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ENTREPRENEURIAL PERSONALITY: THE RELATIONSHIP BETWEEN NARCISSISM AND HABITUAL ENTREPRENEURSHIP

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Abstract

This thesis aims to shed light on the effects that entrepreneur's personality may have on his or her company and how these effects are influenced by national culture. The research has been conducted collecting samples from China, Italy, France and United States. The main traits considered are the degree of narcissism and habitual entrepreneurship, then, these variables have been compared to the four countries' cultural environments using Hofstede's six dimensions framework. The results point out there's no direct correlation between narcissism and habitual entrepreneurship, but both these traits are influenced by the cultural context and entrepreneurs' personal characteristics, such as age and level of education.

Introduction

In 2016, the Italian journal of management "sinergie" published a research conducted by professors Simona Leonelli, Federica Ceci and Francesca Masciarelli. The research aimed to study the effects of entrepreneurs' personality on firm's performance and, in particular, its innovation capabilities. The present research aims to extend the field of analysis while empirically testing the boundary between entrepreneur's personality and firm's dynamics. It's been chosen to focus on narcissism as a personality trait and habitual entrepreneurship as a management phenomenon. The whole comparison is then framed under four different cultural perspectives and the results have been analyzed and commented.

The literature review part gathers all the theoretical notions the reader should consider in order to understand how the subsequent research has been developed. It's mainly based on Leonelli et al.'s (2016) paper, but it's been extended to other topics which weren't discussed before such as habitual entrepreneurship and Hofstede's six dimensions.

The methodology part explains what does the whole research consist in, which is a statistical analysis of a sample obtained through questionnaires administered to startups' founders around the world. First the kind of questionnaire and how it was administered is presented. Further on, the sample is analyzed through graphs showing its main characteristics, such as distribution among the sample of narcissist and habitual entrepreneurs and much more. Then the main instruments of analysis are presented, such as the Kruskal-Wallis test, the ANOVA test and logistical regression. In the end the research returns the results of these tests and comments them.

Literature review

Entrepreneur's traits and start-up innovativeness

Over the years, the concept of entrepreneurship has been deeply reevaluated. In the eighties for example, this phenomenon was triggered by stagflation and unemployment (Wennekers et al., 1999), so people considered again the chance to start over from the ground up. Since then, entrepreneurship has become a widely studied subject and it has been linked to countless other topics such as job growth (Shane, 2003) or economic growth in general (Wennekers et al., 1999).

This concept of creating an opportunity to generate profit by exploiting new means (Shane, 2003), although being adopted since ancient times is now living some sort of "second childhood" with the wide-spreading of the term "startup" as we intend it in the current day. The concept of startup, in fact, was already known in the fifties, when for the first time it has been paired with venture capital (Blank, 2012), but it has reached its notoriety only in recent times with the developing of web and mobile services.

At the same time, even the concept of failure became more known than ever. Starting from the 70% chance of a built from nothing company to fail within two years calculated at the end of the eighties (Haswell et al., 1989) today we deal with a 90% rate of failure for startups (Patel, 2015), which has actually become more likely a sort of convenient formula to acknowledge the riskiness of a startup than a reliable statistical percentage. A more thorough research analysis has pointed out not only that these percentages are in fact lower, but also that a considerable share of failure cases is linked to incompetence or total lack of experience (Statistic Brain, 2017).

Anyway, considering the importance that entrepreneurship has achieved over the last years, it has indeed contributed to the proliferation of researches on it under numerous perspectives. It can be therefore observed that entrepreneurship practice and entrepreneurship study are two sides of the same coin, as long as one progresses, the other follows accordingly, but, needless to say, research struggles to keep up with entrepreneurship's pace of evolution, as new elements of investigation constantly emerge.

Along with market research, financials and firm strategy, one important driver for the success of a startup is its innovation capability (Rosenbusch et al. 2012). which can affect firm's performances positively or negatively. This because a startup has a less rigid structure which allows it to adapt to change better than a conventional firm but at the same time an innovation can be costly and therefore risky for a small company with limited resources (Leonelli et al., 2016). Innovativeness is further discussed by Groenewegen and De Langen (2012), representing one of the three main factors that determine a startup's growth and survival. Hyytinen et al. (2015) consider instead innovation as both a possible driver for startup's performance.

The former because innovation can result in a diversified or totally new market, allowing the firm to avoid barriers to entry and competition costs, along with an enhanced dynamic capability.

The latter because pursuing innovations is nevertheless risky and it may be difficult to estimate the intrinsic value of the startup.

This results in a limited access to external financing and, consequently, higher chances of failure. Hyytinen and his colleagues (2015, p.2), moreover, state that *“entrepreneurs who believe that they are exceptionally innovative may have a particular exit strategy in mind and may, as a result, seek to increase the firm's risk profile to achieve the desired exit.”* In other words, success or failure of a startup is linked (obviously) to entrepreneur's decisions and, furthermore, to his or her perceptions and behaviors.

This opens the field of investigation not only to managerial or financial factors, but also on entrepreneurs' personality, which is how human behaviors affect companies and, more specifically startups.

Several studies have pointed out the existence of a boundary between entrepreneurs' personality and firm's performance (Leonelli et al., 2016), however, only few of them focus on how personality affects the innovativeness of the firm. A research conducted by Simona Leonelli, Federica Ceci and Francesca Masciarelli (2016) relied on previous studies to theoretically assess the main personality traits involved.

The research used startups as a model because in most cases the founder is also the administrator of the company. Given its small dimensions, especially in an early stage, a startup has a significantly reduced distance between the decision maker and the company itself, making the entrepreneur and his or her personality a crucial driver for the startup's fate.

In the first place, personality traits have been defined as *“characteristics of individual behavior which clarify why people act differently in similar situations”* (Leonelli et al., 2016, p.72). Among the others, the traits mostly recognized to affect innovativeness were risk appetite, optimism, logical mind, higher education and previous work and experience in the field (Groenewegen and De Langen, 2012). Ultimately, the

research focused mostly on three categories of traits: narcissism, the Big Five and locus of control.

Narcissism

Derived from the Greek mythological tale of Narcissus, the term narcissism was originally used by Paul Näcke to identify a personality disorder resulting in *“the attitude of a person who treats his own body in the same way in which the body of a sexual object is ordinarily treated”* (Freud, 1914, p.1). This definition has been subsequently mitigated and it's not considered a disorder anymore, except in some extreme cases (Lubit, 2002, Humphreys et al., 2011).

According to the American Psychiatric Association (2000), narcissism is a *“pervasive pattern of overt grandiosity, self-focus, and self-importance behavior, displayed by an individual or group of individuals”* and identifies narcissists as people with a grandiose sense of self-importance, preoccupation with fantasies of unlimited success or power, belief in unique status, need for excessive admiration, unreasonable sense of entitlement, conscious exploitation of others, lack of empathy, envious and arrogant behaving towards others (Mainah, 2014).

More recently, it has been defined by Campbell et al. (2011, p.268) as *grandiosity, perverse self-love, vanity, a sense of entitlement, exploiting others, a desire for power and esteem, and inflated self-views containing three components including the self, interpersonal relationships, and self-regulatory strategies.*

These are just a few definitions of this trait, which received increased public interest in the last years (Grijalva et al., 2014) given its importance as a mean of evaluation for the personality of the entrepreneur. Despite being initially identified as a negative trait of human personality, researchers developed conflicting views whether narcissism could affect startups positively or negatively.

Mainah et al. (2014) state that high levels of narcissism tend to estrange the leader from the very people he's trying to lead, resulting in poor communication and

subsequent lack of cohesion inside the team. They state moreover that despite narcissism could trigger some degree of charismatic leadership, the few benefits don't outweigh the disadvantages.

Leonelli et al. (2016 p.75-76) mention several researchers underlining the positive influence narcissism can have on leaders, such as the already mentioned above charisma, improved levels of creativity, visionary and innovative qualities. Their suggestion is in fact resumed in a theoretical proposition stating that “*Narcissistic entrepreneurs positively influence start-ups’ innovativeness*”

A further in-depth analysis concerning narcissism and its managerial implications will be conducted in the next paragraph, as it represents the key point of the whole research.

The Big Five

The second personality trait considered to be affecting managerial performances is actually a set of personality traits, commonly referred to as “The Big Five” model. Mentioned as such by Goldberg (1981), the Big Five model is the ending result of a complex classification procedure aimed to develop a taxonomy for the thousands of particular attributes that characterize the human being (John, 1999). In its framework, the Big Five model comprises the following categories: neuroticism, extraversion, openness to experience, agreeableness and consciousness (Leonelli et al., 2016). Costa and McCrae (1985) gave their contribution developing the NEO personality inventory. They addressed these above-mentioned categories by adding six facets to Neuroticism, Extraversion and Openness (That's what NEO stands for). Later on (1992) facets were added to the remaining categories too. The complete framework is reported in the table below (fig.1). Further on, every category and its economic implications will be briefly discussed.

