

### REGEPE

e-ISSN: 2316-2058

## Revista de Empreendedorismo e Gestão de Pequenas Empresas

doi: 10.14211/regepe.v6i3.723

# COMPENSATORY ENTREPRENEURSHIP: AVOIDING THE PITFALLS OF GLOBAL ISOMORPHIC ENTREPRENEURSHIP RESEARCH AND ACTIVITIES

Received: 10/04/2017

Approved: 21/10/2017

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#### **ABSTRACT**

Entrepreneurship promotion is a ubiquitous activity, promoted world-wide as offering solutions ranging from economic development to poverty reduction and mobility. This paper examines the research literature suggesting learning opportunities that might be provided to Brazilian scholars and practitioners. The paper also introduces a new concept in entrepreneurship: that of *compensatory entrepreneurship*. It is defined as the political endorsement of entrepreneurial promotion activities, including training, incubation, and media dissemination, for the primary objective of maintaining political and/or economic control of one population over another. The paper provides examples and suggestions for developing a uniquely effective mode of Brazilian entrepreneurship development.

**Keywords:** Entrepreneurship; Isomorphic Entrepreneurship; Compensatory Entrepreneurship.

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Research and Activities

As I write this article, entrepreneurship has become fully entrenched as a popular social force worldwide. References to entrepreneurship have increased in the public policy sphere, in education, university instruction, management, entertainment, and competition. The UN, IMF and the World Bank all fully embrace entrepreneurship. Scholarship in entrepreneurship has skyrocketed – from an emergent special interest group of the Academy of management in 1974 to one of the largest divisions, with over 3000 members. Publications abound, from scholarly journals (80+) to magazines, blogs, podcasts and web sites. The concept has truly diffused to become one of the most popular notions globally, addressing issues as broad as poverty elimination, innovation and creativity. We see entertainment programs such as "shark-tank" gaining audiences world-wide (and now in Brazil). The president of the United States is a former 'entrepreneurship' media mogul with his 'apprentice' series. As Kuratko enthusiastically boasts when discussing entrepreneurship outcomes "This perspective can be exhibited inside or outside an organization, in profit or not –for-profit enterprises, and in business or nonbusiness activities for the purpose of bringing forth creative ideas...The revolution has begun in an economic sense, and the entrepreneurial perspective is the dominant force!" (2005, p. 578).

Brazil, a wonderful resource rich-country, has many challenges and, in many ways, is a land of contradictions. A powerhouse in many fields, including passenger jets and automobiles. Almost half of Brazil is the Amazon rainforest, representing 50% of the world's bio-diversity. Yet, environmental challenges abound, and violence to both the natural environment and in the favela's is a daily occurrence. My own casual observations regarding the surprisingly stark racial divide (actually an absence of 'darker' Brazilians) in the Brazilian University was supported by recent ethnographic research (Roth-Gordon, 2016). What can contemporary entrepreneurship research advise for a growing Brazil?

To date, the largest cross-national efforts involving entrepreneurship consist of the Global Entrepreneurship Monitor (GEM) studies, first undertaken in 1997 (Reynolds, Hay and Camp, 1999). Wherever I travel in this world – whether in Africa, Europe, or Latin America, I inevitably cross paths with active GEM researchers. This says quite a bit about the successful efforts of a most admirable scholar, Paul Reynolds. However, it also says something about the state of entrepreneurship research. Brazil, long a GEM partner, looks very favorable regarding entrepreneurship



measures. It is one of the very few countries in the world where gender equity in entrepreneurship exists (Allen, Elam, Langowitzand Dean, 2007). It is also one of the highest entrepreneurial activity countries. However, there are a number of concerns regarding the GEM research program. First and foremost, what it means to be "involved in owning and managing along, or with others, a business" varies widely depending on the cultural norms, expectations, and economic realities. A Ugandan supplementing their small garden plot with limited petty trading may or may not see themselves as owning a business. Two Ugandan university graduates in exactly the same occupation might self-identify differently - one claiming she is unemployed looking for a government job, the other claiming she is an entrepreneur. In some cultures, owning a business is problematic, in that it draws the attention of tax authorities. In some economies, there are already too many 'necessity driven' entrepreneurs (Williams, 2007). In other cases, the embracing of entrepreneurship can have negative consequences. A recent article in the NY times, for example, points out that multi-nationals are promoting small entrepreneurial activities to better penetrate Brazilian favelas – selling 'junk food' out of small mobile carts. The predictable adverse consequences include obesity and growing Brazilian health problems (Jacobs & Richtel, 2017). Even when governments attempt to facilitate 'bottom up' entrepreneurship, their efforts often fail. For example, a Bolivian effort to promote small scale entrepreneurship in Bolivia required local governments to purchase food products for school feeding programs from small local farmers (Supreme Decree 181; Complementary School Feeding Law 622). The local farmers found themselves locked out due to food safety regulations, with the associated contracts generally favoring large companies.

