research, we will consider the dataset we work with. Moreover, we will focus on testing the hypotheses and discussing the results, eventually looking at the difficulties and potential ways to elaborate on the results we achieved.

Chapter 3. The empirical analysis, results and discussion: a tale of passion.

3.1. Introduction.

In previous chapters, we have elaborated theoretical framework and provided the current theoretical background that led us to the five hypotheses we aim to analyze in our research. To do so we consider 202 Italian SMEs' performance and various characteristics over four years from 2012 to 2015. Considering the context, we apply a quantitative method for our purposes since it allows us to work with larger sample size and consequently achieve more precise generalized conclusions. Moreover, data collection using quantitative methods is more convenient as long as it is a faster way to have it. For example, we can use telephone interviews that provide us with immediate replies and information. Moreover, using statistical software packages (in our case SPSS statistics) allows us to analyze datasets consuming less time. Thus, the quantitative research method saves a lot of time, energy, and resources (Eyisi, 2016).

This biggest part of our research contains a few important pieces. First, we provide a quick update regarding the modern entrepreneurial context, classification, and criteria for that in Europe and Italy. Second, we describe our dataset simultaneously in comparison with that European context and its relevance in the general framework. Third, we represent all variables involved in the models categorizing them before considering the models. Then we represent our models with hypotheses testing and results in discussion. Finally, we talk about the limitation of our research, draw the conclusion and potential practical implementations, and eventually provide some suggestions for future studies in the field.

3.2. European and Italian entrepreneurial context.

Before heading to our hypothesis analysis, we represent the conditions and provide detailed information about the enterprises we focus on in our research. In 2020, European Commission defined small and medium-sized enterprises (SMEs) as ‘any entity engaged in economic activity, irrespective of its legal form. Therefore, all self-employed, family companies, associations, partnerships, and other types of firms can be considered enterprises. Economic activity takes place when resources such as capital goods, labor, manufacturing techniques, or intermediary products are combined to produce specific goods or services. Thus, the input of resources, a production

process, and an output of products (goods or services) characterize economic activity (Eurostat, 2020). Typically, two main attributes are taken into account for defining an SME: staff headcount (employees, persons working for the enterprise who have been seconded to it and are considered to be employees under national law, owner-managers, partners engaged in a regular activity in the enterprise and deriving financial advantages from the enterprise), and either annual turnover or annual balance sheet total. Precise criteria for each category are presented in the table below.

Table 2. SME criteria.

Enterprise category	Headcount: annual work unit (AWU)	Annual turnover	or	Annual balance sheet total
Medium-sized	< 250	≤ EUR 50 million	or	≤ EUR 43 million
Small	< 50	≤ EUR 10 million	or	≤ EUR 10 million
Micro	< 10	≤ EUR 2 million	or	≤ EUR 2 million

Source: European Commission, 2020.

Italian SMEs are crucial for the country's economy. They generate 66.9% of overall value added in the Italian 'non-financial business economy', exceeding the EU average of 56.4%. The share of employment generated by SMEs is even larger, at 78.1%, compared to the EU average of 66.6%. Micro firms are particularly important, providing 44.9% of employment compared to the EU average of 29.7%. In 2014-2018, overall SME value added rose by 12.4%. In contrast, SME employment rose by only 4.7% in 2014-2018, still 9.3% below its 2008 pre-crisis level. More recently, in 2017-2018, SME employment grew by only 1.1%, while SME value added also increased by only 1.8%. Some additional information about the role of Italian SMEs could be found in the table 3.

Table 3. Italian SMEs

Class size	Number of enterprises			Number of persons employed			Value added		
	Italy		EU-28	Italy		EU-28	Italy		EU-28
	Number	Share	Share	Number	Share	Share	Billion €	Share	Share
Micro	3,599,695	94.9%	93.0%	6,719,319	44.9%	29.7%	208.1	28.4%	20.8%
Small	172,324	4.5%	5.9%	3,088,490	20.7%	20.1%	151.8	20.7%	17.6%
Medium-sized	19,226	0.5%	0.9%	1,873,898	12.5%	16.8%	131.0	17.9%	18.0%
SMEs	**3,791,245**	**99.9%**	**99.8%**	**11,681,707**	**78.1%**	**66.6%**	**490.9**	**66.9%**	**56.4%**
Large	3,380	0.1%	0.2%	3,270,222	21.9%	33.4%	242.5	33.1%	43.6%
Total	**3,794,625**	**100.0%**	**100.0%**	14,951,929	**100.0%**	**100.0%**	**733.3**	**100.0%**	**100.0%**

Source: European Commission, 2019

In recent years, many Italian firms have grown substantially. The latest available data indicate that in 2016, 9.2% of all firms in the 'business economy' with at least 10 employees, a total of 15,185 firms were considered high-growth firms. Although this is lower than the EU average of 10.7%, it is substantially higher than in previous years, when the percentage was only 6.8% in 2014 and 7.6% in 2015.

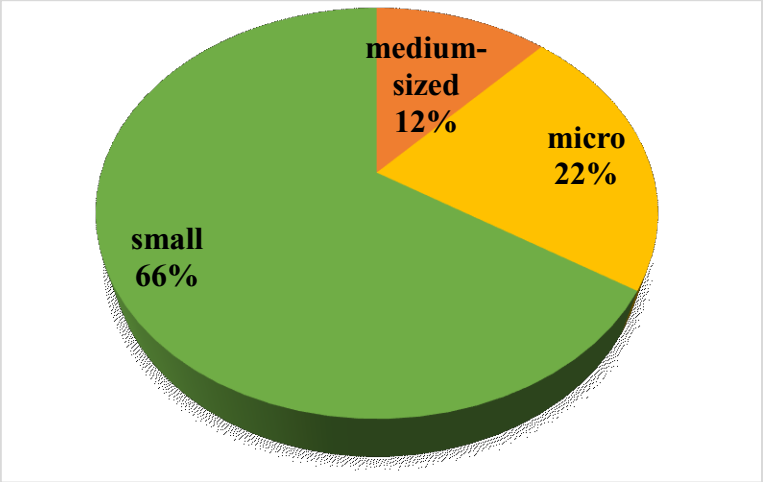
Having done this quick recap, we can consider the SMEs in Italy as a crucial element of the economy that one more time emphasizes the interest in that sector and motivates us to look in detail inside this segment.

3.2. Methodology.

3.2.1. Sample and data collection.

The dataset we analyze in our research contains 202 Italian enterprises and their responses to the survey that was provided by a group of researchers from 5 Italian Universities (Università di Padova, Napoli Seconda Università, Udine, Bocconi, and LIUC). It is a sample with longitudinal data for the period from 2012 to 2015. Between July and September 2012, 1455 firms were randomly contacted to collect various information about their companies and themselves. Consequently, 257 enterprises were included in the final survey results while others declined their part for different reasons. All the included participants are considered small and medium enterprises as long as there are no more than 250 employees in each of them. We classify the companies according to European Commission's definition based on staff headcount. Thus, there are three categories we consider: micro (22%) contains less than 10 employees, small (66%) is for those with less than 50 employees, and finally medium-sized (12%) with no more than 250 employees.

Figure 8. Firm size in 2012

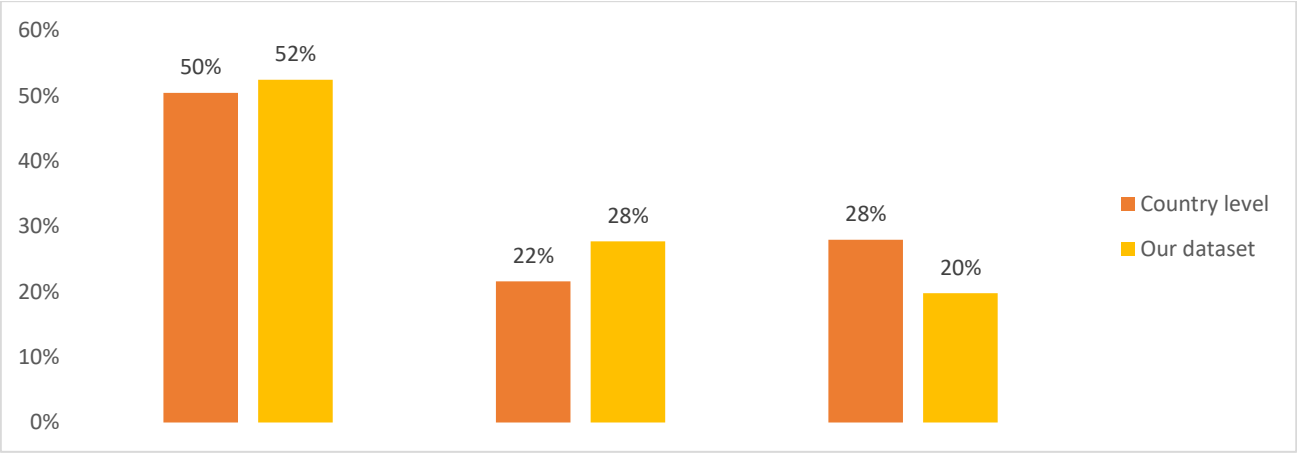


Source: Personal elaboration

Additionally, for the previously selected firms, we added their financial data from AIDA (the database for Italian enterprises), which collects and provides a wide spectrum of mostly financial information, for the period from 2012 to 2015. Eventually, 55 out of 257 were not included for the reason of their failure during the considering period or since they became a bigger firm with more than 250 employees. Finally, for some companies, the missing data was found so they were also rejected from the ultimate dataset.