Big Five dimensions		Facet (and correlated trait adjective) ^d
E	Extraversion versus introversion	Gregariousness (sociable) Assertiveness (forceful) Activity (energetic) Excitement-seeking (adventurous) Positive emotions (enthusiastic) Warmth (outgoing)
A	Agreeableness versus antagonism	Trust (forgiving) Straightforwardness (not demanding) Altruism (warm) Compliance (not stubborn) Modesty (not show-off) Tender-mindedness (sympathetic)
C	Conscientiousness versus lack of direction	Competence (efficient) Order (organized) Dutifulness (not careless) Achievement striving (thorough) Self-discipline (not lazy) Deliberation (not impulsive)
N	Neuroticism versus emotional stability	Anxiety (tense) Angry hostility (irritable) Depression (not contented) Self-consciousness (shy) Impulsiveness (moody) Vulnerability (not self-confident)
O	Openness versus closedness to experience	Ideas (curious) Fantasy (imaginative) Aesthetics (artistic) Actions (wide interests) Feelings (excitable) Values (unconventional)

Fig. 1: NEO Personality Index – revised. Source: Costa and McCrae (1992)

Zhao et al. (2010) discuss these traits under an economical point of view. In particular, they analyze the effects of the Big Five both on managers and entrepreneurs, developing an interesting comparison between the two. Although our research is based on startups, these observations are worth reporting under both points of view.

- Extraversion

Extraversion is the tendency to be outgoing, assertive, active, enthusiastic and excitement seeking. Extroverted people are charismatic, prone to entrepreneurial activity and inspiring positive feelings. Considered to be the key trait for salesmen (Costa and McCrae, 1992), extroversion yields positive effects both for managers

and for entrepreneurs, because it contributes to improve social interactions with colleagues and stakeholders, resulting in benefits both for firm's performance and innovative capabilities (Leonelli et al., 2016). However, according to Zhao et al. (2010), entrepreneurs seem to benefit more from it than managers, this because having to deal constantly with venture capitalists, partners, employees and customers, the role of the entrepreneur is closer to a salesman's than the manager is.

- Agreeableness

Agreeableness identifies a person who can be trusting, forgiving, caring, altruistic and gullible (Zhao et al., 2010). An entrepreneur with high level of agreeableness is cooperative and willing to strengthen interpersonal relationships, on the other end, a low level of agreeableness usually makes him or her to be manipulative, suspicious or ruthless (Costa and McCrae, 1992). These aspects can contribute both positively and negatively to entrepreneur's capabilities, in fact, despite being trustworthy for the rest of the team, the agreeable entrepreneur may need a high level of affiliation, resulting harder for him or her to make difficult decisions concerning the team (Zhao et al., 2010).

- Conscientiousness

Conscientiousness is defined by Zhao et al. (2010, p.261) as *a degree of organization, persistence, hard work and motivation in the pursuit of goal accomplishment*. The effect of these facets on both entrepreneurs and managers is quite obvious, as it stimulates them to strive to put all of their effort to pursue their goals, resulting in an improvement in both performances and innovativeness. Snyder & Ickes (1985) complete this profile stating that although positive for both, conscientiousness has a stronger influence on entrepreneurs than in managers because managers usually work in a more established environment and their tasks are in some way more structured. On the other hand the entrepreneur, even more so in a

startup, operates in a more discretionary and self-directed environment (Zhao et al., 2010).

- Neuroticism

Neurotic people tend to experience a number of negative emotions such as anxiety, hostility, depression, self-consciousness, impulsiveness and vulnerability (Costa and McCrae, 1992). On this trait Zhao et al. (2010) start the analysis considering the higher workloads and unstable conditions of the entrepreneur compared with the manager, but according to them, entrepreneurs have a higher degree of self-confidence and a strong belief in their ability to control outcomes in the environment. These facets appear to more than compensate the situation previously mentioned, making entrepreneurs to be less prone to neuroticism than managers.

- Openness to experience

Probably the trait with the highest correlation with innovativeness, a high degree of openness to experience assumes the subject to be curious, creative and unconventional (McCrae, 1987). As stated previously, innovation is the main driver for the success of a startup (Rosenbusch, 2012), making openness to experience one of the most important traits a good entrepreneur should possess. Managers, instead, usually have a lower degree of openness than entrepreneurs, not necessarily because of their mindset, but because they usually attain to policies established by the company (Zhao et al., 2010).

Locus of control

According to Rotter (1966), rewards and gratifications play a key role in the acquisition and improvement of skills and knowledge. Locus of control measures to which extent the individual believes events are generated by his or her own actions (internal locus of control) or they depend on external factors he or she can't control (external locus of control). In general, individuals with an internal locus of control are usually more confident, they believe their fate is not set and they can influence it with

their actions. Individuals with an external locus of control, instead, are more passive, as they surrender to the fact that the events in their lives are influenced by forces they can't do anything about, such as luck, fate, powerful people or institutions (Leonelli et al., 2016).

Under an economical perspective, Boone et al. (1996) state that CEOs with an internal locus of control are usually more persistent, as they strongly believe in their view and they strive to realize it, whether external CEOs are more prone to quit when facing troubles, as they consider them impotent towards fate and start to feel physically and mentally ill.

Locus of control strongly influences the relationship between the entrepreneur and the environment he or she works in: an internal entrepreneur will exploit his confidence to persuade his employees, while an external entrepreneur will prefer to just give orders (Goodstadt and Hjelle, 1973, Mitchell et al., 1975). These leadership strategies lead to different outcomes, the former usually includes the employee as an integral part of the project, allowing him to think and act on the same wavelength as the entrepreneur's. The latter puts higher distance between entrepreneur and environment, as employees only have to follow directions, resulting in a lower degree of transversal thinking and responsibility taking.

Entrepreneur's locus of control is therefore an important instrument to predict small firms' performance, moreover, it can be considered a driver to even simply start an entrepreneurial activity, as external entrepreneurs are less likely to challenge themselves in risky ventures (Boone et al. 1996). Same conclusions can be drawn for what concerns innovative capabilities: innovation itself is risky, so it's necessary to be confident in one's own skills, whether believing in fate as a main driver discourages the implementation of innovative strategies (Miller and Toulouse, 1986, Miller et al., 1982) proving internal locus of control again to be preferable to external locus of control.

Another observation worth mentioning is the connection that emerges between locus of control and narcissism. While discussing the narcissistic entrepreneur, Maccoby (2000 p.1-3) states that *“Productive narcissists are not only risk takers willing to get the job done but also charmers who can convert the masses with their rhetoric”* and *“(...) nor do they try to extrapolate to understand the future—they attempt to create it”*. These two quotations perfectly fit to what stated before concerning internal entrepreneurs’ acting and influencing capabilities.

A focus on narcissism and narcissistic leadership

Narcissism has been discussed in previous paragraphs by listing some of the definition and connotations researchers have developed over the years. This part will now analyze its effects on entrepreneur’s personality and the effects it has on firm’s performance. These elements will be then taken as a basis to compare narcissism to habitual entrepreneurship, which will be presented in the next paragraph.

Countless studies have been made on narcissism, as many on its effects on the entrepreneur. In particular, from the eighties on, when the way entrepreneurs ran their companies experienced several changes. Until then, entrepreneurs were more a sort of institutional figure who ran the internal politics of the company. They usually shunned the press and communicated mainly through comments created by their corporate PR department (Maccoby, 2000). Eventually the scenario changed radically to the situation we still experience nowadays. The entrepreneur has become some sort of superstar, people like Bill Gates, Steve Jobs or Jeff Bezos spread their philosophies through the media, becoming a proper resource for their experience marketing department (Maccoby, 2000).

Maccoby (2000) explains this phenomenon claiming that business’ role in our lives is bigger than ever before, and that the changes it is experiencing call for a visionary and charismatic leadership. This last part in particular makes us recall Schumpeterian theories about innovation as a main driver for a firm’s success

(1934). The implicit suggestion is that innovation has been internalized to the extent that the image itself of the entrepreneur acts as a source of inspiration.

This “*larger-than-life*” (Maccoby, 2000, p.1) personalities are what Freud would have definitely classified as a “*narcissistic libidinal type*” (Ronningstam, 2005), or more precisely, “*The subject’s main interest is directed to self-preservation; he is independent and not open to intimidation. His ego has a large amount of aggressiveness at its disposal, which also manifests itself in readiness for activity. In his erotic life loving is preferred above being loved. People belonging to this type impress others as being “personalities”; they are especially suited to act as a support for others, to take on the role of leaders and to give a fresh stimulus to cultural development or to damage the established state of affairs.*” (Ronningstam, 2005 p.5).

This quotation has been entirely reported as it thoroughly describes the general profile of a narcissistic entrepreneur, both resuming what already said and further developing the discussion altogether. In particular, this quotation points out some of the main pros and cons, or rather, as more precisely classified by Maccoby (2000), productive and unproductive narcissism.

