Entrepreneurial intentions and attitudes towards plagiarism

José N. Cruz University of Porto, Portugal

Pedro Sousa University of Porto, Portugal

Daniela C. Wilks University Portucalense, Portugal

ABSTRACT

Much of the existing research highlights the prosocial side of entrepreneurship, but various studies suggest that entrepreneurship is not always productive. Furthermore, there is some empirical evidence suggesting that young people who break the rules are more likely to become entrepreneurs in the future. However, to date relatively little research interest has been devoted to the negative side of entrepreneurship. This study contributes to fill this gap by focusing on the association between students' intentions to become an entrepreneur and their attitudes towards plagiarism. Plagiarism is a form of deviant behavior frequent among students, and its perpetration involves risk-taking and the pursuit of gains, which are also present in entrepreneurship. A questionnaire was developed to assess the factors under analysis and the results of data collected from a Portuguese sample suggest a statistically significant positive relationship between students' intentions to become an entrepreneur and their attitudes towards plagiarism.

Keywords: destructive entrepreneurship, entrepreneurial intentions, plagiarism, white collar crime, vignette technique

Copyright statement: Authors retain the copyright to the manuscripts published in AABRI journals. Please see the AABRI Copyright Policy at http://www.aabri.com/copyright.html

INTRODUCTION

Literature on entrepreneurship research has greatly expanded in last decades (see e.g., Carlsson et al. 2013; Chandler and Lyon 2001; Cunningham and Lischeron 1991; Davidsson 2008; Hlady-Rispal and Jouison-Laffitte 2014; Low and MacMillan 1988; Meyer et al. 2014; Peneder 2009; Rehn et al. 2013; Shane and Venkataraman 2000; van Praag and Versloot 2007). The contribution of entrepreneurship for the economic development, job creation, and innovation has been emphasized and the characteristics of an entrepreneur have been much praised. According to Obschonka, et al. (2013) almost all existing research highlights the prosocial side of entrepreneurship. Many economists and politicians see it as: "a drivers of economic and technological development, job creation, and social wealth in our globalized societies" (Obschonka, et al. 2013, p.387).

The concept of entrepreneurship is multidimensional (Harbi and Anderson 2010), and the literature on the topic highlights four characteristics usually embedded in entrepreneurship: 1) focus on economic and financial gains; 2) opportunity recognition; 3) innovation; and 4) risk-taking propensity.

However, entrepreneurship is not always productive, as Baumol (1990) points out, and many cases of white collar crime (WCC) are forms of unethical and destructive entrepreneurship. This author states that entrepreneurs are people:

"who are ingenious and creative in finding ways that add to their own wealth, power, and prestige, then it is to be expected that not all of them will be overly concerned with whether an activity that achieves these goals adds much or little to the social product" (Baumol 1990, p.7).

As a matter of fact, those four characteristics of entrepreneurship can also be found in several types of WCC. This study uses a definition of WCC that includes both illegal and unethical behaviors:

"White collar crimes are illegal and unethical acts that violate fiduciary responsibility of public trust committed by an individual or organization, usually during the course of legitimate occupational activity, by person of high or respectable social status for personal or organizational gain." (Helmkamp et al. 1996, as cited in Friedrichs 2010, p.6)

The identification of similarities between entrepreneurship and WCC contributes to a better understanding of the entrepreneurial 'modus operandi' and the contexts in which entrepreneurs operate.

In the next section of this paper several studies of entrepreneurship are compared with other studies on WCC, in which the aforementioned characteristics are highlighted. The third section presents Baumol's approach to destructive entrepreneurship and empirical evidence indicating that young people who moderately break rules in school and at home are more likely to become entrepreneurs in the future. The following section develops the hypothesis to be investigated and presents the empirical study. Specifically, this study aims to empirically examine - with a sample of Portuguese last year's undergraduate students - if the intention to be an entrepreneur is associated with the inclination to commit an act of plagiarism. Plagiarism is defined as: "the copying of others' work or ideas without attribution, treating the material as if it were one's own." (Heckler and Forde 2015, p. 61) According to Friedrichs (2010, p.108), plagiarism is a type of WCC.

In the last sections results are reported and discussed.

It should be noticed that the aim of this study is not to tarnish the image of entrepreneurs, or to associate entrepreneurship with crime, but, following Baumol (1990), to promote productive entrepreneurship.