There is a high heterogeneity level in the case of enterprises in Italy.. Regionally the sample companies are represented in three main categories including those from the North, South, and Centre regions. We consider 52% (106 out of 202) is being based in the Northern part of Italy, 28% (56 out of 202) to be from the Centre, and finally, 20% (40 out of 202) to be from the South. That is a reliable distribution in comparison with the general numbers of Italian enterprises. In the year 2012, collected Istat data showed the following distribution for all 4,442,452 companies (distribution by regions is shown below) in the country: 50%, 22%, and 28% are from North, Center, and South respectively. Thus, our sample is representative on a country level as well. Additionally, you can see the distribution of firms in 20 Italian regions in the year 2020 to see more in detail geographical distribution.

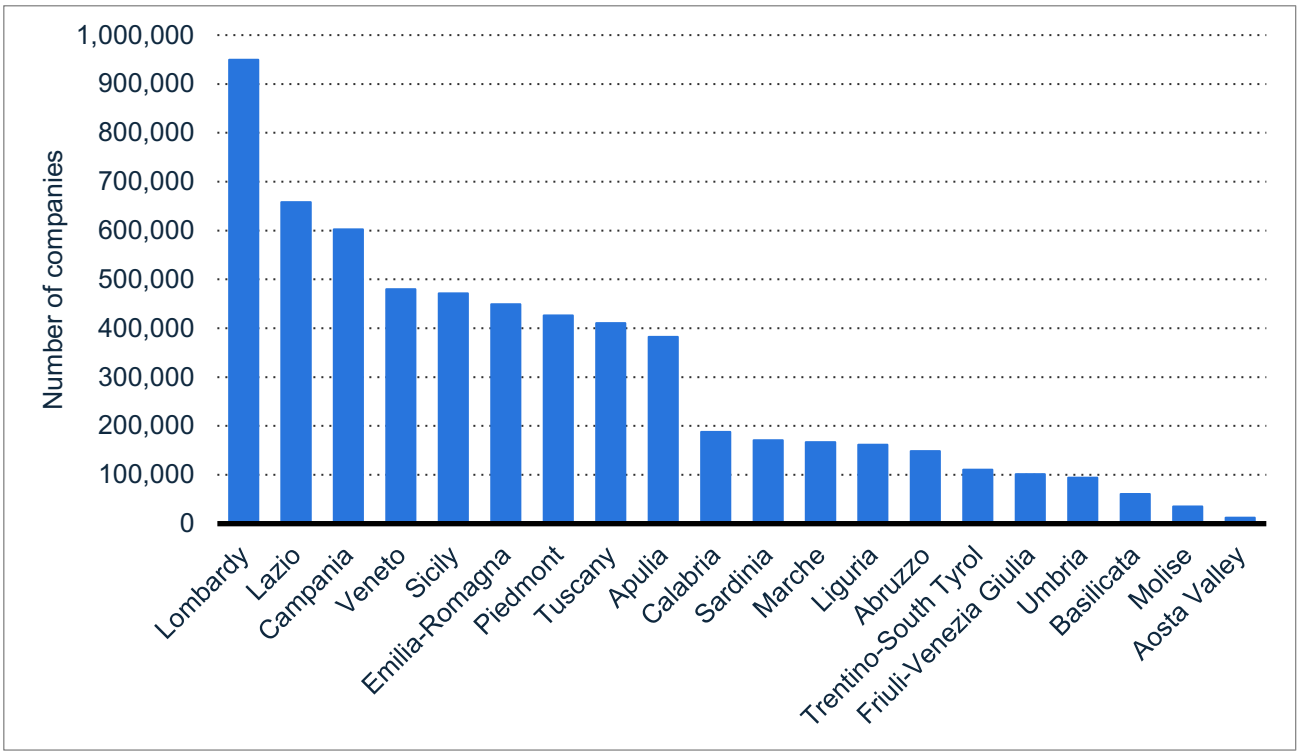
Figure 9. Regional representation of firms in 2012



Region	Our dataset	Country level
North	106 (52%)	2,240,809 (50%)
Center	56 (28%)	959,157 (22%)
South	40 (20%)	1,242,486 (28%)
Total	**202**	**4,442,452**

Source: personal elaboration

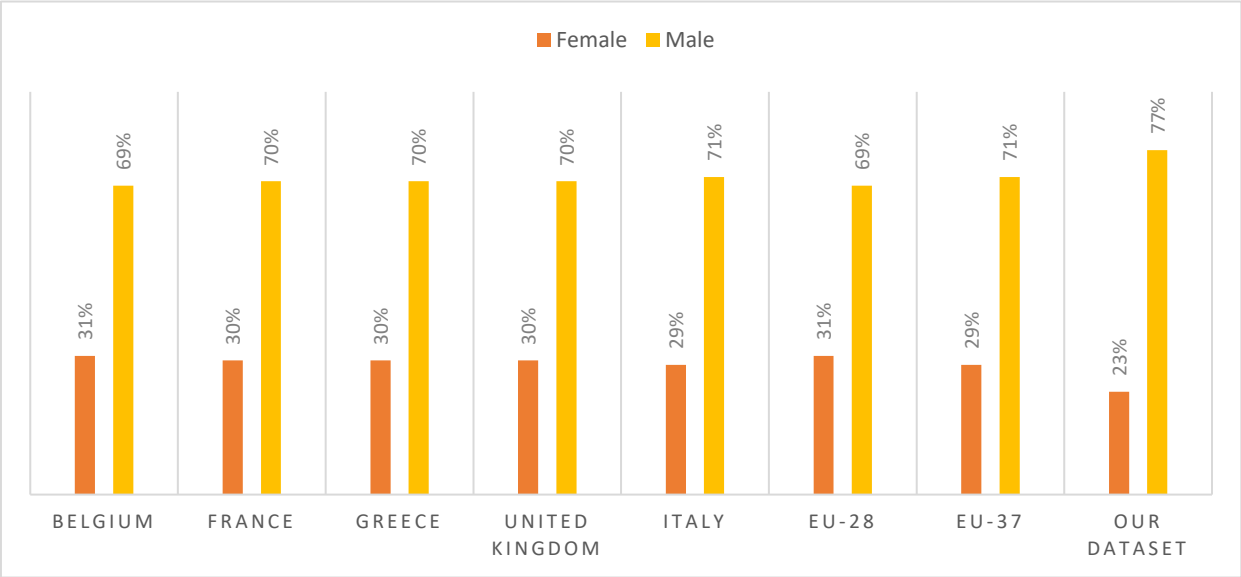
Figure 10. Number of enterprises in Italy as of 2020, by region



Source: InfoCamere, 2020

Gender is always a control metric for the research so we also consider that parameter. In our dataset there are 23% of entrepreneurs are female and the rest (77%) are male interviewed. This data is in line with the data reported by the European Commission in 2012 in the *'Statistical Data on Women Entrepreneurs in Europe'* report. It shows the entrepreneurs' gender distribution in some European countries. According to them, Italy has the 29% and 71% of female and male entrepreneurs respectively. These data are quite similar to our dataset and the numbers are completely the same as the Europe-37 countries number.