Narcissistic entrepreneurs’ aggressiveness allows them to strongly pursue their goals, which is good for developing new and risky projects, again with benefits for innovation. The downside is that the entrepreneur can be very committed to a project that will be unsuccessful no matter how much effort is put in it. In this case his narcissism will act counterproductive, as the entrepreneur won’t hear any of the warnings of the rest of the team, seeing them as obstacles to success instead.

Steve Jobs has given us a pretty well-known example of this phenomenon in real life (Rawlinson, 2017). In 1984 he launched Macintosh computer with the idea of revolutionizing the entire computer industry, at the time ruled by IBM, by creating a user-friendly machine in a time in which computers were still a mysterious object for the most. The result was as revolutionary as promised, with an all new interface and

improved graphical capabilities. The real problem, however, was the price. Not only this machine was way more expensive than its competitors, but lacked some of the most important features users required at the time, such as memory space and updatable hardware. What started as a computer for the masses turned out to be an expensive toy. In the end, the results of Steve Jobs' stubbornness were sales well below expectations and a compromised relationship with Apple's CEO John Sculley, which eventually led to his dismissal from the company he founded.

This story has brought to our attention some of the facets of the narcissistic entrepreneur, such as selfishness, stubbornness and aggressiveness, but also high levels of personal confidence.

On a productive perspective, narcissism makes an entrepreneur to become a leader (Maccoby, 2000), which is someone other people will follow. This is made possible thanks to communicative abilities, inspiring and charismatic personality.

On the downside, narcissism can result also in alienation and disrespect for others' ideas, making the entrepreneur loved by the masses but hated in his or her environment. On this last point, however, Maccoby (2000) states that narcissistic entrepreneurs prefer to be admired, rather than loved, which brings the discussion again to the character of the superstar entrepreneur where it started from.

The habitual entrepreneur

The second main phenomenon to be considered in this research is habitual entrepreneurship and its connections to entrepreneurs' personality.

Just like entrepreneurship as a concept, there is no generally accepted definition for "habitual entrepreneur". It is usually regarded as an entrepreneur who established more than one business throughout his or her career (Iacobucci and Rosa, 2004) and developed a certain degree of business experience. Entrepreneurs who exit one business before owning a subsequent one are defined as "serial entrepreneurs", the ones who start, purchase and retain several businesses at once are defined "portfolio entrepreneurs" (Ucbasaran et al., 2008). This definition as it is, however, is rather incomplete and needs further discussion.

Several theories have been developed over the years to better identify this category of entrepreneurs, but, as pointed out by Ucbasaran et al. (2008), they are based on sometimes contrasting definitions, making them difficult to compare. These researchers examined them in the attempt to give a harmonized definition for the habitual entrepreneur and its subcategories. The theories analyzed take experience as a basis (Cross, 1981; Storey, 1982), but also numbers of firms founded or owned (Ronstadt, 1988; Kolvereid and Bullvåg, 1993) and degree of control of the firm (Schollhammer, 1991). Ucbasaran et al. (2008) sum up these features and develop the following definitions:

- Novice entrepreneurs: individuals with no prior business experience who currently own a minority or majority equity stake in a new or purchased independent business.
- Habitual entrepreneurs: individuals who hold or have held a minority or majority equity stake in a new or purchased independent business.

Habitual entrepreneurs are themselves sub-divided in:

- Serial entrepreneurs: individuals who sold or closed at least one prior business they held or participated in, and currently own or participate in another independent business.
- Simultaneous (or Portfolio) entrepreneurs: individuals who currently own or participate in two or more businesses.

These categories are resumed in the table below:

Nature of entrepreneurship	Single activity	Multiple activity	
		Habitual entrepreneurs	
	Novice entrepreneurs	Sequential serial entrepreneurs	Simultaneous portfolio entrepreneurs
Involving new businesses	Novice founders	Serial founders	Portfolio founders
	1	2	3
Involving existing business	Novice acquirers	Serial acquirers	Portfolio acquirers
	4	5	6

Fig. 2: Types of entrepreneurs by independent business ownership experience. Source: Ucbasaran et al., 2008

The main difference between a novice and a habitual entrepreneur relies on the fact that the latter has already owned one or more companies, so he's likely to have improved skills. Experienced entrepreneurs, for example, have better ability to create, identify and exploit opportunities, better knowledge in how to manage people and resources and higher technical expertise (Ucbasaran et al., 2008). They also have a broader relational network, which both leads to higher social capital and easier access to financing, which, especially with startups, is crucial.

To sum up, it can be stated that experience enhances human capital, which is leveraged by the entrepreneur to gain access to a virtually uninterrupted supply of critical resources (Cooper et al., 1994; Greene and Brown, 1997). Moreover, habitual

entrepreneurs can make a fundamental contribution to the problem of wealth creation in society (Scott and Rosa, 1996), because they contribute financially with taxation revenue and academically as they give a broader understanding of the entrepreneurial process (Rosa, 1998).

It is however incorrect, or at least incomplete, to state that all habitual entrepreneurs are successful and outperform novice entrepreneurs (Ucbasaran et al., 2006). Firstly, there is little empirical evidence to justify the correlation between experience level and firm performance (Ucbasaran et al., 2008) and, secondly, habitual entrepreneurs could inherit both assets and liabilities from their previous experiences (Starr and Bygrave, 1991), which could damage other companies or the entrepreneur himself. It is therefore more appropriate to say that novice entrepreneurs are the “breeding ground” for future experienced entrepreneurs, allowing themselves to grow through success, failure and revision of expectations (Sitkin, 1992; McGrath, 1999).

Some differences emerged from the comparison between serial and portfolio entrepreneurs too. According to Westhead and Wright (1998), portfolio entrepreneurs tend to own or participate in multiple businesses more for materialistic reasons than serial entrepreneurs, who seem to repeat the operation to pursue a personal goal instead. Serial entrepreneurs usually rely on personal, family or friends financing, where portfolio entrepreneurs, instead, are usually financed by customers, suppliers or business partners (Birley and Westhead, 1994). However, no significant differences concerning firm performance have been noticed between serial and portfolio entrepreneurs (Westhead and Wright, 1998).

Comparison between narcissism and habitual entrepreneurship

Now that the main theoretical concepts of this research have been introduced, narcissism and habitual entrepreneurship theory will be compared in order to identify if there is some sort of correlation between these two traits. This work's main hypothesis will be pronounced and will be later analyzed through a research based on real samples.

According to the various aspects analyzed until now, it seems that habitual entrepreneurship and narcissism seem to influence and mutually strengthen themselves. It's been stated, among the other things, that habitual entrepreneurship grants higher levels of experience, which increases the chances of success. Narcissists, likewise, pursue success and achievements as one of the main goals of their entrepreneurial life. As stated by Maccoby (2000), achievements can feed feelings of grandiosity, which are portrayable as narcissism. Moreover, according to Spivack et al. (2014), repeatedly engaging in entrepreneurial activity can be classified as a behavioral addiction. The reasons that explain this attitude are to be found in independence and enhanced psychological well-being. This quest for the consolidation of one's personality is consistent with the characteristics of narcissism until now analyzed.

Another example of common ground between narcissism and habitual entrepreneurship is represented by optimism (Westhead and Wright, 2016). A narcissistic entrepreneur is by definition highly confident in his actions, which is consistent with optimism. In the case of habitual entrepreneurship, optimism is one of the main drivers for the individual to start multiple activities.

Failure plays an important role too between the traits we are analyzing, in fact, while narcissists rarely blame themselves for a failure, effects on habitual entrepreneur may differ according to Westhead and Wright (2016), who state that serial or portfolio entrepreneurs who experience failure one or more times during their career usually report lower levels of comparative optimism. However, by integrating Hayward et

al.'s (2010) research, it appears that highly confident entrepreneurs who fail are better positioned to start subsequent ventures. They state in fact that these individuals develop throughout their career *emotional, cognitive, social and financial resilience to their failure*. (p.1). This behavior carries both positive and negative effects with it, such as resilience as a key requirement for succeeding in businesses with high failure rates (i.e. pharmaceuticals) and excessive self-confidence as a reason to develop faulty judgements on failed ventures. Ultimately, Hayward et al. (2010) claim that negative effects are more than counterbalanced by positive effects. Not only, they identify optimism, narcissism and self-esteem as enduring traits that don't change from one venture to the next, which can be interpreted as themselves to be the main drivers for habitual entrepreneurship.

To sum up these researches and theoretical observations, this work's main hypothesis may suggest that:

“Entrepreneurs with high levels of narcissism are likely to be habitual entrepreneurs too.”

Hofstede's cultural dimensions

It is not sufficient, however, to just state the hypothesis without considering at least some of the factors that influence this correlation. This comparison will be now set in different cultural environments to observe which changes it may go through. Cultural mindsets may, in fact influence or sometimes even shape the human behavior, as the theory presented further on will point out.