On the other end of the scale, as with many universities world-wide, Brazilian universities have been asked to enter in the 'triple helix' effort of knowledge production and commercialization (Etzkowitz, de Mello and Almeida, 2005). While the goals of the triple helix seem rational and achievable, it is worth noting that very few universities make any revenue from their intellectual property activities, the vast majority lose money from their efforts (Valdivia, 2013).

In general, while entrepreneurship no doubt provides demonstrated positive attributes – assisting with labor market integration, provided some social mobility, facilitated new firms and even new industries – much less has been written regarding



the 'down side' of entrepreneurship, particularly regarding entrepreneurship in the political sense. Like all social concepts related to working and productivity, such as labor laws and the minimum wage, unionization and industrial relations, social security, disability, workmen's compensation, taxation, and social benefits, entrepreneurship may provide both an opportunity to empower as well as an opportunity to exploit. In this conceptual paper related to entrepreneurship in Brazil, I wish to examine how entrepreneurship might be used, manipulated, and leveraged to provide political and instrumental goals. How frequently is entrepreneurship 'hijacked' for the benefit of certain elite actors over others, and to what extent is it used as a method of promoting symbolic justification for inequity of economic and political power, as opposed to the often attributed role of empowerment and upward mobility? While I have no data to examine these questions systematically, I wish to provide a research path for those

#### **ENTREPRENEURSHIP AS A POLITICAL ENTERPRISE**

interested who may have data to help explain the Brazilian situation.

Piketty and others have highlighted the global increase in income inequity (Piketty, 2017). Virtually all advanced economies have experienced a post WWII consolidation of income in the highest 1 percent. Income inequity has also been common in emerging economies, where a well entrenched elite often reaps considerable economic advantages over their less fortunate co-nationals. For example, South Africa has the world's highest gini coefficient, variously estimated to be between 63 to 70, Brazil's is also very high at 54 (UN, 2016). Inequality imposes considerable constraints and is limited by other notions such as fairness, social responsibility, democratic values, and the management of effective and efficient markets. Obviously, in a society where one individual had all the wealth, (e.g. a gini coefficient of '100') and everyone else has none, there would be no markets, no incentives to innovate, and no production of any kind. Likewise, a society where wealth was equally divided among every member would provide disincentives to innovate and take risks.

While few countries operate at the extremes of inequality, the growing dissonance, as demonstrated by, for example, the occupy wall street, and the Arab spring (started, when a disgruntled 'entrepreneur' immolated himself following the



destruction of his informal 'entrepreneurial' business) demands political reaction. Even the most entitled member of the 1% recognizes that the power of the many, over the consolidation of wealth for the few, represents a potentially fragile and volatile relationship that could be challenged 'on the street'. Repercussions from urban disenfranchisement in the USA in the1960's and 1970's, as exemplified by the riots in Watts, Newark, and elsewhere, resulted in a political 'war on poverty' yielding the economic opportunity act (EOA), supporting community action and providing federal funds supporting programs such as head start, job corps, and vista, many still in existence today. Extensive protested have already occurred in Brazil (e.g. Watts, 2016).

Extrapolating the results of urban dismay and decay from the USA to a global perspective, we see that bilateral and multilateral institutions, such as the World Bank, Unesco, and the UN, provide symbolic legitimacy and nurture institutional isomorphism around the globe. The 193 member countries of the UN makes up the virtual entirety of the world's population. Each of these 193 member states has been influenced by, and influences, the policy of the UN, and so their own domestic agendas. Their influence is not trivial. For example, one of the largest entrepreneurship organizations - the ICSB -specifically held its 61st Annual World Conference at United Nations in 2016, calling for a declaration regarding "the urgent need to have a day to recognize the important role of micro, small, and medium enterprises in the development of economies as a whole". Partly as a result, the UN General Assembly created International Day for small, medium-sized enterprises. These initiatives fuel the perception, globally, that entrepreneurship is 1) essential 2) a means for progressive development and 3) a rational – indeed – an expected – policy for governments to promote. Even a country as isolated as North Korean has excitedly 'jumped' onto the entrepreneurship hiring consultants bandwagon, advisors and teach entrepreneurship skills to a growing elite population of small business owners (Hurst, 2017).