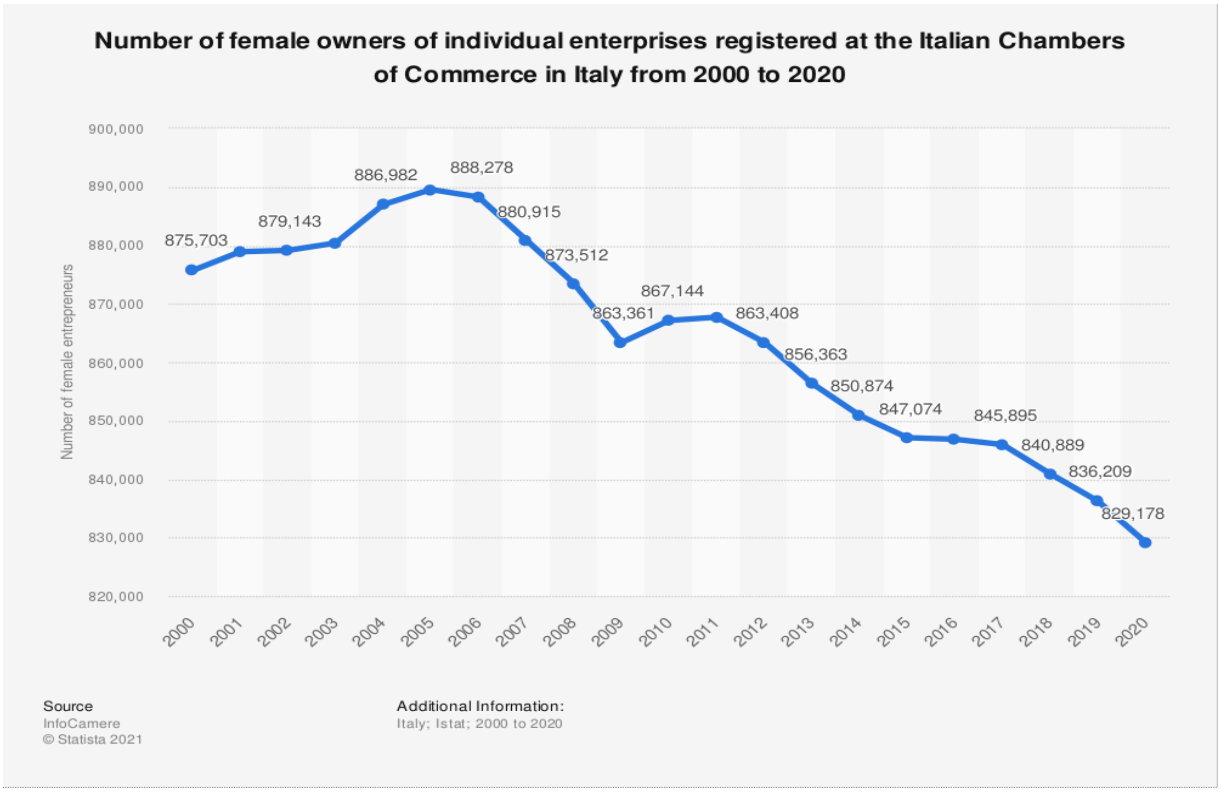
Figure 9. Gender representation for entrepreneurs in different countries, 2012



Source: personal elaboration based on a European Commission report

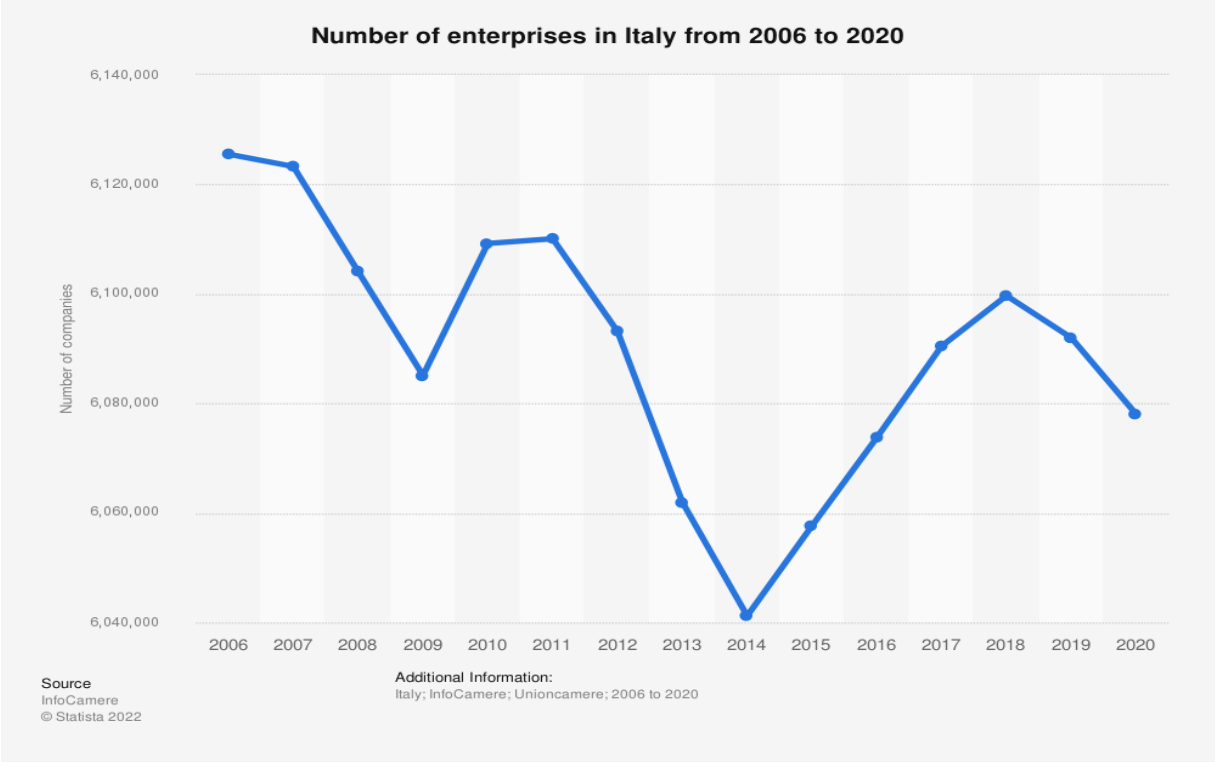
Interestingly, despite many policies in the EU and Italy, supporting and motivating female entrepreneurs become more common, we see a declining trend for women in absolute numbers while there is no such trend for the total number of entrepreneurs in Italy. Related data is provided below.

Figure 10. Number of Italian female entrepreneurs in 2000-2020



Source: InfoCamere, 2020.

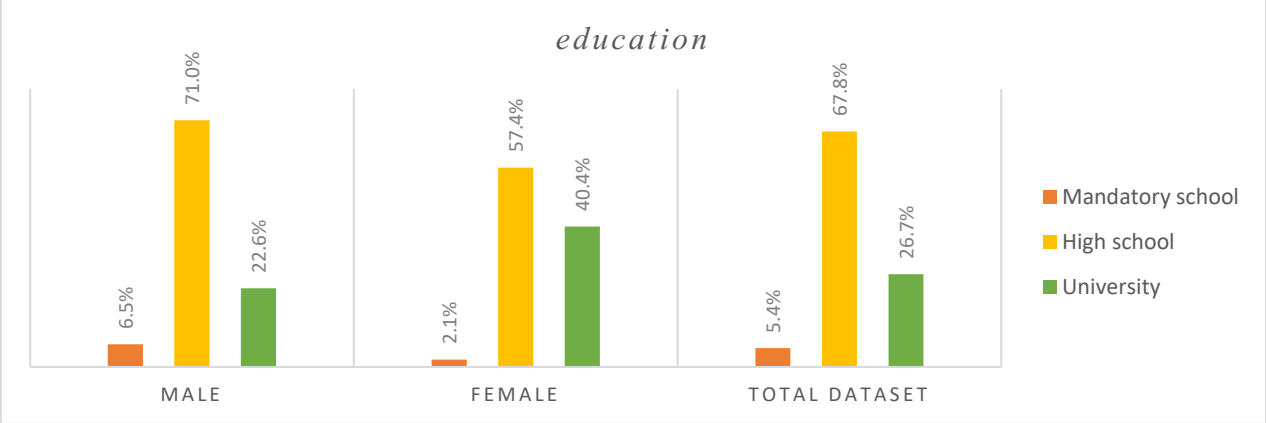
Figure 11. Number of Italian enterprises in 2006-2020



Source: InfoCamere, 2020.

Another important characteristic of every dataset in our research field is the level of education among individuals we consider. In our questionnaire, three main categories are describing that parameter: a mandatory school, a high school, and a university degree level. The absolute majority of almost 68% received a high school education level, while a university degree is obtained by just below 27%, and finally, the remaining 5% have simply graduated from mandatory school. A significant difference is observed on a gender level. While more than 40% of women received the highest level possible in our interview, only 23% of men own the same degree. It is again in line with the European countries' statistics trend in 2012, in which, according to European Commission, female entrepreneurs are more highly educated than the male ones (2014).