CHARACTERISTICS COMMON TO ENTREPRENEURSHIP AND TO SOME TYPES OF WCC

Schumpeters's definition of entrepreneurship (Schumpeter 1934, as cited in Baumol 1990, p. 5) highlights the role of innovation. Other definitions emphasize other characteristics of entrepreneurship (see Howorth 2005; Low and MacMillan 1988). For instance, Knight (1921, as cited in Ahmad and Seymour 2008, p.7), Penrose (1959, as cited in Ahmad and Seymour 2008, p.7) and Kirzner (1973) provide some definitions that were influential in the development of entrepreneurship literature and each of them underlines one particular characteristic of entrepreneurship, as indicated in Table 1 (Appendix).

In what follows, these four characteristics are analyzed in some detail and related to white collar crime.

Focus on Economic and Financial Gains Related to Business or Professional Occupation

Krizner (1973) presents the entrepreneur as an opportunity trader, whose main interest is maximizing gains. Hebert and Link (2006) show that many studies associate entrepreneurship to launching a new venture. Some authors define entrepreneur as a self-employed person (e. g. Dhose and Walter 2012; Kolvereid 1996; Luthje and Franke 2003). Still others extend entrepreneurial behavior to employees that are innovative and take risks in developing their own projects inside corporations in order to increase their earnings and to achieve better positions in their professional career - the "intrapreneurs" (see Zhao 2005, p.27). Despite the persistent differences among scholars about what might be involved in entrepreneurship, it is broadly accepted that it is related to business or professional occupation involving the pursuit of economic and financial gains. The exception is social entrepreneurship that is focused on social or collective gains. This kind of entrepreneurship is not relevant for the current analysis, because WCC is rarely oriented to social needs.

WCC is associated with business, economic and financial gains. According to Benson and Simpson (2009) "white-collar crime arises out of legitimate business activities" (Benson and Simpson 2009, p.137). In a similar manner, a former Portuguese General Attorney stated that "WCC is no longer a by-product of business but a business in itself." (Rodrigues 1999, p.7). Likewise, Gottschalk and Smith (2011) pointed out that the criminal entrepreneur is focused on "situations in which there is a profit to be made in criminal activity." (Gottschalk and Smith 2011, p.300)

Opportunity Recognition

As indicated in Table 1 (Appendix), Penrose (1959) stated that "entrepreneurial activity involves identifying opportunities within the economic system" (as cited in Ahmad and Seymor 2008, p.7). In the same vein, Shane and Venkataraman (2000) argue that:

"The field of entrepreneurship involves the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them" (as cited in Ahmad and Seymour 2008, p.7).

In fact, opportunity recognition as a characteristic of entrepreneurship is well documented in the literature and it has been considered to be at the core of entrepreneurship (see Baron 2006; Hansen et al. 2011; Shane, 2003; Ucsabaran et al. 2008).

Opportunity recognition has also been found to be a characteristic of all types of crime. In the case of white collar crime, the opportunity of concealing crimes under the appearance of legality is crucial for the success of the perpetrators. Benson and Simpson

(2009) acknowledge that opportunity is the central characteristic of WCC, while Gottschalk and Smith (2011) pointed out that:

"the criminal entrepreneur's task is to discover and exploit opportunities... opportunity discovery relates to the generation of value, where the entrepreneur determines or influences the set of resource choices required to create value. Thus, the criminal entrepreneur faces the same challenges as the legal entrepreneur." (Gottschalk and Smith 2011, pp.300-301)

Arnulf and Gottschalk (2012) also emphasize the role of opportunity in WCC.

Innovation

The relationship between entrepreneurship and innovation has received considerable attention in the literature (e.g., Zhao 2005; Brem 2011). As already stated, Schumpeter's definition of entrepreneurship emphasizes innovation - "carrying out new combinations" (as cited in Baumol 1990, p.5) - as being the central characteristic of entrepreneurship. The Schumpeterian entrepreneur is a creative destructor and the driver of economic dynamics. However, as indicated before, there are other definitions of entrepreneurship that do not emphasize the innovation characteristic so much. Nevertheless, market competition requires innovation. In order to succeed the entrepreneur must challenge the 'status quo'. For Zhao (2005):

"Innovation can be radical *and* incremental. Radical innovations refer to path-breaking, discontinuous, revolutionary, original, pioneering, basic or major innovations... Incremental innovations are small improvements made to enhance and extend the established processes, products, and services." (Zhao 2005, p.27) Following this definition, innovation includes not only radical changes, but also tiny improvements.