Hofstede (1983) claims that nationality is relevant to management for at least three reasons: political, sociological and psychological. Political factors are indeed a country's history, institutions, government and educational systems, which determine the way an individual is raised regardless of his or her personality. Nationality and/or regionality represent a symbol for the individual, which can thus develop a sense of belonging and identification in a country's symbol, and that is the sociological reason. Psychologically speaking, instead, the matter becomes more intricate, as it represents a consequence of the first two categories above mentioned which operates on individuals' minds through their life experiences (Hofstede, 1983).

Through life experiences, Hofstede (1983) claims that individuals become "mentally programmed", which means that they tend to set their mind to interpret experiences in a certain way. By extending this concept to an entire population, we start dealing with the idea of "culture".

Culture is probably the most analyzed and discussed topic among international business and marketing researchers. It has been defined in countless ways, Kluckhohn (1951), for example, stated that culture consists in "*patterned ways of thinking, feeling and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements of human groups*". Other than symbols, often represented in artifacts as well (Kroeber and Parsons 1958), culture is layered in values, heroes and rituals (Hofstede, 1980). These layers are then externalized through practices, which make them visible to outside observers, but don't explain their cultural meanings, which lie in the layer itself. Practice, therefore, are driven by

the other layers, but explain only what an external observer perceives them as. The whole framework has been represented by Hofstede (1980) as an “onion diagram”, as shown below (Fig. 3):

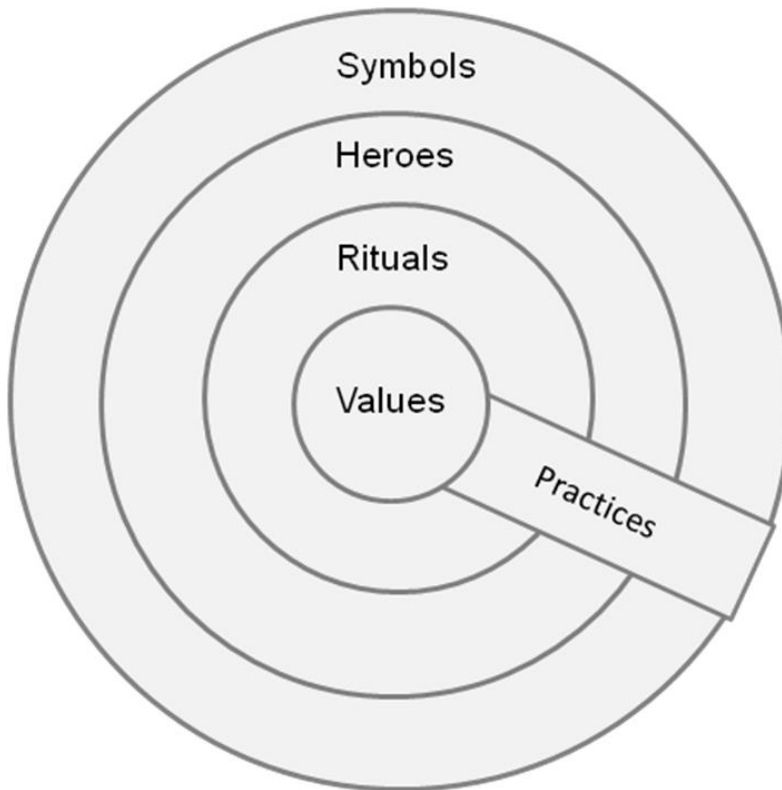


Fig. 3: Hofstede's model of cultures (onion diagram). Source: Hofstede (2001)

This model may appear too simple, but it is pretty explanatory instead: its layers carry a huge number of different facets with them. Combined together, these facets result in infinite cultural mindsets, which are impossible to be explained one by one. Consequently, culture per se is usually defined through general statements. A deeper knowledge can be obtained by categorizing culture, which is actually what has been done in the graph above.

Hofstede (1983) himself defines national culture or national character as a superficial and false generalization, as several subcultures exist in a single nation or regions and there's no commonly accepted language to define them all. Some aspects,

however, are still distinguishable as the prevailing way of thinking and acting in a geographical area. This allows to have a general, but not precise identification of a nation's culture. Moreover, this can be misinterpreted, because as mentioned before, culture is usually carried out by practices, which only explain values or rituals the way the observer perceives them.

Bearing these caveats in mind, an acceptable terminology to describe culture has been developed by Hofstede between 1967 and 1968. In the beginning, he used four independent criteria to classify cultural differences among nations. Depending on one country's own characteristics, a score is assigned to every category. These criteria are known as "dimensions" as scores can be distributed in any possible combination among them (Hofstede, 1983). The model successfully summarized some pre-existing dimensions from other researchers (Gregg and Banks, 1965, Lynn and Hampson, 1975) and has become over the years a widely used instrument to classify culture.

The model has been further improved in the eighties with the contribution of the Canadian researcher Michael Harris Bond (Hofstede and Bond, 1988), who added a fifth dimension, and in 2000s when Bulgarian scholar Michael Minkow added the sixth one (Hofstede and Minkow, 2010). According to the Hofstede Insights website, the updated framework is composed and described as follows:

- Power Distance - *This dimension deals with the fact that all individuals in societies are not equal, it expresses the attitude of the culture towards these inequalities amongst us. Power Distance is defined as the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally.*
- Individualism versus Collectivism - *The fundamental issue addressed by this dimension is the degree of interdependence a society maintains among its members. It has to do with whether people's self-image is defined in terms of "I" or "We". In Individualist societies people are supposed to look after*

themselves and their direct family only. In Collectivist societies people belong to 'in groups' that take care of them in exchange for loyalty.

- *Uncertainty Avoidance - The dimension Uncertainty Avoidance has to do with the way that a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? This ambiguity brings with it anxiety and different cultures have learnt to deal with this anxiety in different ways. The extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these is reflected in the score on Uncertainty Avoidance.*
- *Masculinity versus Femininity - A high score (Masculine) on this dimension indicates that the society will be driven by competition, achievement and success, with success being defined by the winner / best in field – a value system that starts in school and continues throughout organisational life. A low score (Feminine) on the dimension means that the dominant values in society are caring for others and quality of life. A Feminine society is one where quality of life is the sign of success and standing out from the crowd is not admirable. The fundamental issue here is what motivates people, wanting to be the best (Masculine) or liking what you do (Feminine).*
- *Long Term versus Short Term Orientation - This dimension describes how every society has to maintain some links with its own past while dealing with the challenges of the present and future, and societies prioritise these two existential goals differently. Normative societies, which score low on this dimension, for example, prefer to maintain time-honoured traditions and norms while viewing societal change with suspicion. Those with a culture which scores high, on the other hand, take a more pragmatic approach: they*

encourage thrift and efforts in modern education as a way to prepare for the future.

- *Indulgence versus Restraint - One challenge that confronts humanity, now and in the past, is the degree to which small children are socialized. Without socialization we do not become “human”. This dimension is defined as the extent to which people try to control their desires and impulses, based on the way they were raised. Relatively weak control is called “Indulgence” and relatively strong control is called “Restraint”. Cultures can, therefore, be described as Indulgent or Restrained.*

Methodology

Sample and Procedure

The samples are based on startups founded between 2009 and 2017 and located in China, Italy, France and United States. All of them have been collected through surveys. Only the ones from United States, however, can be considered primary data, as they've been collected specifically for this thesis. The rest of the samples from remaining countries come from previous researches. It's worth mentioning though, that all the data have been collected for the same purposes and with the same procedure, which makes the difference between this research's primary and secondary data insignificant.

All the startups have been selected by randomly picking from online databases, which allowed to gather a wide range on information, both on firm's status and its founders' data. These founders were sent a contact request on LinkedIn where they've been asked to fill in a survey to assess their level of narcissism and whether they are habitual entrepreneurs or not. Entrepreneurs without a LinkedIn profile were contacted via Facebook or email. After accepting the request, the questionnaire was administered.

Data from the Chinese sample have been collected from AngelList's database, which provided information on both the startups and their founders. All the companies were founded between 2011 and 2017 and were located in Shanghai, Beijing, Shenzhen and Guangzhou. 256 companies were initially contacted, 138 accepted the connection request and 66 answered the questionnaire (25,78% response rate).

Italian startups have been selected from the Italian register of innovative startups and they were all founded between 2012 and 2015. Their economic and financial information were retrieved using Aida, a company valuation instrument made available by Moody's analytics company Bureau Van Dijk. The initial sample was

composed by 495 companies. In the end, 391 contact requests were accepted and 128 entrepreneurs answered the questionnaire (25,86% response rate).

For the French sample, all the startups have been selected from “myFrenchStartup”, which is the most complete list of startups available with information on both founders and companies’ financial status. They were all founded between 2009 and 2015 and located in Provence-Alpes-Côte d’Azur, Auvergne-Rhône-Alpes and Ile-de-France. Out of 560 entrepreneurs contacted, 400 accepted the request and only 97 answered the questionnaire (17,32% response rate).