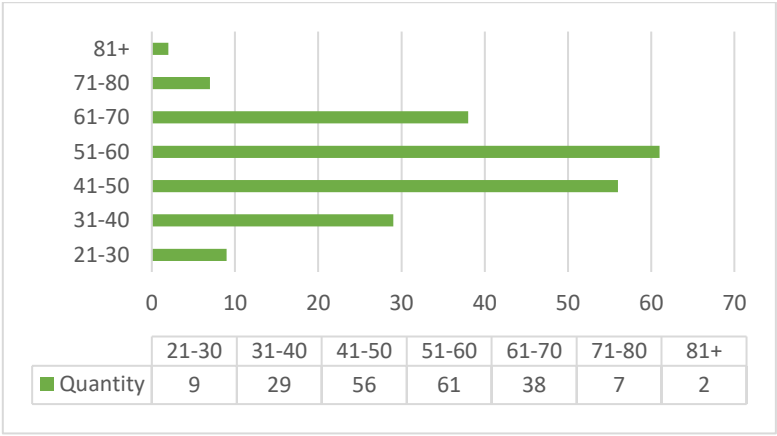
Figure 12. Education level of Italian entrepreneurs in 2012



Source: personal elaboration

Finally, it is worth saying about the age distribution among the observed interviewees. We consider the youngest one being 22 years old while the oldest one is 105 years old. The mean age of the individuals is 51.9 years old.

Figure 13. Age distribution of Italian entrepreneurs in 2012



Source: personal elaboration

In that stage of our research, we described the characteristics of our sample. In the next section, we will talk directly about research models and their components.

3.2.2. Measures.

Having provided the analytics for our dataset, we are ready to talk in detail about the variables we will include in our research models presenting three main categories of them. Those are independent, dependent, and control variables.

3.2.2.1. Dependent variable.

It is worth mentioning, that all elaborations of the variables, models, hypotheses testing, and eventual results are made by using the IBM SPSS Statistics 26 software package.

Eventually, considering available data, we decide to evaluate entrepreneurial performance in terms of return on equity (ROE) which is a measure of financial performance calculated by dividing net income by the equity of shareholders. It is considered a measure of enterprise profitability and its efficiency in profit-generating. The higher the ROE, the more successful a firm is. In our data received from AIDA, it is called "Redditività del capitale proprio". To avoid randomly successful results during only one financial year for an enterprise, we decided to form a variable average ROE (**AVROE**), simply finding a mean over the period of 2012 – 2015.

3.2.2.2. Independent variables.

Sport: to consider our first hypothesis we had to modify collected by the questionnaire data. The question for the interviewees sounds like this: *'At your young ages, before you began to work, what were your hobbies, or more generally, the activities that you used to do with the biggest passion, interest, and involvement?'* The respondents were given an option to mention three main activities. Among the answers, the majority (97 out of 202, or 48%) replied with the activity connected to the sport. Most of the time the answer was simply a sport or sports activities. When specified usually football, basketball, skiing, swimming, and boating were mentioned. Eventually, we decided to form the dummy variable 'Sport' (an individual who used to be passionate about sport, no=0, yes=1).

Art: Similarly was formed this variable. The second (25 out of 202, or 12%) most common answer was connected to artistic activities, such as literature, music, and painting, if not art was simply

mentioned. To analyze our next hypothesis we shaped another dummy variable 'Art' (an individual who used to be passionate about art at young ages, no=0, yes=1).

Harmonious and Obsessive passions factors: To have the measures for both different passions described previously, we use the concept elaborated by Vallerand and his colleagues (2003) and the so-called Passion Scale. They made 14 points questionnaire on the passion for two categories – obsessive and harmonious obviously – to measure the individuals' passion level.

Table 4. Passion Scale

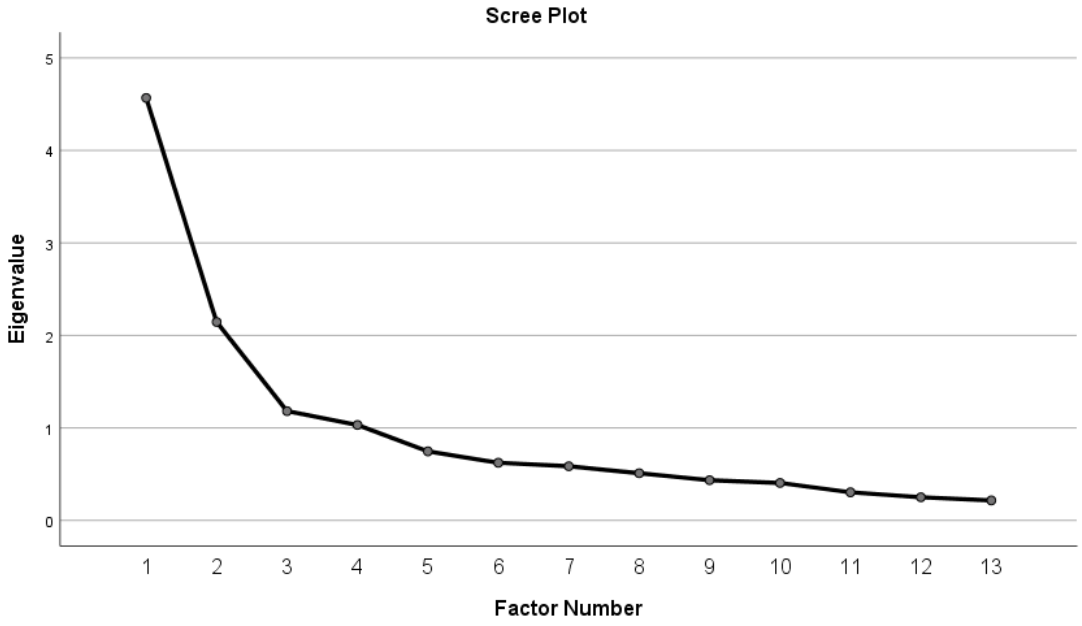
Scale items	Factor 1 (harmonious passion)	Factor 2 (obsessive passion)
1. This activity allows me to live a variety of experiences.	.75	
2. The new things that I discover with this activity allow me to appreciate it even more.	.69	
3. This activity allows me to live memorable experiences.	.68	
4. This activity reflects the qualities I like about myself.	.54	
5. This activity is in harmony with the other activities in my life.	.49	
6. For me it is a passion, that I still manage to control.	.46	
7. I am completely taken with this activity.	.44	
8. I cannot live without it.		.87
9. The urge is so strong. I can't help myself from doing this activity.		.84
10. I have difficulty imagining my life without this activity.		.79
11. I am emotionally dependent on this activity.		.70
12. I have a tough time controlling my need to do this activity.		.67
13. I have almost an obsessive feeling for this activity.		.66
14. My mood depends on me being able to do this activity.		.60

Source: Vallerand et al. (2003).

With an adjustment to the Italian entrepreneurial context, these questions were applied from English to Italian. Instead of a 7-point Likert scale, the 5-point scale was used (the range is from 1 = do not agree at all to 5 = completely agree) according to the interviewees' agreement level for each proposed statement. In appendix A you can find the complete questionnaire.

Having collected and structured data we decide to reduce the variables using the confirmatory factor analysis in the SPSS Statistics software package. To test a hypothesis about the relationship between variables we apply factor analysis for these 14 replies connected to both types of passion and confirm the hypothesis about two main factors. We confirmed the 2 factors' expectations using a scree plot that shows the eigenvalues on the y-axis and the number of factors on the x-axis. It always displays a downward curve. The point where the slope of the curve is leveling off (the "elbow) indicates the number of factors that should be generated by the analysis.

Figure 14. Factor analysis scree plot



Source: personal elaboration

To clarify the link between the two factors we executed the varimax rotation as the tool for that. We make an orthogonal rotation with an oblimin solution, considering only those factors with a factor loading greater than 0.4. The results are shown in the Table below. We decided to delete the last question HP_7 due to the possible translation issue of the question from English to Italian. The expression "I am completely taken" is viewed as positive in the first case, while in the Italian language it acquires a negative meaning ("sono completamente preso"). In this last case, the concept refers to a situation in which the individual has a disproportionate passion for the activity, but is unable to control it. Following this reasoning it appears more in line with OP and our data confirms this belief; people experiencing it face many difficulties in controlling the desire to perform the loved activity.

Table 5. Rotated Factor Matrix

Rotated Factor Matrix[a]

	Factor	
	1	2
OP_2	.787	
OP_3	.776	
OP_1	.747	
OP_5	.714	
OP_6	.593	
OP_4	.538	
OP_7	.411	
HP_6		.736
HP_5		.725
HP_4		.629
HP_2		.497
HP_3		.492
HP_1		.401

Extraction Method: Maximum Likelihood.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.

Source: personal elaboration

To confirm the idea of forming two factors we use Cronbach's alpha coefficient which is a function of the number of items in a test that shows the average covariance between pairs of items, and the variance of the total score. The general rule of thumb is that a Cronbach's alpha of .70 and above is good, .80 and above is better, and .90 and above is best.