The OECD definition of entrepreneurship endorses this broad view of innovation: "Entrepreneurs ... seek to generate value, through the creation or expansion of economic activity, by identifying and exploiting new products, processes or markets." (Ahmad and Hoffman 2008, p.8)

For Casson (1982, as cited in Peneder 2009, p.78) entrepreneurial innovation is the choice to overcome "the routine application of a standard rule" especially when "no obviously correct procedure exists". It thus seems that entrepreneurs simply do not fit the status quo and may be at odds with standards and rules. Along the same lines, Mayer-Schönberger (2010) interprets innovation as a tension leading to the breaking of laws and argues that "Schumpeter saw the entrepreneur as somebody who disdains the equilibrium and breaks the rules of the establishment…" (Mayer-Schönberger 2010, p.154-155)

With regard to WCC, McBarnet (1991) claims that the innovation in WCC is not simply law-breaking behavior, but the ability of to hide crimes under the guise of legality, combining legitimate with illegitimate elements in complex ways that are not easily identified as crime. Passas (2005) goes further and argues that the innovation characteristic in several types of WCC might be found in offences that do not break the law, but contradict the 'ratio' of the law: "practices that are within the letter of the law and yet have multiple adverse social consequences." (Passas 2005, p.771)

When the criminal scheme used to perpetrate the crime is innovative, it is less likely to be detected as it involves professional skills, planning and intelligence. Therefore it is expected that innovation increases the probability of not being caught.

Risk-Taking Propensity

According to Knight (1921, as cited in Ahmad and Seymour 2008, p.7) – see Table 1 (Appendix) - "The entrepreneur bears the uncertainty of market dynamics." In fact, running a business involves the risk of not recovering the invested capital, since business activities occur in contexts of uncertainty. Risk-taking is thus an inherent characteristic of entrepreneurship.

Brockhaus (1980) adds that being an entrepreneur involves several individual risks, considering that a failed venture can result in major losses. Moreover, because the entrepreneur is likely to be devoted to the venture at a personal level, the failure of a venture becomes a personal failure with devastating emotional consequences, including feelings of shame and even suicide (see Smith and McElwee 2011). Similarly, Ucbasaran et al. (2013) in reviewing the literature on the costs of business failure identified psychological and social costs in addition to financial costs. The authors argue that while financial costs usually involve loss or reduction of personal income, psychological costs consist of different negative emotions such as pain, shame, remorse, guilt and fear. As for social costs, business failure impacts on personal and professional relationships, causing divorces and the break-up of social ties, discrimination regarding employment chances and difficulties in getting access to resources.

Like entrepreneurs, WCC offenders take risks in the hope of making gains. If the illegal scheme is detected, the offender may lose his/her reputation, job or clients. There are also psychological and social costs resulting from the loss of a job, and/or loss of a license to practice in the case of liberal professionals. These costs may have overwhelming consequences (Friedrichs 2010, p.357). Depression has also been pointed out as an additional psychological cost, especially in more serious cases that involve imprisonment or considerable loss of status (Payne, 2012).

As shown above, there are similarities between entrepreneurship and many types of WCC.

DESTRUCTIVE ENTREPRENEURSHIP AND RULE-BREAKING ENTREPRENEURS

According to Schumpeter the entrepreneur carries out "new combinations". These are innovations that "take various forms besides mere improvements in technology" (Schumpeter, 1934, as cited in Baumol 1990, p.5). This definition of the entrepreneur links entrepreneurial talent to the production of innovations. As Smith (2009) explains, in Schumpeter's view,

"the entrepreneur is a unique and creative individual who develops new products, services and techniques, which innovate the way in which people operate in a given environment." (Smith 2009, p.7)

Baumol (1990) points out that Schumpeter's definition includes not only activities that increase social value (productive), but also rent-seeking (unproductive) and crime (destructive). He argues that the forms of innovation referred to in this definition are compatible with activities that reduce social value, and entrepreneurs may have unproductive and destructive activities.