Data regarding the United States have been collected more recently than the other countries’. The research aimed to focus on the states in the western part of the country, but given the presence of the Silicon Valley, the majority of the answers came from California. The list of startups has been randomly generated by AngelList’s database, where it’s been possible to collect their founders’ contact info. All the companies were founded between 2012 and 2017. The financial numbers have been collected by comparing both AngelList and Crunchbase, which is a similar data bank. This comparison was necessary because both databases alternately lacked some important information about the companies’ raised funds or their investment rounds. In the end, out of 170 entrepreneurs selected, 100 accepted the request and only 11 answered the questionnaire (6,47% response rate).

In summary, composition of the whole sample, including each country’s response rate and entrepreneurs’ sex distribution are shown in the following tables:

	CHINA	ITALY	FRANCE	UNITED STATES	OVERALL
REQUESTS SENT	256	495	560	170	1481
REQUESTS ACCEPTED	138	391	400	100	1029
QUESTIONNAIRES FILLED	66	128	97	11	302
MALE ENTREPRENEURS	59	115	88	10	272
FEMALE ENTREPRENEURS	7	13	9	1	30
RESPONSE RATE	25,78%	25,86%	17,32%	6,47%	20,39%

Fig. 4: Sample response rates divided by country. Source: My elaboration.

Sample Distribution by Country

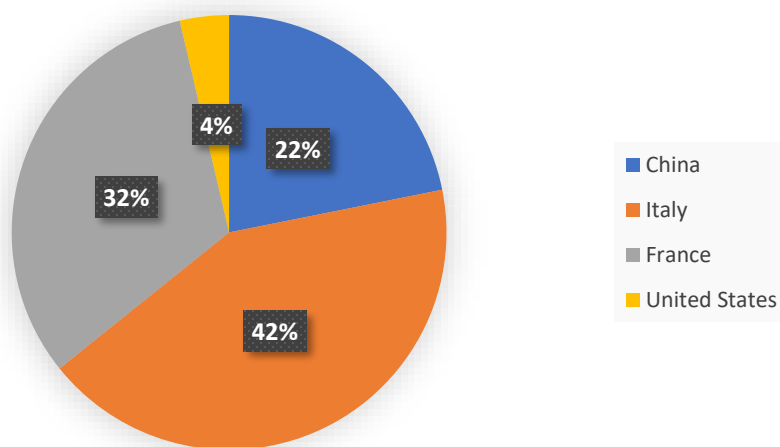


Fig 5: Sample distribution by Country. Source: My Elaboration.

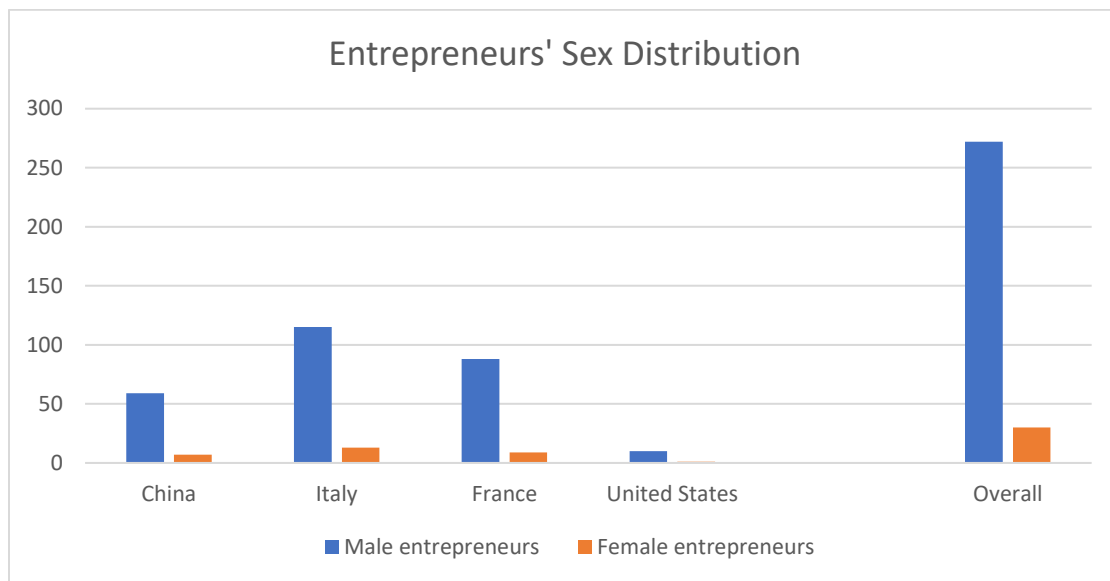


Fig. 6: Entrepreneurs' Sex Distribution. Source: My elaboration.

Measures

Degree of Narcissism

This is the main variable measured by the questionnaire that has been administered to the entrepreneurs of the whole sample. It has been used to collect both what we consider primary and secondary data in previous researches. The questionnaire is modeled after the Narcissistic Personality Inventory (NPI-16) developed by Ames, Rose and Anderson (2006). The original version is composed by 16 items which can be replied with two statements, one narcissism-consistent and one narcissism-inconsistent according to what represents the opinion of the respondent better. This test produces 16 dummies, coded 1 for narcissism-consistent answers and 0 for narcissism inconsistent answers. The average of these dummies returns an index value that measures the entrepreneur's degree of narcissism. For this research it has been decided to use a 5-point Likert scale version instead of a dummy, in this way forced choice answers that may negatively influence the test may be avoided. In other words, the questionnaire now contains only the narcissistic-consistent

statements and the respondent should indicate whether he agrees or not. The values that can be entered range from a value of 1 (strongly disagree) to 5 (strongly agree). Then, the average of these values returns the entrepreneur's degree of narcissism.

Every questionnaire has been translated with the help of mother tongue speakers and administered in the four countries in their respective language.

Down below are represented the average degrees of narcissism per country compared in a bar diagram:

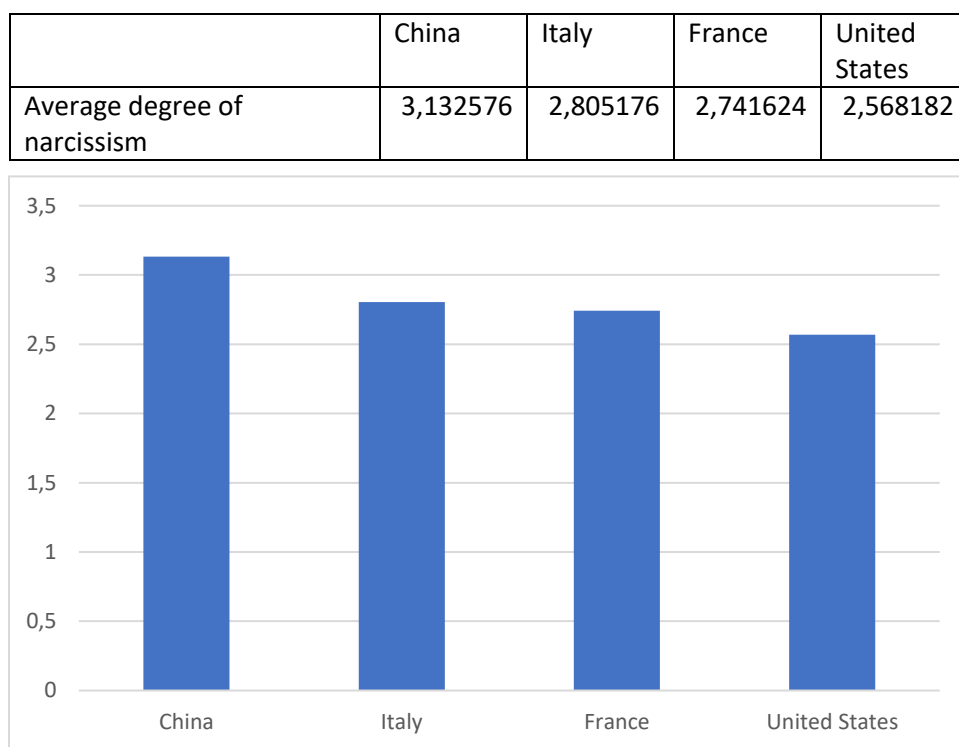


Fig. 7: Average degree of narcissism distributed between countries. Source: My elaboration.

To allow calculations on these data, narcissism values have been grouped into three categories: values scoring between 0 and 2,5 are classified as 1 (low), between 2,5 and 3,5 as 2 (medium) and higher than 3,5 as 3 (high). Down here is how the levels of narcissism are distributed among the four countries. The values have been expressed in percentages too. The second table shows the overall levels.