Table 6. HP Cronbach's alpha coefficient

Reliability Statistics

Cronbach's Alpha	N of Items
.765	6

Source: Personal elaboration

Table 7. OP Cronbach's alpha coefficient

Reliability Statistics

Cronbach's Alpha	N of Items
.854	7

Source: Personal elaboration

Additionally, we shall focus on some variables that serve us as controls in our research. They are not variables of the main interest in the study and keep being constant but could influence the outcomes. Based on some previous research we decided to include the next ones.

The size of a company used to be always an important characteristic. Even entering the market size is already considered a significant factor of success (R. Agarwal and D.B. Audretsch, 2001). Staniewski (2016) mentions it among the most crucial organizational factors that a firm possesses and defines its future growth and success. Thus, taking into account our classification defined above, we include three dummy (1 = yes, 0 = no) variables **mic_12**, **sm_12**, **ms_12**. Enterprises with less than 10, 50, and 250 employees respectively with the 'yes' attribute.

There is a set of variables to control the individual characteristics of the entrepreneurs in our dataset. First, we include the **gender** of the owners. Gender differences in terms of firms' performance were always a topic to be discussed. For instance, Klapper and Parker (2011) found that female entrepreneurs underperform relative to males in both earnings and survival. Women tend to have particular attention to their quality of life, an aspect that may prevent them from being deeply involved in the business and so experience an OP. They also might be more likely to refrain from being risky. At the same time, most of the research tends to find no difference or a little one in success between genders (Robb and Watson, 2012; Cliff, 1998). Our dummy variable takes '0' in the case of a female and '1' if the owner is a male.

Age is always a factor to be considered in that type of research. Levesque and Minniti (2006) claimed the stereotype that entrepreneurship is "a young person's game" based on Steve Jobs of Apple, Michael Dell of Dell, and Mark Zuckerberg of Facebook and other examples, who achieved great success in their twenties. However, Gielnik et al. (2018) found that older people are more likely to move from forming entrepreneurial intentions to becoming involved in entrepreneurial activity, making older people equally likely to become entrepreneurs as younger people. Thus, we include as a control variable **age_ent** that simply shows us the entrepreneur's ages.

The importance and relevance of education level were discussed in the formation of our hypothesis. Therefore, we do not repeat ourselves and include an ordinal variable **educ** for the education level of individuals (mandatory school = 1, high school = 2, university = 3).

Finally, we present the correlation coefficients matrix (see the table 8) to measure the relationship strength between each pair of introduced variables. We are intent to avoid a possible

multicollinearity problem in our models in case several independent variables are correlated. We use one of the most common ways of counting Pearson correlation coefficients measuring also the direction of a linear relationship between two variables. Commonly the coefficients that are less than 0.8 and greater than -0.8 are not considered significant and do not affect the models. As we see, there are no big coefficients among the presented ones and the only case is the strong negative relationship between the size defining variables (micro, small, and medium segments of enterprises) which is explicable by the mutually exclusive fact of belonging to the only one of these three options.

Having presented all the variables, we have in various categories; we will talk about the hypotheses analyses in the next section.

Table 8. Correlation matrix for the variables.

Source: Personal elaboration

Correlations[c]

		GENDER	AGE_ENT	EDUC	MIC_12	SM_12	MS_12	HPF	OPF	Sport	Art	AVROE
GENDER	Pearson Correlation	1										
	Sig. (2-tailed)											
AGE_ENT	Pearson Correlation	.317**	1									
	Sig. (2-tailed)	.000										
EDUC	Pearson Correlation	-.166*	-.295**	1								
	Sig. (2-tailed)	.028	.000									
MIC_12	Pearson Correlation	.031	.010	-.079	1							
	Sig. (2-tailed)	.682	.894	.300								
SM_12	Pearson Correlation	-.067	-.048	.005	-.719**	1						
	Sig. (2-tailed)	.377	.528	.948	.000							
MS_12	Pearson Correlation	.057	.055	.089	-.206**	-.531**	1					
	Sig. (2-tailed)	.457	.468	.241	.006	.000						
HPF	Pearson Correlation	.071	.160*	-.128	.012	.007	-.024	1				
	Sig. (2-tailed)	.351	.035	.093	.878	.925	.749					
OPF	Pearson Correlation	-.047	.055	-.067	.010	-.062	.075	.046	1			
	Sig. (2-tailed)	.540	.469	.382	.900	.418	.324	.550				
Sport	Pearson Correlation	.211**	-.203**	.078	.018	-.086	.098	-.066	-.022	1		
	Sig. (2-tailed)	.005	.007	.308	.811	.261	.197	.385	.777			
Art	Pearson Correlation	-.267**	-.027	.080	-.016	.076	-.087	.031	-.007	-.348**	1	
	Sig. (2-tailed)	.000	.728	.297	.834	.319	.251	.686	.930	.000		
AVROE	Pearson Correlation	.060	-.153*	-.065	-.229**	.183*	.022	-.155*	.060	.104	.155*	1
	Sig. (2-tailed)	.435	.045	.396	.002	.016	.769	.041	.434	.174	.041	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

c. Listwise N=174

3.3. Analyses.

3.3.1. Hypotheses 1-2. Passion during teenage years and current success.

We start to test our hypotheses from those that contain ideas about the teenage ages' activities the future entrepreneur used to be involved in. To do so, we apply the linear regression analysis to control significance or the opposite for our variables. First, we include only control variables and could see that except for gender everything else is significant (typically, we have three significance levels), but even for that variable we have a significance equal to 0.131 so we decide to keep it included also taking into account the theoretical background.

Second, we add to our model two categorical variables that are in charge of our young ages' passions, which are Sports and Art, testing the first two hypotheses. The latter appears to be significant and confirms our Hypothesis 2 while refusing the first one. It shows a positive correlation between the eventual successes of entrepreneurs who were involved in artistic activities earlier. At the same moment, despite the similarities between the athletes' and entrepreneurs' personalities, we do not find the connection and confirmation of the assumption that an interest in the sport practicing in your youth could lead you to become a more successful entrepreneur. Interestingly, including new variables makes also significant gender, supporting the idea of males being more inclined to have successful enterprises than females.

Table 9. Testing results for hypotheses 1-2

variables	AVROE	AVROE
(Constant)	0.255***	0.218***
	(0.074)	(0.074)
AGE_ENT	-0.002***	-0.002**
	(0.001)	(0.001)
GENDER	0.039	0.049*
	(0.026)	(0.027)
EDUC	-0.036*	-0.041**
	(0.021)	(0.020)
MIC_12	-0.084***	-0.084***
	(0.025)	(0.025)
Sport		0.038
		(0.023)
Art		0.109***
		(0.035)
R-squared	0.105	0.156

*** p<0.01, ** p<0.05, * p<0.1

Source: personal elaboration.

We should underline some interesting observations as well. Thus, we steadily find that despite the small number, the ages of our individuals are always negatively correlated in both models, simply meaning that younger entrepreneurs are more successful than their more mature colleagues are. Education in our models is also twice a negatively correlated factor of success. That result contradicts our following hypotheses and we will elaborate it in a discussion part. The fact of belonging to the segment of the smallest companies also reduces the chances for success which could be described by fewer resources possessed by the owners. Finally, the control of the quality of the model is presented by the R-squared coefficient, showing in a regression model the proportion of variance for the dependent variable that can be explained by the independent ones. The numbers are in the expected interval and the 0.156 for the second model could even be considered a high amount.

3.3.2. Hypothesis 3: Education moderation effect.

To test Hypothesis 3 regarding the moderation of sports and art activities by education, we need to create some new variables. To analyze the effect we compute the new variables such as **Sport_Educ** or **Art_Educ** that are simply products of **Sport, Art,** and **Educ** ones.

We observe a high correlation level between the above-mentioned variables (see the relevant correlation matrixes in Appendix B) and cannot include them in the models because of the multicollinearity problem risk. To avoid that problem we center the variable in a way X_cent = X – X_mean, where X – initial value and X_mean – the mean of all values. Counting a product of such variables as Sport_cent*Educ_cent leads us to not have multicollinearity problem anymore.

To test our Hypothesis 3 we build the linear regression including the Sport_cent*Educ_cent and Art_cent*Educ_cent variables. The results are presented in the table below.

Table 10. Testing results for the hypothesis 3.

variables	**AVROE**	**AVROE**
(Constant)	0.088* (0.047)	0.096** (0.046)
Sport	0.031 (0.022)	
Art		0.076** (0.034)
EDUC	-0.020 (0.021)	-0.021 (0.021)
Sport_cent*Educ_cent	-0.018 (0.042)	
Art_cent*Educ_cent		-0.058 (0.061)
R - squared	0.017	0.035

*** p<0.01, ** p<0.05, * p<0.1

Source: personal elaboration.

Having built these models, we observe that in both cases education does not have any statistically significant relation with art and sport affecting entrepreneurial performance. None of the activities are significant over the moderation effect of education. Thus, our Hypothesis 3 is refused even though some literature shows a substantial effect of it on the entrepreneurial success.