Commenting on Baumol's view, Obschonka et al. (2013) state that:

"it is mainly the reward structure of the economy and the set of prevailing rules that influence the manifestation of an entrepreneurial spirit into either productive or unproductive entrepreneurship. According to this view, an entrepreneurial spirit per se is not destructive or antisocial (but may have the potential for such negative expressions)." (Obschonka, et al. 2013, p.387)

Baumol's work on the similarities between WCC and entrepreneurship has received

some support. In general, studies on the topic suggest that entrepreneurship may be destructive (Urbig, et al. 2012). Smith (2009) states that "entrepreneurship and entrepreneurial ability play a significant part in creating criminal wealth." (Smith 2009, p.1) Consistent with this view, Tonoyan et al. (2010), using data from the 'World Business Environment Survey – 2000', contend that corrupt behavior among entrepreneurs is shaped by both formal (economic and legal rules or organizations) and informal institutions (culturally embedded codes of conduct, norms and values).

Empirical research has analyzed Baumol's ideas. Urbig et al. (2012) experimentally tested his assumption that entrepreneurs, once having recognized an opportunity, exploit this opportunity whether it is productive or destructive. They obtained evidence that entrepreneurial talent can play a distinctive and potentially destructive role in society. Similarly, Arnulf and Gottschalk (2012) empirically analyzed WCC in Norway and concluded that not all types of WCC incorporate the characteristics of entrepreneurship, but "the most typical role of a white collar criminal by far is the entrepreneur criminal." (Arnulf and Gottschalk 2012, p.12)

Another line of research explores the association between rule-breaking and entrepreneurship. Zhang and Arvey (2009) and Obschonka, et al. (2013) found empirical evidence indicating that young people who moderately break rules in school and at home are more likely to become entrepreneurs in the future.

Given the above, it is plausible to think that individuals with entrepreneurial intentions might be more likely to misbehave in situations in which they can obtain some advantage by doing so.

THE EMPIRICAL STUDY

An empirical study was conducted to examine the relationship between the intention to be an entrepreneur (the specific target behavior of starting a business) and the inclination (disposition to act) to commit an offense of plagiarism ("inclination to plagiarize"). This type of deviant behavior is suitable for a sample composed of students. In fact, there are many studies about students' attitudes towards plagiarism and students' self-reported behavior on plagiarism (see e. g. Egan 2008; Ehrich et al. 2014; Park 2003; Walker 2010).

The focus here is on intentions to become an entrepreneur and not on the entrepreneur's behavior. Thus, our sample was composed by last year's undergraduate students. This permits examining the entrepreneurial process prior to actual entrepreneurial activity. As pointed out by Krueger et al. (2000), the use of a sample of students in the process of choosing their career has the advantage of avoiding the introduction of biases caused by entrepreneurial experiences: "Sampling only successful or current entrepreneurs introduces biases that censor data unpredictably, especially for rare phenomena." (Krueger et al. 2000, p.420)

This study tests the following hypothesis: There is a positive relationship between intentions to become an entrepreneur and the "inclination to plagiarize".

Method

Participants and Procedure

A questionnaire was developed and administered to a sample of last year's undergraduate students (N=98) from two universities in Portugal. All participants gave their informed consent prior to their inclusion in the study. Women made up 70% of the sample, which was comprised of students of humanities (Law) (68%) and business sciences, with an

average age of 22.2 years-old (SD = 2.8; Mdn = 21), and more than one-third of them had previous work experience (35.7%). They were all non-paid volunteers and the research followed standard ethical guidelines.

Measures

Socio-demographics data and personal details were gathered. Entrepreneurial intentions were assessed by a six-item scale used by Liñán and Chen (2009), and Liñán et al. (2011). Respondents were asked to rate themselves on a 7-point Likert scale with regard to their intentions to be an entrepreneur (1 = 'total disagreement'; 7 = 'total agreement'). Example items are "I am ready to do anything to be an entrepreneur"; "I will make every effort to start and run my own firm."

In order to assess students' attitudes towards plagiarism (i.e. their "inclination to plagiarize") respondents were presented a hypothetical scenario or vignette describing a situation of plagiarism, which included the four characteristics of entrepreneurship mentioned above as explained in the Appendix. After having read the vignette, respondents were asked how likely they would behave as the offender in the vignette, with a 7-point Likert scale (1 = 'extremely unlikely'; 7 = 'extremely likely'). The vignette technique has been widely used as a suitable research method for studying deviant behavior (e.g., Carpenter and Reimers 2005; Langton et al. 2006), and, specifically students' cheating behaviors (Rettinger et al. 2004).