#### COMPENSATORY ENTREPRENEURSHIP.

In this article I introduce a new term, that of 'compensatory entrepreneurship'. I define compensatory entrepreneurship as the political endorsement of entrepreneurial



Research and Activities

promotion activities, including training, incubation, and media dissemination, for the primary objective of maintaining political and/or economic control of one population over another. Compensatory entrepreneurship is an outcome of recognizing income inequality and the potential political instability that results, and can be observed when governments offer an entrepreneurial intervention asserted to help ameliorate opportunity gaps. Similar to other compensatory notions, in particular, that of compensatory education (Bloom, Davis, Hess and Silverman, 1965), it is targeted to marginalized groups hoping to advance through a system often viewed as weighing against them in opportunity and having limited upward mobility. In the case of entrepreneurship, the simple production and dissemination of compensatory entrepreneurship may serve to reduce social and political pressures aimed at established elites. For example, the author observed a program implemented in a South African township, commissioned by the local township mayor, and delivered by University faculty. The program was designed, according to the dictates of the mayor, to promote 'cooperatives'. The Faculty members were largely highly qualified scholars, professors, and graduate students from a well known and highly respected university. They confided that they had no confidence at all in the quality of the program, its goals, or its implementation, and believed the program served primarily a symbolic, ceremonial role. They were simply abiding by a political request (virtually a demand, in their context) to deliver a program that satisfied the new authorities. The author observed the two – day seminar, which began with a one hour introduction into 'what is a business', 'what is a cooperative' and 'what is a market'. Students were subsequently asked to form groups and to self-select into various categories of business industries (e.g. constructions, utilities, service, etc...). They had virtually no knowledge of the industries they were supposed to design cooperatives for, no background in the process, and no familiarity with any of the other self-selecting members in their respective 'cooperative'. The high point of the day was the free distributed lunch, and the facilitators confided that the free lunch was probably the primary motivation for student attendance. They were unaware of any cooperatives forming as an outcome of the program during the previous two years in which it took place. Notably, while all the students were unemployed and black, all the facilitators where white and well-educated elites.



Entrepreneurship programs should be carefully evaluated and examined in terms of their political goals, as well as their instrumental goals. While few would object to training thousands of young unemployed South Africans from starting effective and efficient co-operatives (as in the previous example), a cynical political actor can easily harness the legitimacy gained from offering entrepreneurship promotion programs without actually providing any concrete outcomes, relief, or mobility. My general observations over two decades of entrepreneurship research is that programs often 'cherry pick', a select and fortunate example out of their basket of hundreds or even thousands of start-up activities. These are the very programs that are placed on the web, promoted through brochures, and offered as a centerpiece for visiting dignitaries, donors, and voters. It is as though we chose lottery winners to promote the lottery – despite the very limited opportunities that lotteries provide any user.

In the Brazilian case, it would seem to me that focusing on a bottom up strategy empowering local leadership in the favelas would be a logical strategy, one where empowerment would lead individuals to develop micro-industries that focus on sustainable development using locally available materials, capabilities, and needs. India has been in the fore-front of developing village based appropriate technology, and effective models might be transferable, such as that of jugaad (Prabhu and Jain, 2015; Radjou, Prabhu and Ahuja, 2012). Note that effective program development is unlikely to occur in a top-down manner. While multi-lateral agencies are quick to roll out programs making crafts out of recycled material, the bulk of these projects are designed as novelty products for tourists – they are not intended for day-to-day usage by the communities trained to produce them. These relationships essentially lock in a dependency perspective - marginalized persons are taught to produce decorative products for elites to take home with them. Scaling up such technologies is virtually impossible – they become at best, large scale etsy<sup>2</sup> producers, hardly a path to mobility or economic growth. More likely are community self-development initiatives that revive traditional crafts, such as that done by the Amayra women in Peru (Sastre-Merino, Negrilloand Hernández-Castellano, 2013). They consider the political, social and economic environments when designing their targeted programs. Developing such programs requires creating extensive sympathetic networks between different

<sup>&</sup>lt;sup>2</sup> Etsy: refers to handmade or vintage items, supplies, and unique factory-manufactured items sold at an e-commerce website named Etsy.



organizations at multiple levels, as well as enhancing the political, technical and social capabilities of the community being served. These programs cannot be designed exogenously to the communities being served – they must occur as a product of the community itself (Freire, 1970; 1994).