3.3.3. Hypotheses 4a, 4b: Harmonious and obsessive passion and success.

To test hypotheses 4a and 4b we defined previously, we begin with the same initial model including the control variables that we described above. Thus, we proceed directly with the next model in which we include the two factors we formed before for the harmonious and obsessive passions, HPF and OPF respectively. The significance level and numbers for previously considered variables change slightly or even not at all as in the case of belonging an enterprise to the micro sector. Our main interest is in passion factors. The one in charge of the obsessive passion shows up as significant and we see the negative correlation between success and the individual having that passion. The significance level is high ($p=0.048$) so we have an interesting result to be discussed in a results section. Our Hypothesis 4a is refused since HPF is insignificant. Meanwhile, for the 4b, we received the confirmation of the expected connection. We consider the obsessive passion factor and it is significant. Thus, hypothesis 4b is confirmed.

In general, we can say that entrepreneurial ages keep being significant and are negatively correlated to success, simply saying that younger entrepreneurs are more likely to reach success. The same picture is observed in the case of the size of the company. The smallest ones are less likely successful than their bigger competitors. Interestingly, also for all these models, we can see a negative correlation in the case of more educated individuals. Finally, R – squared numbers are also shown in the table and correspond with our expectations. The aggregated results are presented in a table below.

Table 11. Testing results for hypothesis 4

variables	AVROE	AVROE
(Constant)	0.255***	0.249***
	(0.074)	(0.073)
AGE_ENT	-0.002***	-0.002***
	(0.001)	(0.001)
GENDER	0.039	0.041
	(0.026)	(0.026)
EDUC	-0.036*	-0.038*
	(0.021)	(0.021)
MIC_12	-0.084***	-0.084***
	(0.025)	(0.025)
HPF		0.15
		(0.012)
OPF		-0.024**
		(0.012)
R-squared	0.105	0.128

*** p<0.01, ** p<0.05, * p<0.1

Source: personal elaboration.

3.3.4. Hypothesis 5: Gender moderation effect.

To test our last hypothesis of the gender moderation effect over various types of passion on entrepreneurial performance, we initially build a simple linear regression model. As described before, we repeat the procedure of centering the corresponding variables and their product to avoid a potential problem of multicollinearity analyzing the eventual correlation matrixes (see Appendix C).

While none of the variables are significant in the case of harmonious passion, which refuses our hypothesis 5a, we observe interesting results for the second model. As it is supposed to be in the moderation effect case, we observe the gender to be insignificant while including it in the regression model. However, the product of obsessive passion and gender is significant and that may lead us to confirm our last hypothesis defined.

Table 12. Testing results for hypothesis 5

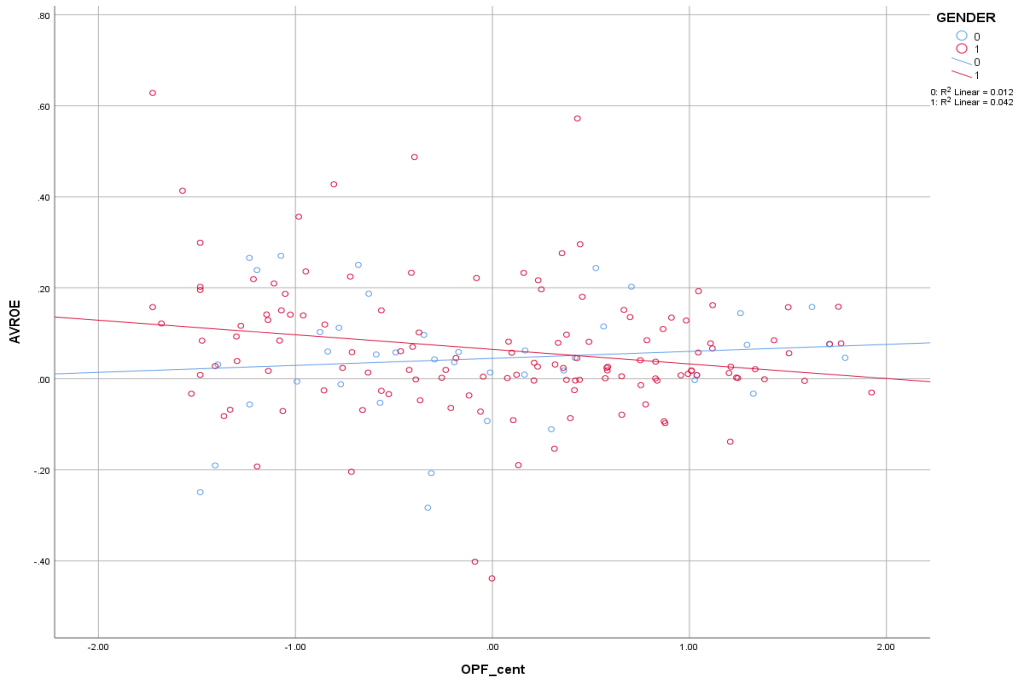
variables	AVROE	AVROE
(Constant)	0.043* (0.023)	0.045** (0.022)
HPF	0.005 (0.012)	
OPF		-0.021* (0.012)
GENDER	0.021 (0.026)	0.020 (0.025)
HPF_cent*Gend_cent	-0.009 (0.030)	
OPF_cent*Gend_cent		-0.047* (0.027)
R - squared	0.005	0.04

*** p<0.01, ** p<0.05, * p<0.1

Source: personal elaboration.

To control and make the final decision about our hypothesis, we build a scatterplot with the performance measure on the axis Y and the OPF, previously centered, on axis X. Additionally, we use the gender to group our data and then extrapolate them comparing the difference between two categories (female and male entrepreneurs). Interestingly and quite obviously, we see a significant difference between the two graphs. Thus, in the case of male entrepreneurs, we see the expected negative outcome of being under the obsessive passion effect. As more this sort of passion is, as lower their performance is. However, in the case of female entrepreneurs, the factor of bigger obsessive passion leads to the opposite result. A higher OPF leads to better performance. That is one of the most interesting outcomes of our research. We will discuss it in detail in the next section while below you may find a relevant graph for the described case.

Figure 15. Moderation effect of Gender on OPF



Source: personal elaboration.

In the next part, we will discuss our results and explain the theoretical details of what we have received in the testing section.

3.4. Discussion.

As has been mentioned in a literature review, the impact of the young ages' activities and passions on the following entrepreneurial success was not studied widely. Thus, our attempts to find similar topics in literature, or even studies specifically focused on that, were not very successful. Pervun et al. (2022) have discussed the most similar topic in very recent research in terms of youth sports as a precursor to future business endeavors. Thus, we can argue that our results are unique and we cannot compare them with others directly, and simply shall try to interpret them. We based our first three hypotheses on various streams of literature regarding personal psychology, research of sport, art and education. In that case, considering the first hypothesis, we see that it was not confirmed in any of the models and we decline the idea of sport in youth as being a significant parameter for future entrepreneurial performance. We cannot say that there is a link between it and entrepreneurial success even though we considered the fact of successful athletes and entrepreneurs

are similar in terms of personality traits and behavior. Moreover, the researchers say that the probability of becoming entrepreneurs is higher for those who used to be actively involved in sports earlier. Nevertheless, our first hypothesis is declined.

As in the first case, we could not find the precisely same topic discussion in the literature for the link between art at young ages and further entrepreneurial success. However, we have considered many sources studying similar topics. There is an undoubting link between creativity and art, and in the case of creativity, much research argued the impact of creativity on future success. Creativity is considered a competitive advantage and a crucial factor (for example, Basadur and Hausdorf, 1996; Bessant et al., 2005) but also other researchers argue that there is a positive relationship between performance and creative skills and actions. Therefore, we see the sort of confirmation of previous scientific works and an even stronger contribution to that taking into account the formation of ages activities and not only the same period of entrepreneurial activities. The hypothesis is also proven in an Italian entrepreneurial context. It is confirmed and the strong (99% statistical significance level) positive relation – with the biggest coefficient among all significant variables – between future success and art as a part of young ages passions is presented.

The most surprising result could be observed in the case of the education level effect. We could expect that it would be simply a positively correlated significant effect of higher level education as most of the research mentioned in the second chapter argued. In case of not having a positive effect, we expected to play a moderation role in education and based on that our third hypothesis. However, eventually, we have no confirmation for the moderation effect of education but moreover, observe the negative statistically significant relationship between performance and education level. There could be some potential explanation for that. Perhaps, the Italian entrepreneurial context is somehow similar to the developing countries (Reynolds et al., 2012) where the role of entrepreneurship could be not a result of choice but more a necessity. Thus, education level loses its significance and is not that important anymore. Alternatively, a higher level of education leads to a more specialized role of employee and thus those with a higher education end up being hired and paid in companies where they are responsible for a small but precise function. Meanwhile, entrepreneurship is more about a whole variety of skills and does not depend that much on a higher level of education. Therefore, our hypothesis three cannot be confirmed.