RESULTS



A chi-square test of independence indicated that entrepreneurial intentions was associated with gender, $\chi^2(1, N = 98) = 8.428$, p < .01, Cramer's V = .30. The odds of a male to show a high level of entrepreneurial intentions is 4 times higher than the odds of a female, OR = 3.938, 95%CI [1.517,10.218]. Field of study, previous work experience and age were not associated with or related to entrepreneurial intentions.

Field of study, gender and age were not associated with "inclination to plagiarize". A significant and moderate relationship between work experience and "inclination to plagiarize" was found. In particular, an individual with work experience is more likely to show a lower "inclination to plagiarize" than another without it, $\chi^2(1, N = 98) = 4.543$, p < .05, Gamma = .43; OR = 2.529, 95%CI [1.067,5.995].

Finally and more prominently, statistical analysis revealed a significantly moderate and positive correlation between entrepreneurial intentions and "inclination to plagiarize", $r_s = .310$, p < .01. This finding did not change when controlling for the degree of realism participants attached to the scenario.

DISCUSSION

Findings confirm the hypothesis – entrepreneurial intentions were found to be associated with "inclination to plagiarize". Gender differences were found for entrepreneurial intentions in line with literature (e. g. Fairlie and Robb 2009; Verheul et al. 2012). Gender was not associated with "inclination to plagiarize". The research on the relationship between gender and plagiarism has produced relatively unclear results. Egan (2008) compared the attitudes towards plagiarism between Malaysian students and Australian students and only found gender differences for Malaysian students: male Malaysian students expressed a

greater propensity to plagiarize than Malaysian females. Walker (2010) found no statistically significant difference between males and females behavior on plagiarism. In contrast, Hensley et al. (2013) found that men were more likely than woman to plagiarize. Further research is needed to clarify this issue.

Concerning the field of study, according to McCabe et al. (2006), business sciences students were more prone to cheat, but no differences were found between Law students and business sciences students. The significant association between "inclination to plagiarize" and work experience needs further investigation.

Our findings support Baumol's view that individuals with high levels of entrepreneurial intentions may follow the route of productive entrepreneurship, but may also embark on unethical and destructive entrepreneurship. This being the case, it is important to define "the rules of the game", by changing institutions and the legal framework to promote productive entrepreneurship.

As Mayer-Schönberger (2010, p.187) argues, law "can act as enabler, leveller, and enforcer that facilitates rather than hinders entrepreneurial activity." Moreover, he highlights the role played by laws in promoting productive entrepreneurship; namely labor laws, fiscal laws, copyright laws, financial market regulations, and bankruptcy laws.

Appeals to promote entrepreneurship should take unethical and destructive forms of entrepreneurship and its associated costs into account. Awareness is the first step, but without an efficient judicial system little can be achieved.

CONCLUSION

One main broad conclusion can be drawn: there is a significant positive and moderate relationship between entrepreneurial intentions and the "inclination to plagiarize". This is a relevant finding if we are to fully understand entrepreneurship and prevent its unethical and destructive forms.

A major limitation of this study is that it is focused upon a relatively small sample of students, which can limit the generalization of results. In addition to this, students' attitudes towards plagiarism are difficult to assess due to potential social desirability bias. Future studies should therefore include a measure of social desirability. Finally, although participants were guaranteed strict confidentiality and anonymity of their responses, self-reported data contains several potential sources that should be noted as another limitation. Future research should include other forms of assessment and study if findings can be extended to other forms of deviant behavior.