	CHINA		ITALY		FRANCE		UNITED STATES	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
LOW	11	16,67%	35	27,34%	29	29,90%	5	45,45%
MEDIUM	33	50,00%	80	62,50%	58	59,79%	3	27,27%
HIGH	22	33,33%	13	10,16%	10	10,31%	3	27,27%
TOTAL	66		128		97		11	

Fig. 8: Narcissism degree and its percentages within each country. Source: My elaboration.

nar_code	Freq.	Percent	Cum.
1	80	26.49	26.49
2	174	57.62	84.11
3	48	15.89	100.00
Total	302	100.00	

Fig. 9: Narcissism degree and its percentages overall. Source: My elaboration.

Age of the entrepreneur

Before submitting the questionnaire, the reader is asked to communicate his or her age, which has been scaled for calculations in the following way:

Entrepreneur's age	Value
Less than 20	1
20-29	2
30-39	3
40-49	4
50-59	5
more than 59	6

Fig. 10: Entrepreneur's age scaled values. Source: My elaboration.

The age of the sample distributed in the corresponded countries as shown in the following graph:

AGE	CHINA		ITALY		FRANCE		UNITED STATES	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
20-29	17	25,76%	7	5,47%	20	20,62%	0	0,00%
30-39	30	45,45%	51	39,84%	34	35,05%	5	45,45%
40-49	10	15,15%	44	34,38%	25	25,77%	3	27,27%
50-59	9	13,64%	20	15,63%	17	17,53%	3	27,27%
MORE THAN 59	0	0,00%	6	4,69%	1	1,03%	0	0,00%

Fig. 11: Entrepreneurs' age percentages for each country. Source: My elaboration.

Habitual entrepreneurship

This is the second value measured by the questionnaire administered to the sample. Alongside the NPI-16, the entrepreneur is asked to state whether he or she has founded other companies, how many and how many were still operating the day the survey was made. The first question is a dummy variable, which returns 1 to identify the entrepreneur as habitual and 0 to identify him or her as a novice. The other two questions aim to distinguish if the habitual entrepreneur is a serial or portfolio entrepreneur. In the sample habitual entrepreneurs are distributed as follows:

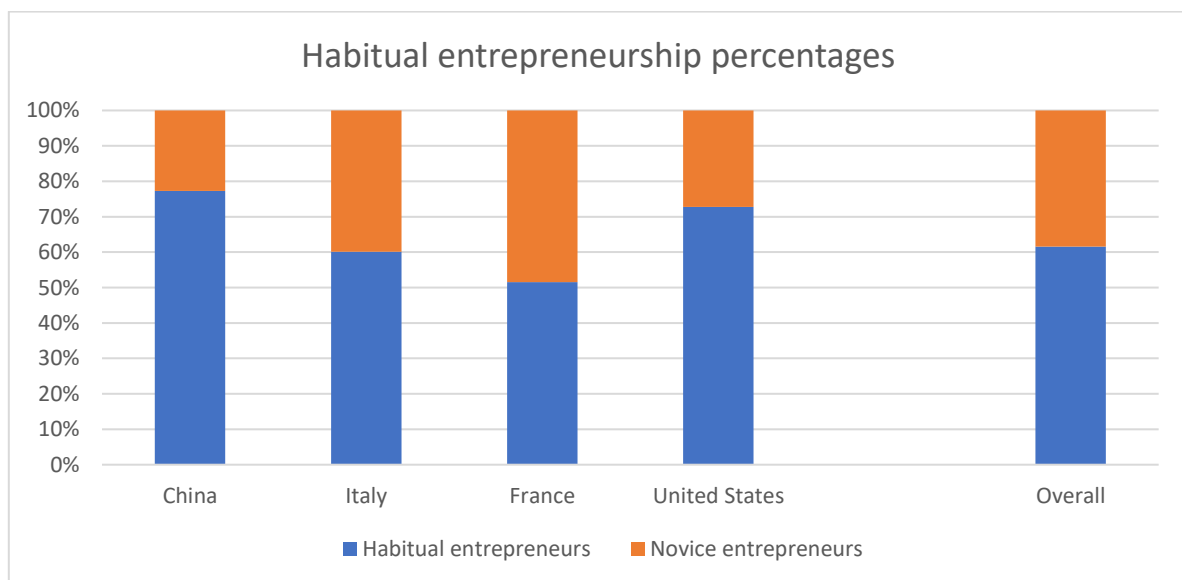


Fig. 12: Habitual entrepreneurship percentages. Source: My elaboration.

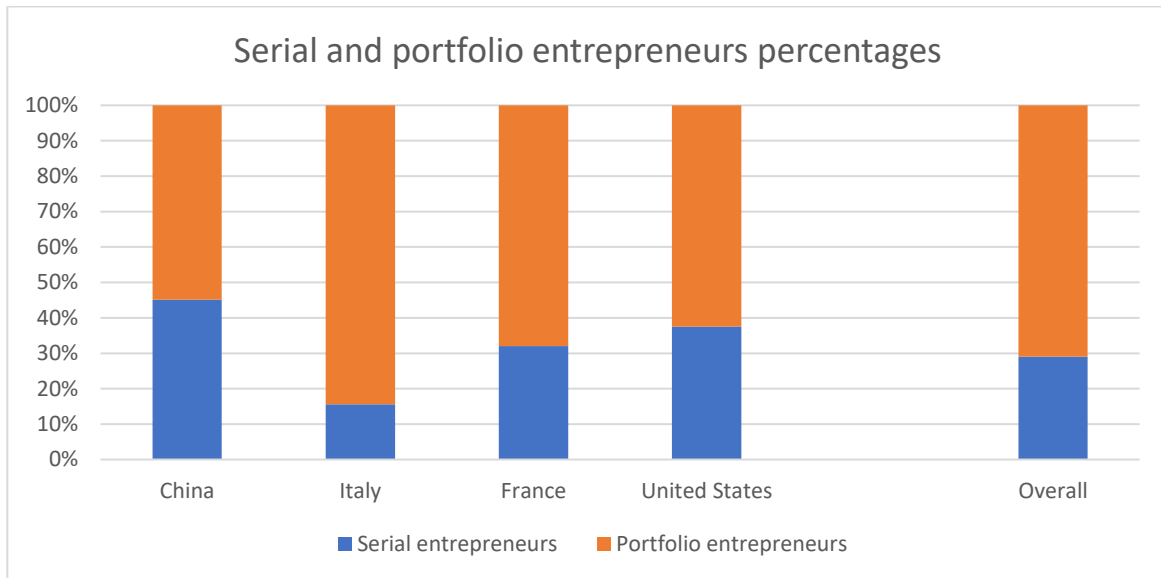


Fig. 13: Serial and portfolio entrepreneurs' percentages graph. Source: My elaboration.

	CHINA		ITALY		FRANCE		UNITED STATES	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
HABITUAL	51		77		50		8	
SERIAL	23	45%	12	16%	16	32%	3	38%
PORTFOLIO	28	55%	65	84%	34	68%	5	63%

Fig. 14: Serial and portfolio entrepreneurs' numbers and percentages table. Source: My elaboration.

Education level

Just like the age of the entrepreneur, education level is asked in the questionnaire and a code is given according to the table below. Table in fig. 14 shows how these levels of education are distributed among countries:

Level of education	Edu Code
Diploma	0
Bachelor degree	1
Master degree	2
PhD	3
MBA	4

Fig. 15: Edu codes. Source: My elaboration.

EDUCATION LEVEL	CHINA		ITALY		FRANCE		UNITED STATES	
	Freq.	Percent	Freq.	Percent	Freq.	Percent	Freq.	Percent
DIPLOMA	4	6%	22	17%	10	10%	2	18%
BACHELOR DEGREE	28	42%	11	9%	7	7%	4	36%
MASTER DEGREE	25	38%	63	49%	68	70%	4	36%
PHD	7	11%	27	21%	11	11%	1	9%
MBA	2	3%	5	4%	1	1%	0	0%

Fig. 16: Distribution of the levels of education among countries. Source: My elaboration.