The next step is to talk about hypotheses four a and b, considering two types of passions. In every model containing HPF, we observe that it remains insignificant in the case of Italian entrepreneurs. Despite most of the literature (e.g. Vallerand; Ho and Pollack, 2003), describing harmonious passion as a factor leading to better performance and outcomes, our models keep it irrelevant. The possible explanation for that could lie in a difference between entrepreneurs in other countries who have been studied before and Italian ones. One of the reasons could be the structure of companies and owners in Italy. While in other European countries the percentage of family businesses is around 60%, in Italy this number is equal to 85%. It might mean that most entrepreneurs manage already existed previously family enterprises and the choice of their future has been made before and it is more of succession but not a personal choice. Thus, there is a lack of connection between harmonious passion and entrepreneurial performance since Italian entrepreneurs were involved in that activity somewhat automatically and did not build it since the beginning, and therefore have less engagement.

Furthermore, the potential explanation could be in the fact that the enterprises in our research represent SMEs and other research (Covin and Covin. 1990) show that high-performing firms typically stay in environments that often exhibit an aggressive competitive orientation and environmental hostility. That could negatively affect the potential harmonious passion presence for successful entrepreneurs either.

The obsessive passion factor was highly significant in a model and thus we can say that our hypothesis 4b is confirmed and in our case, we see the negative impact of it on performance. OPF was mentioned as a negative factor for success in many research works and so it is the same situation in an Italian entrepreneurial context. Thus, obsessive passion could be a reason for weak financial results for enterprises (Ho and Pollack, 2014). Moreover, individuals could experience frustration (Vallerand, 2008) not being able to engage in their activity, persisting at it to the detriment of themselves and the people around them.

Finally, considering our hypotheses 5a and 5b, we observe something unexpected in our models. First, we should admit that the harmonious passion factor keeps being insignificant and there is not much to add to the reasons that we talked about just above. However, we detect that the moderation effect of gender takes place in the case of obsessive passion and is confirmed through the plots we made. Especially, we must emphasize the character of moderation. When we divide into two groups our entrepreneurs we see that OPF expectedly has a negative effect on entrepreneurial performance

that was discussed previously. However, in female cases, we see the opposite. The obsessive passion not only makes the performance worse but also oppositely is a factor that is considered a positive one. Simply a higher level of OPF leads to a better performance level in the case of female entrepreneurs. That sort of effect has a lack of literature and so potentially is the one to study more. We can assume based on previous similar research that this effect could be specific to females with some specific qualities. For example, Bayraktar and Jimenez (2022) argued that obsessive passion is positively related to social loneliness and perhaps we should analyze that effect in couple with other characteristics of only female entrepreneurs to receive the answer and elaborate on what we reached so far. Additionally, we could explore more female entrepreneurs' work-life balance characteristics as obsessive passion was found to be associated with a measure of conflict with other life activities (Amiot et al., 2006).

It is worth considering other variables in our models since some of them presented somehow unexpected links. Especially, we would talk about the entrepreneurs' ages, gender, and belonging of an enterprise to the smallest size companies segment. Finally, we would underline the most unexpected connection discovered between control variables and entrepreneurial performance.

First, we observe that entrepreneur age and success are negatively related to all presented models. The relation is not that strong but constant so we still can say that generally, younger entrepreneurs reach a higher success level than their older peers. It is in line with other research, for example, Hisrich (1990) claimed that although an average age has little meaning, generally when appropriate training and preparation are present, earlier starts in an entrepreneurial career are better than later ones.

Second, in those models where gender is a significant factor, we exclusively have a positive relationship which means that typically male entrepreneurs are more successful in their activities. The result is not surprising since many of the research (e.g., Fairlie and Robb, 2009), where gender was found as a significant factor, claimed the same link. Here we could focus on the Italian context since many independent sources show us still a high problem of gender inequality and masculinity in Italian society. Thus, the fresh gender equality index claims that in Italy it is equal to 63.8 out of 100, while on average in the EU it is 68 and in some countries like Sweden or Denmark is 83.9 and 77.8 respectively. The famous Hofstede (2003) cultural dimension research claims that Italy has the second highest, after Austria, masculinity index in European ones. Meanwhile, such countries as Norway and Sweden have an index of 8 and 5 respectively. All that cultural background could

eventually lead to the difference in availability to enter (we said previously that there is only 29% of female entrepreneurs) and eventually reach a high level of entrepreneurial performance.

Third, the fact of belonging to the smallest micro-segment of SMEs leads us to a negative relation with success which is also in line with general knowledge of performance. Smaller companies have fewer resources, flexibility, and the right to the mistake. Due to their market power, larger firms can charge higher prices and hence earn higher profits (Pervan and Visic, 2012). Additionally, higher profits could also be the result of economies of scale and stronger negotiating power that provides larger firms with more favorable financing conditions. Thus, smaller enterprises usually tend to struggle more than their bigger colleagues do.

Last but the most unexpected among our control variables result is presented for the education level of entrepreneurs. The level of education is constantly significant over the all models we considered and it is constantly negatively related to entrepreneurial success. Remind you that we have three levels of education mandatory high school and finally to a university degree. There are possibly a few different ways to develop this fact and we should think of the particular Italian context possibly, or maybe the years of experience mean more in the case of our entrepreneurs than the previously gained education. In any case, we could take it as a potentially stimulating topic to talk about in the next research.

There are a few practical possible implications we would like to propose after having seen and discussed the results. We could apply the knowledge of arts activities at youth ages as positive factors for the future performance in education processes and thus modify and plan different educational stages, for example, school or after-school activities, considering that research result. Additionally, while considering their future employment as an entrepreneur people could take into account their previous activities and be more conscious of their professional orientation. We believe that it could be used in employment human resources processes. Since there are more and more popular so-called intrapreneurial activities that are simply entrepreneurship in an existing organization while hiring and considering various candidates this knowledge could be applied as well.

Figure 16. Potential implementation of research

Source: Personal elaboration

3.5. Limitations and suggestions for future research.

"There is no perfection, only beautiful versions of brokenness" (Shannon L. Alder). Thus, we are also sure that there are a few aspects of our research that could be improved and applied for future research based on ideas of what has been already done. First, there is always space to improve and have a better dataset. In our case, we had just above 200 enterprises out of 4 million Italian companies so the first and most obvious improvement could be about increasing the size of our sample. Second, the question of generalization for the results is here since we have considered only Italian context and cultural differences that might take a place while trying to expand our conclusions to an international or even global scale. Third, we considered only small and medium-sized enterprises while large ones (more than 250 employees hired) have different some different characteristics, for example, the managerial practices, money raising and funding the new business activities, there is some space to include that part in our research in future and see how it changes the results.

Another critical part that could be discussed is the success measurement approach. As it is described at the very beginning nowadays there are a few concepts of success measuring and not only financial performance has to be analyzed. Potentially, all other dimensions such as emotional, social, occupational, community, even personal development, and other variations of success can be implemented and it is definitely in line with the global trends of taking care of not only your 'financial' health but also your mental health. Thus, mixing up together some more psychological theories and economics might lead us to big significant openings. Therefore, we consider that not only as a weakness of ours but mostly as a huge space for the future improvement and growth of the topics.

Moving forward to other potential future elaborations, we remind that our first hypotheses are sort of new ideas that have not been explored a lot in the entrepreneurial literature so far. The deeper analysis of personality formation periods and their impact on the following entrepreneurial performance by applying other hypotheses, considering updated and more elaborated towards that direction questionnaires and final datasets, or oppositely going towards some more narrow segments and trying to discover them in profound terms are all potential future implications of our current research.

In contrast with a barely discovered link between young ages and current entrepreneurial performance, we could go for further analysis of the dualistic model of passion and its implementation in an economical context. One of the most obvious ideas could be a switching position for dependent and independent variables. We could try to see what the passion factors depend on and how they change in case of different entrepreneurial success again applying different concepts for the success measure.

3.6. Conclusion.

The last chapter in line with the previous two ones allows us not only to test hypotheses and analyze the results but also to conclude our whole research. Previously we defined and reviewed the literature regarding entrepreneurial personality and followed its performance and success, in case it takes place. We presented different sorts of passion individuals may experience in their previous years – through the activity at young ages – and nowadays – presenting the Dualistic Model with harmonious and obsessive types of passion. Considering these passions and entrepreneurial success, we elaborated on the theoretical framework to be tested and discussed in this last chapter.