REFERENCES

- Ahmad, N., and Hoffman, A. 2008. "A framework for addressing and measuring entrepreneurship," *OECD Statistics Working Paper No. 2* Available at SSRN http://ssrn.com/abstract=1090374 or http://dx.doi.org/10.2139/ssrn.1090374, accessed December 2014
- Ahmad, N., and Seymour, R. G. 2008. "Defining entrepreneurial activity: definitions supporting frameworks for data collection," *OECD Statistics Working Paper* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1090372, accessed March 2014.
- Arnulf, J., and Gottschalk, P. 2012. "Principals, agents and entrepreneurs in white-collar crime: An empirical typology of white-collar criminals in a national sample," *Journal of Strategic-Management Education* 8: 1-22.
- Baron, R. 2006. "Opportunity recognition as pattern recognition: How entrepreneurs "connect the dots" to identify new business opportunities," *Academy of Management*

- Perspectives 20: 104-119.
- Baumol, W.J. 1990. "Entrepreneurship: Productive, unproductive and destructive," *Journal of Political Economy* 98: 893-921.
- Benson, M., and Simpson, S. 2009. *White-Collar Crime: An Opportunity Perspective*. New York: Routledge.
- Brem, A. 2011. "Linking innovation and entrepreneurship literature overview and introduction of a process-oriented framework," *International Journal of Entrepreneurship and Innovation Management* 14: 6-35.
- Brockhaus, R. H. 1980. "Risk taking propensity of entrepreneurs," *Academy of Management Journal* 23: 509-520.
- Carlsson, B., Braunerhjelm, P., McKelvey, M., Olofsson, C., Persson, L., and Ylinenhää, H. 2013. "The evolving domain of entrepreneurship research," *Small Business Economics* 41: 913-930.
- Carpenter, T. D., and Reimers. J. L. 2005. "Unethical and fraudulent financial reporting: Applying the Theory of Planned Behavior," *Journal of Business Ethics* 60: 115-129.
- Casson, M., and Wadeson, N. 2007. "The discovery of opportunities: Extending the economic theory of the entrepreneur," *Small Business Economics* 28: 285-300.
- Chandler, G. N., and Lyon, D.W. 2001. "Issues of research design and construct measurement in entrepreneurship research: The past decade," *Entrepreneurship Theory and Practice* 25: 101-113.
- Cunningham, J. B., and Lischeron, J. 1991. "Defining entrepreneurship," *Journal of Small Business Management* 29: 45-61.
- Davidsson, P. 2008. The Entrepreneurship Research Challenge. Cheltenham: Edward Elgar.
- Dhose, D., and Walter, S. 2012. "Knowledge context and entrepreneurial intentions among students," *Small Business Economics* 39: 877-895.
- Egan, V. 2008. "A cross-cultural and cross-gender comparison of attitudes to plagiarism: The case of Malaysian and Australian business students," *Asian Forum on Business Journal* 1: 19-33.
- Ehrich, J., Howard, S., Mu, C., and Bokosmaty, S. 2014. "A comparison of Chinese and Australian university students' attitudes towards plagiarism," *Studies in Higher Education* DOI: 10.1080/03075079.2014.927850.
- Fairlie, R., and Robb, A. 2009. "Gender differences in business performance: evidence from the characteristics of business owners survey," *Small Business Economics* 33: 375–395.
- Friedrichs, D. 2010. *Trusted Criminals: White Collar Crime in Contemporary Society* (4th ed.). Belmont: Wadsworth Cengage Learning.
- Gottschalk, P., and Smith, R. 2011. "Criminal entrepreneurship, white-collar criminality, and neutralization theory," *Journal of Enterprising Communities: People and Places in the Global Economy* 5: 300–308.
- Hansen, D. J., Schrader, R., and Monllor, J. 2011. "Defragmenting definitions of entrepreneurial opportunity," *Journal of Small Business Management* 49: 283-304.
- Harbi, S. E., and Anderson, A. R. 2010. "Institutions and the shaping of different forms of entrepreneurship" *Journal of Socio-Economics* 39: 436-444.
- Hebert, R., and Link, A. 2006. "The entrepreneur as innovator," *Journal of Technology Transfer* 31: 589–597.
- Heckler, N., and Forde, D. 2015. "The role of cultural values in plagiarism in higher education," *Journal of Academics Ethics* 13: 61-75.
- Hensley, L, Kirkpatrick, K., and Burgoon, J. 2013. "Relation of gender, course enrollment, and grade to distinct forms of academic dishonesty," *Teaching in Higher Education* 18: 895-907.
- Hlady-Rispal, M., and Jouisson-Laffitte, E. 2014. "Qualilative research methods and