#### ENTREPRENEURSHIP EDUCATION

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One outcome of the tremendous interest in entrepreneurship continues to be the growth and importance of entrepreneurship education (Katz, 2003; Kuratko,2005). While entrepreneurship education in the USA began to rise monotonically after WWII, a rapid trajectory of growth took place starting in the 1990's and continues to this day (Katz, 2003).

Education with actual venture creation as the main learning vehicle is a relatively novel phenomenon, emerging in the late 1990's at a few universities, primarily in Scandinavia, the U.S. and the U.K. Previous research has studied how such programs have resulted in new ventures being incorporated and how students as surrogate entrepreneurs take on early-stage technologies and bring them to the market. Studies have also explored how project-based learning enables a personalized yet team-based learning and development of entrepreneurial identity.

Unfortunately, much research in entrepreneurship education focuses on relatively immediate evaluation, including entrepreneurship intentions and identity. The problem with this line of research is that extended longitudinal research is necessary to properly evaluate the impact of entrepreneurship education. Students who typically take a course or program in the university may not be in a position to fully evaluate the utility of the skills they learned until they try and put them into practice, often many years following course completion.

Brazil is no stranger to radical education. Perhaps the most noteworthy pedagogical scholar of the past century is Paulo Freire (1970; 1994). His work, focusing as it does on experiential and relevant empowering education, might offer some insight for entrepreneurial education in Brazil, although he was clearly aligned against the reproduction of entrepreneurial capitalism. The question is really a matter of empowerment – to what extent is entrepreneurship promoted as community



development (as in social entrepreneurship) and to what extent is it advanced as individual self-promotion to the disadvantage of others?

Without a doubt, entrepreneurship education is a very vague and poorly measured or defined process, where heterogeneity represents a central and rarely examined problem (Honig, 2004b; Zeng, Z; Honig, 2016). Of critical importance is Brazil is entrepreneurship education by whom, for whom, and for what purpose? While some would advocate primarily for a university leadership approach (Etzkowitz, de Mello, and Almeida, 2005) the poor track record of such efforts would seem to question the logic of this pursuit (Valdivia, 2013). Complicating the higher education trajectory of entrepreneurship education is that Brazilian universities seem to have a difficult time mirroring the class-racial composition of the nation-state, despite newly instituted quotas (Bailey and Peria, 2010). Passing the required entrance exam for a typical favela educated person is a barrier of considerable proportions (Valente, 2017). Given the relatively privileged status of Brazilian university students, perhaps the most effective programs would be to train students and graduate students in promoting entrepreneurial activities in the favelas. Effective programs can involve university students in researching, measuring, and identifying effective methods of evolving those skills to the population in most need - those whose alternatives are bleakest, and whose 'upside' is greatest. In this case, the 'win-win' would be university students with field trained research skills, combined with lower income opportunities for those where entrepreneurship may have the largest potential impact. Key to such training should be activities around experiential education, focusing on experimental activities that involve customers, ideally from other classes and markets. Extensive pedagogy exists in identifying best practices to promote experiential learning, itself an important topic of knowledge diffusion for universities (Kolb, 2004; Kolf and Kolb, 2005; Kolb, Boyatzis and Mainemelis, 2001; Zeng and Honig, 2016; Vygotsky, 1980). In developing an appropriate educational curricula, I would advise Brazilians to avoid many of the pitfalls of other entrepreneurship education programs world-wide. This would include staying clear of the business plan training model, which fails to yield significant results (Bhide, 2000; Honig and Samuelsson, 2012; Honig and Karlsson, 2004). It also suggests avoiding the 'shark-tank' and idea competition plans, because there is no evidence that successful navigation of these programs yields any significant positive effects, and emerging evidence that they are not particularly helpful (Smith and Viceisza, 2017).



#### CONCLUSION: ENTREPRENEURSHIP IN BRAZIL FOR THE NEW MILLENNIA

Suggesting how a 'country' can effectively engage in entrepreneurship is, by definition, a somewhat arrogant task. The contingent nature of markets, cultures, and environments almost prohibits effective regional and national planning. Of course, a few of us remain suspect of the newest idea coming out of the cannon: today, it's probably the as yet untested 'business model canvas (Osterwalder and Pigneur, 2010). All of which goes to say, be careful, be smart, and be local.