The first part of this chapter is dedicated to the modern context in terms of entrepreneurship we observe in Europe and particularly in Italy, especially SMEs which are the dominant part of all enterprises either in Europe or in Italy. Based on that we represent the dataset that is made by mixing two data sources which are the questionnaire elaborated by a group of researchers from five Italian universities and the AIDA database which is mostly in charge of the financial performance of SMEs. Eventually, we represent the main characteristics of a final sample considering such parameters as size, geography, education level, gender, and age of entrepreneurs.

Having described the three categories of variables (dependent, independent, and control) we perform various linear regression models to test our five hypotheses empirically using the SPSS

Statistics software package. Therefore, we see that young-age activities that entrepreneurs used to be passionate about – such as sports and artistic ones – are both statistically significant and positively related to entrepreneurial performance. Moreover, education could be a moderator in the case of sports deeds. In the next part, we test and analyze the hypotheses connected with harmonious (HP) and obsessive (OP) passions. Unfortunately, there are no significant results in the case of OP. However, we receive very curious data on HP that tells us about it is significantly and negatively related to success. Additionally, we observe the moderation effect over gender, again in the case of HP, while OP remains to be statistically insignificant.

Finally, we defined the potential practical implementations of our research, limitations that could be improved, and suggestions for future elaboration and further research to take in that field. Particularly, we would use our results in education, human resource management, and in recently popular intrapreneurial practices while an employee is tasked with developing an innovative idea or project within a company.

Appendix A. Entrepreneurial Questionnaire

Pensando alla sua attività imprenditoriale quanto sono vere queste affermazioni?

		per nulla	poco	abbastanza	molto	moltissimo
1	le permette di fare tante esperienze diverse	①	②	③	④	⑤
2	le permette di vivere delle esperienze memorabili (o di cui non si scorderà mai)	①	②	③	④	⑤
3	riflette le qualità che le piacciono di se stesso	①	②	③	④	⑤
4	è in armonia con le altre attività della sua vita	①	②	③	④	⑤
5	per lei è una passione, che riesce a controllare/gestire	①	②	③	④	⑤
6	è completamente preso dall'attività imprenditoriale	①	②	③	④	⑤
7	non potrebbe mai vivere senza / la sua vita non avrebbe senso senza essere imprenditore	①	②	③	④	⑤
8	il desiderio di essere imprenditore è molto forte: non può frenarsi	①	②	③	④	⑤
9	ha difficoltà ad immaginare la sua vita senza essere imprenditore	①	②	③	④	⑤
10	le sue emozioni dipendono molto dalla sua impresa / dal suo lavoro	①	②	③	④	⑤
11	è veramente difficile per lei controllare il bisogno di andare al lavoro	①	②	③	④	⑤
12	ha quasi un sentimento ossessivo verso l'attività lavorativa	①	②	③	④	⑤
13	il suo umore dipende dalla capacità di svolgere il suo lavoro	①	②	③	④	⑤

14	le nuove cose che scopre le permettono di apprezzare ancora di più la sua attività	①	②	③	④	⑤

Source: personal elaboration, based on Vallerand's passion scale (Vallerand et al., 2003).

Appendix B. Correlation matrixes for the moderation effect of the Hypothesis 3

Correlations

		AVROE	Sport	EDUC	Sport_Educ
AVROE	Pearson Correlation	1	.104	-.065	.076
	Sig. (2-tailed)		.174	.396	.321
	N	174	174	174	174
Sport	Pearson Correlation	.104	1	.063	.952**
	Sig. (2-tailed)	.174		.372	.000
	N	174	202	202	202
EDUC	Pearson Correlation	-.065	.063	1	.268**
	Sig. (2-tailed)	.396	.372		.000
	N	174	202	202	202
Sport_Educ	Pearson Correlation	.076	.952**	.268**	1
	Sig. (2-tailed)	.321	.000	.000	
	N	174	202	202	202

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		AVROE	Sport	EDUC	Sport_cent_Educ_cent
AVROE	Pearson Correlation	1	.104	-.065	-.037
	Sig. (2-tailed)		.174	.396	.628
	N	174	174	174	174
Sport	Pearson Correlation	.104	1	.063	.005
	Sig. (2-tailed)	.174		.372	.943
	N	174	202	202	202
EDUC	Pearson Correlation	-.065	.063	1	-.023
	Sig. (2-tailed)	.396	.372		.745
	N	174	202	202	202
Sport_cent_Educ_cent	Pearson Correlation	-.037	.005	-.023	1
	Sig. (2-tailed)	.628	.943	.745	
	N	174	202	202	202

Source: Personal elaboration

Correlations

		AVROE	Art	EDUC	Art_Educ
AVROE	Pearson Correlation	1	.155*	-.065	.126
	Sig. (2-tailed)		.041	.396	.097
	N	174	174	174	174
Art	Pearson Correlation	.155*	1	.077	.970**
	Sig. (2-tailed)	.041		.279	.000
	N	174	202	202	202
EDUC	Pearson Correlation	-.065	.077	1	.163*
	Sig. (2-tailed)	.396	.279		.020
	N	174	202	202	202
Art_Educ	Pearson Correlation	.126	.970**	.163*	1
	Sig. (2-tailed)	.097	.000	.020	
	N	174	202	202	202

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		AVROE	Art	EDUC	Art_cent_Educ_cent
AVROE	Pearson Correlation	1	.155*	-.065	-.052
	Sig. (2-tailed)		.041	.396	.492
	N	174	174	174	174
Art	Pearson Correlation	.155*	1	.077	.167*
	Sig. (2-tailed)	.041		.279	.017
	N	174	202	202	202
EDUC	Pearson Correlation	-.065	.077	1	.042
	Sig. (2-tailed)	.396	.279		.550
	N	174	202	202	202
Art_cent_Educ_cent	Pearson Correlation	-.052	.167*	.042	1
	Sig. (2-tailed)	.492	.017	.550	
	N	174	202	202	202

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Personal elaboration

Appendix C. Correlation matrixes for the moderation effect of the Hypotheses 5a,b

Correlations

		AVROE	HPF_cent	GENDER	HPF_cent_Gend
AVROE	Pearson Correlation	1	.031	.060	.017
	Sig. (2-tailed)		.689	.435	.820
	N	174	174	174	174
HPF_cent	Pearson Correlation	.031	1	.003	.882**
	Sig. (2-tailed)	.689		.962	.000
	N	174	202	202	202
GENDER	Pearson Correlation	.060	.003	1	.001
	Sig. (2-tailed)	.435	.962		.988
	N	174	202	202	202
HPF_cent_Gend	Pearson Correlation	.017	.882**	.001	1
	Sig. (2-tailed)	.820	.000	.988	
	N	174	202	202	202

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		AVROE	HPF_cent	GENDER	HPF_cent_Gend_cent
AVROE	Pearson Correlation	1	.031	.060	-.020
	Sig. (2-tailed)		.689	.435	.797
	N	174	174	174	174
HPF_cent	Pearson Correlation	.031	1	.003	.024
	Sig. (2-tailed)	.689		.962	.730
	N	174	202	202	202
GENDER	Pearson Correlation	.060	.003	1	-.004
	Sig. (2-tailed)	.435	.962		.954
	N	174	202	202	202
HPF_cent_Gend_cent	Pearson Correlation	-.020	.024	-.004	1
	Sig. (2-tailed)	.797	.730	.954	
	N	174	202	202	202

Source: Personal elaboration

Correlations

		AVROE	OPF_cent	GENDER	OPF_cent_Gend
AVROE	Pearson Correlation	1	-.135	.060	-.183*
	Sig. (2-tailed)		.076	.435	.016
	N	174	174	174	174
OPF_cent	Pearson Correlation	-.135	1	.074	.879**
	Sig. (2-tailed)	.076		.296	.000
	N	174	202	202	202
GENDER	Pearson Correlation	.060	.074	1	.019
	Sig. (2-tailed)	.435	.296		.784
	N	174	202	202	202
OPF_cent_Gend	Pearson Correlation	-.183*	.879**	.019	1
	Sig. (2-tailed)	.016	.000	.784	
	N	174	202	202	202

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Correlations

		AVROE	OPF	GENDER	OPF_cent_Gend_cent
AVROE	Pearson Correlation	1	-.135	.060	-.135
	Sig. (2-tailed)		.076	.435	.076
	N	174	174	174	174
OPF	Pearson Correlation	-.135	1	.074	.009
	Sig. (2-tailed)	.076		.296	.894
	N	174	202	202	202
GENDER	Pearson Correlation	.060	.074	1	-.095
	Sig. (2-tailed)	.435	.296		.181
	N	174	202	202	202
OPF_cent_Gend_cent	Pearson Correlation	-.135	.009	-.095	1
	Sig. (2-tailed)	.076	.894	.181	
	N	174	202	202	202

Source: Personal elaboration

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