- epistemological frameworks: A review of publication trends in entrepreneurship," *Small Business Management* 52: 594-614.
- Howorth, C., Tempest, S., and Christine, C. 2005. "Rethinking entrepreneurship methodology and definitions of entrepreneur," *Journal of Small Business and Enterprise Development* 12: 24-40.
- Kirzner, I. 1973. *Competition and Entrepreneurship*. Chicago: University of Chicago Press. Kolvereid, L. 1996. "Prediction of employment status choice intentions," *Entrepreneurship Theory and Practice* 21: 47-53.
- Krueger JR, N., Reilly, M., and Carsud, A. 2000. "Competing models of entrepreneurial intentions," *Journal of Business Venturing* 15: 411-432.
- Langton, L., Piquero, N., and Hollinger, R. 2006. "An empirical test of the relationship between employee theft and low self-control," *Deviant Behavior* 27: 537-565.
- Liñán, F., and Chen, Y.-W. 2009. "Development of cross-cultural application of a specific instrument to measure entrepreneurial intentions," *Entrepreneurship Theory and Practice* 33: 593-617.
- Liñán, F., Urbano, D., and Guerrero, M. 2011. "Regional variations in entrepreneurial cognitions: Start up intentions of university students in Spain," *Entrepreneurship & Regional Development* 23: 187-215.
- Low, M. B., and MacMillan, I. C. 1988. "Entrepreneurship: past research and future challenges" *Journal of Management* 14: 139-161.
- Luthje, C., and Franke, N. 2003. "The 'making' of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT," *R&D Management* 33: 135-147.
- Mayer-Schönberger, V. 2010. "The Law as stimulus: The role of Law in fostering innovative entrepreneurship," *Journal of Law and Policy* 6: 154-188.
- McBarnet, D. 1991. "Whiter than white collar crime: Tax, fraud insurance and the management of stigma," *The British Journal of Sociology* 42: 323-344.
- McCabe, D., Butterfield, K., and Trevino, L. 2006. "Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action," *Academy of Management Learning & Education* 5: 294-305.
- Meyer, M., Libaers, D., Thijs, B., Grant, K., Glänzel, W., and Debackere, K. 2014. "Origin and emergence of entrepreneurship as a research field," *Scientometrics* 98: 473-485.
- Obschonka, M., Andersson, H., Silbereisen, R., and Sverke, M. 2013. "Rule-breaking, crime, and entrepreneurship: A replication and extension study with 37-year longitudinal data," *Journal of Vocational Behavior* 83: 386-396.
- Park, C. 2003. "In other (people's) words: Plagiarism by university students—literature and lessons," *Assessment & Evaluation in Higher Education* 28: 471-488.
- Passas, N. 2005. "Lawful but awful: 'Legal corporate crimes'," *The Journal of Socio- Economics* 34: 771-786.
- Payne, B. 2012. White-Collar crime: A Text/Reader. Los Angeles: Sage.
- Peneder, M. 2009. "The meaning of entrepreneurship: A modular concept," *Journal of Industry, Competition and Trade* 9: 77-99.
- Rehn, A., Bränback, M., Carsud, A., and Lindahl, M. 2013. "Challenging the myths of entrepreneurship?," *Entrepreneurship Et Regional Development: An International Journal* 25: 543-551.
- Rettinger, D., Jordan, A., and Peschiera, F. 2004. "Evaluating the motivation of other students to cheat: A vignette experiment," *Research in Higher Education* 45: 873-890.
- Rodrigues, C. 1999. "Os senhores do crime," *Revista Portuguesa de Ciência Criminal* 9: 7-30.
- Shane, S. 2003. A General Theory of Entrepreneurship: The Individual-Opportunity Nexus.