Hofstede's six dimensions

Hofstede's six dimensions is another fundamental variable to be considered in this research. It allows to frame the results of above data's analysis in a local cultural context. Moreover, it represents the crucial intersection between company's organizational practices and locally acceptable practices (Hofstede Insights, 2018). The tool used to calculate the score of each country in every dimension is the Hofstede Insights website, which returns each score by simply typing the name of the country in. Moreover, it allows these data to be compared and gives a brief explanation for every dimension, which has been reported in the literature review. and a comment for each country's score, which will be reported in the results of the analysis. In the following page it's the comparison between the six dimensions' scores of the four chosen countries:

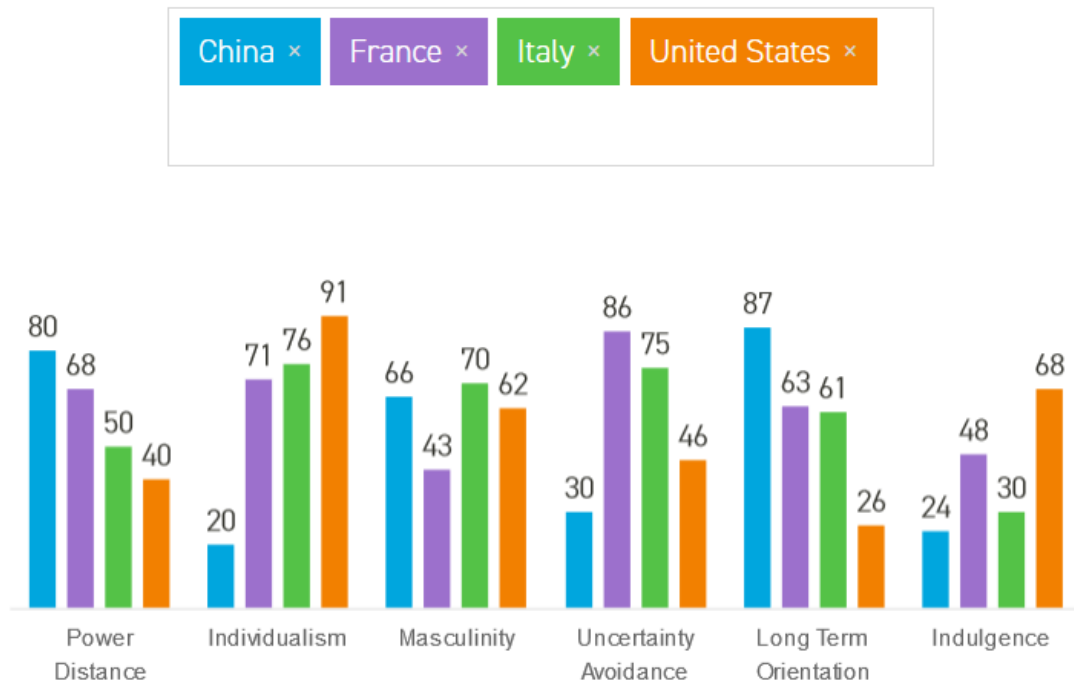


Fig. 17: China, France, Italy and United States compared through their Hofstede's six dimensions scores. Source: Hofstede Insights (2018).

Model Specifications

This plethora of data presented until now has been processed using mainly three tools: Kruskal-Wallis H test (Kruskal and Wallis, 1952), ANOVA (analysis of variance) test and a regression model. The first two have been run using Excel spreadsheets, while the third was computed in STATA program.

Firstly, the Kruskal-Wallis test is a rank-based nonparametric test that can be used to assess whether there are statistically significant differences between two or more groups of an independent variable on a continuous or ordinal dependent variable. In this case, it has been run to assess whether is there any correlation between narcissism and habitual entrepreneurship. Values representing the degree of narcissism have been entered in the spreadsheet, as well as the dummies identifying habitual entrepreneurship. Then, the H value was computed using the formula:

$$H = \frac{12}{N(N+1)} \sum_{i=1}^k \frac{R_i^2}{n_i} - 3(N+1)$$

The result has then been compared to critical values derived through a chi square test (CHISQ.DIST.RT excel function) with 1 degree of freedom and $p=0,1; 0,05; 0,01$ to decide whether to reject or not the null hypothesis.

The calculations were repeated for each country and for the whole sample altogether in order to assess if the test showed different results depending on the country it has been run for.

Another Kruskal-Wallis test has been conducted to detect any correlation between habitual entrepreneurship and Hofstede's six dimensions. Same procedure as before has been followed with the H value derived comparing habitual entrepreneurship dummy with each dimension score per time. Hofstede's scores have been scaled with an "if" function, which returned 1 for scores between 0 and 25 (Low), 2 for scores between 25 and 50 (medium-low), 3 for scores between 50 and 75 (medium-high) and 4 for scores between 75 and 100 (high). The test has

been repeated for each country's habitual entrepreneurship dummy and each dimension.

The ANOVA test based on the comparison of two or more samples' variances to assess whether the groups originated from the same distribution or not. In this case, the ANOVA test has been used to compare the degree of narcissism with each of the four countries' six dimensions. The test has been initially run entering narcissism values and all six dimensions' scores in a single analysis, but kept rejecting the null hypothesis in every country. This result was pretty predictable, because, just as stated by Hofstede (1983) himself, his dimensions "*may occur in any combination*". Consequently, there's a chance that the test rejects the null hypothesis because two or more dimensions are not correlated, which overshadows any possible correlation between narcissism and Hofstede's dimensions. To overcome this issue, the test has been repeated six times for each country by comparing narcissism with only one dimension per time. The calculations have been made using Excel's ANOVA function, available in its additional data analysis pack.

Further on, the ANOVA test has been employed to detect any correlation between the entrepreneur's level of narcissism and his or her education level with the same Excel's data analysis function mentioned above.

Then, a regression model has been made using the STATA program. More precisely, a logistical regression has been run (logit function) to compare habitual entrepreneurship, which is a dummy variable, with the levels of narcissism and education, the sex of the entrepreneur, the age and the country of belonging.

Results

The Kruskal-Wallis test conducted between the level of entrepreneur's narcissism and the habitual entrepreneurship dummy variable rejected the null hypothesis in every country and, consequently, even in the overall case with the following results:

	H VALUE		P		
		0,1	0,05	0,01	
CHINA	74,57707	2,705543	3,841459	6,634897	
ITALY	133,5093	2,705543	3,841459	6,634897	
FRANCE	103,5763	2,705543	3,841459	6,634897	
UNITED STATES	7,072584	2,705543	3,841459	6,634897	
OVERALL	316,7191	2,705543	3,841459	6,634897	

Fig. 18: Narcissism and Seriality, Kruskal-Wallis test results. Source: My elaboration

The H value is clearly higher than the critical value for every p chosen, meaning that the null hypothesis can be with no doubt rejected and, consequently, that observations concerning narcissism and observations concerning habitual entrepreneurship clearly don't derive from the same distribution. In particular, United States tend to score a way lower H value compared to the other countries, but not only it still lies in the rejection region of a chi square distribution, it was also computed on a way smaller sample than the other ones, which may explain this difference in the score.

The second Kruskal-Wallis test returned the results shown in the next page:

	CHINA	ITALY	FRANCE	UNITED STATES	OVERALL
POWER DISTANCE	98,256	191,253	144,754	15,783	452,251
INDIVIDUALISM VS COLLECTIVISM	5,075***	191,253	144,754	15,783	338,699
MASCULINITY VS FEMININITY	98,256	191,253	144,754	15,783	452,251
UNCERTAINTY AVOIDANCE	98,256	191,253	144,754	15,783	452,251
LONG TERM VS SHORT TERM	98,256	191,253	144,754	15,783	452,251
INDULGENCE VS RESTRAINT	5,075***	191,253	144,754	15,783	338,699

p=0,1	2,706
p=0,05	3,841
p=0,01	6,635

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

Fig. 19: Seriality and Hofstede's six dimensions. Kruskal-Wallis test results. Source: My elaboration.

The test rejects the null hypothesis for every dimension and every country except for China. It can be observed, in fact, that the null hypothesis may not be rejected for China's Individualism vs Collectivism and Indulgence vs restraint dimensions with a p equal to 0,01. This may point out that there is some sort of correlation between habitual entrepreneurship and these two dimensions in this country.

The initial ANOVA test, as mentioned before, didn't highlight any remarkable relationship between narcissism and Hofstede's six dimensions and it's been therefore omitted. The results of the repeated test which compared each category per time is the following:

	CHINA	ITALY	FRANCE	UNITED STATES
POWER DISTANCE	462,647	10,867	377,492	0,476*
INDIVIDUALISM VS COLLECTIVISM	187,353	1710,295	377,492	68,571
MASCULINITY VS FEMININITY	95,588	498,454	10,127	20,119
UNCERTAINTY AVOIDANCE	3,824**	498,454	1272,771	0,476*
LONG TERM VS SHORT TERM	462,647	498,454	377,492	0,476*
INDULGENCE VS RESTRAINT	187,353	10,867	10,127	20,119
P=0,1	2,744	2,726	2,731	2,974
P=0,05	3,913	3,878	3,890	4,351
P=0,01	6,834	6,735	6,769	8,096

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

Fig. 20: Narcissism and Hofstede's six dimensions, ANOVA test results. Source: My elaboration.

In this case the ANOVA test detects some sort of relationship between narcissism and Hofstede's six dimensions in China and in the United States. In particular, the test could not reject the null hypothesis that would correlate the Chinese sample's degree of narcissism and uncertainty avoidance. For what concerns the United States, instead, there were three null hypothesis non-refusals. More precisely, the ANOVA test highlighted a correlation between the American sample's narcissism score and, respectively, the power distance, uncertainty avoidance and long-term vs short term dimensions. It is worth mentioning that some other relationships, though located in the rejection region, returned a considerably lower F value than the rest of the rejected values. This result was given by the confrontation between Italian levels of narcissism and, respectively, power distance and indulgence vs restraint dimensions. The same phenomenon was present in the French and in the American sample in the masculinity vs femininity and indulgence vs restraint dimensions.