- Cheltenham: Edward Elgar.
- Shane, S., and Venkataraman, S. 2000. "The promise of entrepreneurship as a field of research," *Academy of Management Review* 25: 217-226.
- Smith, R. 2009. "Understanding entrepreneurial behavior in organized criminals," Available from OpenAIR@RGU http://openair.rgu.ac.uk, accessed December 2014.
- Smith, R., and McElwee, G. 2011. "After the fall: Developing a conceptual script based model of shame in narratives of entrepreneurs in crisis!," *International Journal of Sociology and Social Policy* 31: 91–109.
- Tonoyan, V., Strohmeyer, R., Habib, M., and Perlitz, M. 2010. "Corruption and entrepreneurship: How formal and informal institutions shape firm behavior in transition and mature market economies," *Entrepreneurship Theory and Practice* 34: 803-831.
- Ucbasaran, D., Shepherd, D. A., Lockett, A., and Lyon, S. J. 2013. "Life after business failure: The process and the consequences of business failure for entrepreneurs," *Journal of Management* 39: 163-202.
- Ucbasaran, D., Wright, M., and Westhead, P. 2008. "Opportunity identification and pursuit: Does an entrepreneur's human capital matter?," *Small Business Economics* 30: 153-173.
- Urbig, D., Weitzel, U., Rosenkraz, S., and van Wittelootuijn, A. 2012. "Exploiting opportunities at all cost? Entrepreneurial intent and externalities," *Journal of Economic Psychology* 33: 379-393.
- Van Praag, M., and Versloot, P. H. 2007. "What is the value of entrepreneurship? A review of recent research," *Small Business Economics* 29: 351-382.
- Verheul, I., Thurik, R., Grilo, I., and van der Zwan, P. 2012. "Explaining preferences and actual involvement in self-employment: Gender and the entrepreneurial personality," *Journal of Economic Psychology* 33: 325-341.
- Walker, J. 2010. "Measuring plagiarism: Researching what students do, not what they say they do," *Studies in Higher Education* 35: 41-59.
- Zhang, Z., and Arvey, R. 2009. "Rule breaking in adolescence and entrepreneurial status: An empirical investigation," *Journal of Business Venturing* 24: 436-447.
- Zhao, F. 2005. "Exploring the synergy between entrepreneurship and innovation," *International Journal of Entrepreneurial Behavior & Research* 11: 25-41.

APPENDIX: SCENARIO AND TABLE

Scenario

Luis is enrolled in a graduate degree and at the same time is taking a professional training which is compulsory to obtain a practicing license. Two months ago, as part of the course work, he was required to submit an essay of about 35 pages, precisely two days after the national bar association exam. As he did not have enough time to prepare for the exam and write the essay, he chose to study for the exam. Three days before the deadline for the submission, he had not yet begun writing the essay. If he failed that subject he would have to drop out and he had already paid \in 2,500 in tuition fees. If he failed the bar exam he would have to postpone his professional activity for some years.

Being very worried about the situation, he contacted one of his father's friends who worked in a university and asked him for some essays on the subject in digital form so that he might do some research to write the essay. His father's friend sent him several essays by email. For an entire day Luis looked for software that would allow him to change words in documents, and he finally found one for €400. As soon as he got the software, he worked on the essay sent by his father's friend, replacing words for their synonyms. He still had time to go through the final version of the essay and made some final changes.

Luis submitted the essay on time and obtained such a high grade that the professor in charge of the subject invited him to publish a short version of the essay in a scientific journal published by the university. He did some research trying to find out if the original work had already been published, but did not find any reference to a previous publication. He then submitted a 18 pages article to the professor, who was extremely pleased. Luis greatly improved his CV.

Characteristics of Entrepreneurship in the Scenario

- 1) Focus on economic and financial gains: Not to lose the € 2,500 already paid for tuition fees, to avoid postponing his professional activities, and to improve his CV in order to be more successful.
- 2) Opportunity recognition: To have access to someone who could help him (his father's friend) and to realize that there was software that could assist him in concealing the crime.
- 3) Innovation: to look for new software, to find it and use it for concealing plagiarism.
- 4) Risk-taking propensity: The possibility that the plagiarism might be detected and its consequences (e.g., being sued by the authors of the essay).

 $\begin{tabular}{ll} \textbf{TABLE 1} - Definitions of entrepreneurship and the four main characteristics involved in entrepreneurial behavior \end{tabular}$

| Definition | Author | Characteristics of Entrepreneurship |
|---|--|---|
| The entrepreneur is an opportunistic trader. | Kirzner (1973) | FOCUS ON ECONOMIC AND FINANCIAL GAINS |
| The entrepreneur carries out new combinations. | (Schumpeter, 1912, as cited in Baumol 1990, p.5) | INNOVATION |
| Entrepreneurial activity involves identifying opportunities within the economic system. | Penrose (1959 as cited in Ahmad and Seymour 2008, p.7) | OPPORTUNITY RECOGNITION |
| Entrepreneurs attempt to predict and act upon changes within markets. The entrepreneur bears the uncertainty of market dynamics. | Knight (1921 as cited in Ahmad and Seymour 2008, p.7) | RISK-TAKING |