Although this lower score could be explained with the smaller dimensions of the American sample, this is not true for the French one, which is the second biggest one in this research. Given that this similarity happens in the very same dimensions in both samples it may not be a coincidence, so this point may definitely deserve further attention in the interpretation section and, most likely, in future researches.

For what concerns the possible relationship between the entrepreneurs' levels of narcissism and his or her level of instruction, the ANOVA test returns the following results:

		CHINA	ITALY	FRANCE	UNITED STATES	OVERALL
P=0,1	F	15,817	0,085*	0,260*	1,404*	2,610*
	F critical	2,745	2,725	2,732	2,975	2,714
	Significance %	0,000	0,771	0,611	0,250	0,107
P=0,05	F	15,817	0,085**	0,260**	1,404**	2,610**
	F critical	3,914	3,878	3,890	4,351	3,857
	Significance %	0,000	0,771	0,611	0,250	0,107
P=0,01	F	15,817	0,085***	0,260***	1,404***	2,610***
	F critical	6,834	6,736	6,769	8,096	6,677
	Significance %	0,000	0,771	0,611	0,250	0,107

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

Fig. 21: Narcissism and entrepreneur's education level, ANOVA test results. Source: My elaboration

In this case the test leaves no doubts about a possible correlation between entrepreneur's levels of narcissism and education. The test, in fact, couldn't reject the null hypothesis for Italy, France and United states for any value of p. What rejected the null hypothesis, instead, is China, that with an F score equal to 15,817

seems to show no relevant correlation between the two variables considered. Saving further discussion on this point for the next paragraph, it appears quite solid that people with high levels of instruction tend to have higher levels of narcissism too. China's rejected hypothesis didn't influence the overall test enough, which still can't be rejected although its significance percentage is obviously lower than the single countries' ones.

To complete this scientific investigation on entrepreneurs and their personality, the results of the regression test ran on STATA are reported below:

Logistic regression		Number of obs =		302		
		LR chi2(5) =		27.86		
		Prob > chi2 =		0.0000		
Log likelihood = -187.21502		Pseudo R2 =		0.0692		
serialitcode	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
narcissism	-.1361969	.1356551	-1.00	0.315	-.402076	.1296822
educode	-.2309423	.1370688	-1.68	0.092	-.4995922	.0377076
sexcodeceo	-.6018574	.4080085	-1.48	0.140	-1.401539	.1978246
age	.507294	.1330253	3.81	0.000	.2465693	.7680188
countrycode	-.4905037	.1600548	-3.06	0.002	-.8042053	-.176802
_cons	-.2133639	.5314791	-0.40	0.688	-1.255044	.8283159

Fig. 22: STATA regression results. Source: My elaboration.

The regression detected a correlation between habitual entrepreneurship (named “seriality” in STATA) and, respectively, level of education, age of the entrepreneur and country. The first correlation is negative, meaning that entrepreneurs with higher levels of education are less likely to own or participate in more than one company. The second correlation shows that the older is the entrepreneur, the higher is the probability that he may have had more than one company. The third correlation

shows that the country of the entrepreneur has a negative impact on his likelihood to be a habitual entrepreneur too.

Analysis and interpretation of the results

The first and probably most important outcome of the analysis is that, despite what theory suggested, there seems to be no statistic correlation between narcissism and habitual entrepreneurship. The sample description had already pointed out an average degree of narcissism for the whole sample, with a peak of 3,13 in China, while habitual entrepreneurship distribution reported wider gaps between each country with a slight prevalence of habituals over novices overall. Comparing these outcomes leads to the conclusion that entrepreneurs usually don't involve themselves in more than one company for personal self-loving matters. Further confirmation is given by the fact that portfolio entrepreneurs prevail over serial entrepreneurs in all four countries. By recalling what has been stated in the theoretical part, portfolio entrepreneurs tend to be driven more by profit than serial entrepreneurs do: they usually believe in the goodness of their idea and are driven mostly by the will of succeeding with their company. Therefore, the factors that mainly influence habitual entrepreneurship have to be found elsewhere.

The subsequent Kruskal-Wallis test between habitual entrepreneurship and Hofstede's six dimensions shows a correlation with two dimensions, namely individualism vs collectivism and indulgence vs restraint.

Individualism, in which China scored 20, points out that China has a highly collectivistic culture, where people act for the interest of groups and not necessarily for themselves. Employees are weakly committed to the organization. Relationships are cooperative for in-groups and cold for out-groups, making personal relationship prevail over task and company (Hofstede insights, 2018).

China is also a fairly restrained society, as the score of 24 in this category shows, meaning that there's a general trend towards cynicism and pessimism. Indulging and

self-gratification are perceived as somewhat wrong. With the highest percentage of habitual entrepreneurs in the sample, it is plausible to think that this phenomenon is quite common in China to compensate this lack of indulgence through hard work not for self-accomplishment purposes but as some sort of imposed-by-society dogma.

The low score in individualism dimension may also explain why habitual entrepreneurs are in almost equal percentages serial and portfolio in China. Portfolio entrepreneurs are usually the ones with the largest network, but given this cold behavior people tend to have with out-groups, entrepreneurs tend to opt for serial entrepreneurship as well.

What emerged until now should be in contrast with the relatively high levels of narcissism, but, as pointed out by the first Kruskal-Wallis test, there's no correlation and therefore these higher levels should derive from something else. The ANOVA test between narcissism and Hofstede's six dimensions highlighted a correlation with uncertainty avoidance both in China and in the US.

China's low score (30) in this dimension points out that Chinese people don't feel threatened by ambiguous or unknown situations. The way they developed this mindset is through their beliefs and institutions, which prevent anxiety through legal frameworks. Therefore Chinese people are comfortable with ambiguity, their businesses tend to be small to medium sized and family owned (which further explains what stated above on the distribution of serial and portfolio entrepreneurs) (Hofstede Insights, 2018). The connection with narcissism may be then explained with the national pride that derives from this institutional control of unknown.

United States scored a little higher (40), which means that Americans, as well as Chinese, don't feel excessively threatened by unknown, but, unlike them, their reaction lies in their openness to innovation and the tendency to shape the future, rather than predicting it, which is directly borrowed from the definition of narcissistic entrepreneur. The correlation with long term orientation's score (26) may be interpreted as a consequence of this "can-do" mentality, as well as power distance's

score, which highlights slight power inequalities endorsed by both leaders and followers, which are encouraged to do their best to overcome this barrier. These three features of American culture can with no doubt explain their levels of narcissism.

The ANOVA test between narcissism and level of instruction is instead more straightforward than the ones commented so far. It states in fact that the higher entrepreneur's level of the education is, the higher is the chance that he or she may have a narcissistic personality. This can be explained by the fact that while individuals progress with their formation, they develop a deeper self-confidence and higher knowledge of their means, making them appreciated by themselves and willing to be appreciated by others. The reason why this doesn't happen in China can be explained again by its cultural mindset described above. More in particular, keeping present their high degree of power distance (80) it is plausible that their self-accomplishment as entrepreneurs or, more generally, as people, is not driven by their own dreams and desires, but, more likely, by a cultural mindset imposed by society. In other words, you shouldn't achieve success to prove you are great, you just must achieve it.

Finally, the habitual entrepreneurship regression highlighted respectively:

- A negative correlation with the level of education, probably because a deeper knowledge of one topic in particular makes the entrepreneur more committed to his or her ideas and more prone to achieve success in just one take.
- A positive correlation with entrepreneurs' age, which is explainable by the fact that while progressing with their lives, people accumulate savings, making them able to invest in multiple activities more when they become older, than when they are young.
- A negative correlation with the country that is considered, which basically shows, as already commented, that national culture influences, negatively in our case, the tendency of the entrepreneur to own multiple companies.

Conclusions

In the end, this work tried to investigate the relationship between narcissism and habitual entrepreneurship and, how this comparison is influenced by national cultures. Basically, it has been tried to compare probably the two most multi-faceted and difficult to classify concepts in human knowledge, such as personality and culture. The results show that narcissism and habitual entrepreneurship are not directly correlated, but they are both influenced by local culture. The complexity of these interactions made necessary to broaden up the field of investigation, leading to a better understanding of the dynamics of entrepreneurs' personalities, firms' performances and cultural values. It's been possible to study the effects of a particular culture as the Chinese one on phenomena that in the western part of the world seem to follow different paths.

This research had several limits, such as the limited number of observation for the American sample and the unavailability of financing information for a consistent share of companies in the sample. The analysis could be definitely improved by investigating on the relationship between habitual entrepreneurship and the firms' number of investors, which could empirically confirm the theoretical difference between novices and habituals' network extension (the former rely mostly on personal and family financing while the latter exploit their network to gather financing from a higher number of investors).

This is just one of the countless paths the theoretical research initially started by Leonelli et al. (2016) can spread on.

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