Brazil is a rich country, in terms of culture, resources, climate, and potential. In many ways, you lead the world - consider Embraer, as well as your creative automotive industry. Both of these industries developed by identifying a uniquely Brazilian orientation to solving problems that others had, often unsuccessfully, grappled with. Entrepreneurship promotion is exactly like that. There is no secret recipe, no model or map that any country can follow and no preferable set of tax incentives or educational models that will launch you into the high stakes venture capital concentration of the Silicon Valley. However, there is learning that can be accomplished by effectively and closely examining the research literature that exists exploring other geographical locations, and other national programs. In particular, both Israel and Taiwan provide examples whereby government intervention, when carefully placed (and typically matched with private sector initiatives) yields conclusive results (Saxenian, 1996; Senor and Singer, 2009; Honig, 2001). Importantly, in both of these cases, the government, as well as universities, kept a healthy distance from the marketplace. Entrepreneurship education came very late to these countries, and arguably had little to do with their success. Rather, establishing critical reliable and uncorrupted markets, enhancing human capital across the population, and providing the necessary incentives to take risks, and reward those risks, served to launch these environments beyond conventional expectations. Transnational entrepreneurship was an additional factor, one that Brazilians, with their excellent Japanese, European, and American connections, are in an excellent position to leverage (Drori, Honig and Wright, 2009).

Brazilians should be excited by the opportunities offered through entrepreneurship. Scholars and universities can play an important role by ensuring the appropriate human capital complements your wealth of natural resources. Perhaps,



the greatest opportunities lie at advancing the 'bottom of the pyramid', where both the opportunities, and the risks, offer the most promise.

#### REFERENCES

Allen, I. E., Elam, A., Langowitz, N., & Dean, M. (2007). Global entrepreneurship monitor. *2006 report on women and entrepreneurship*.

Bailey, S. R., & Peria, M. (2010). Racial quotas and the culture war in Brazilian academia. *Sociology Compass*, *4*(8), 592-604.

Bhidé, A. V. (2003). The origin and evolution of new businesses. Oxford University Press.

Bloom, B. S., Davis, A., Hess, R. D., & Silverman, S. B. (1965). *Compensatory education for cultural deprivation* (p. 179). New York: Holt, Rinehart and Winston.

Drori, I., Honig, B., &Wright, M. (2009). Transnational Entrepreneurship: an Emergent Field of Study. *Entrepreneurship, Theory and Practice*. Vol.33(5):1001-1022.

Etzkowitz, H., de Mello, J. M. C., & Almeida, M. (2005). Towards "meta-innovation" in Brazil: The evolution of the incubator and the emergence of a triple helix. *Research Policy*, *34*(4), 411-424.

Freire, P. (1970). Pedagogy of the oppressed. [Translated by Myra Bergman Ramos].

Freire, Paulo. (1994). "Pedagogy of hope." London: Continuum.

Gordon, E. W., & Wilkerson, D. A. (1966). Compensatory education for the disadvantaged, programs and practices-preschool through college.

Honig, B. & Samuelsson, M. (2012). Planning and the Entrepreneur: A longitudinal Examination of Nascent Entrepreneurship in Sweden. *Journal of Small Business Management* 50(3):365-388.



Honig, B. (2016). Institutionalization of the field and its impact on both the ethics and the quality of entrepreneurship research in the coming decades in Alain Fayolle and Phillipe Riot, (eds) <u>Rethinking Entrepreneurship</u> Routledge, chapter 8,123-136.

Honig, B. (2014a). Salesman or scholars: A critical examination of research scholarship in the field of entrepreneurship. In Frederike Welter and Ted Baker (eds). Routledge Companion to Entrepreneurship, 467-480.

Honig, B., & Karlsson, T. (2004). Institutional forces and the written business plan. *Journal of Management* Vol. 30(1): 29-48.

Honig, B., & Martin, B. (2014b). Entrepreneurship Education in Fayolle Alain (ed) Handbook of Research on Entrepreneurship, Edward Elgar Publishing: Northampton MA:127-146.

Honig, B. (2001). Israel and the ICT: The case of an industrial transformation. In: *International Labour Organization*. CD: World Employment Report 2001 Life at Work in the Information Economy, Country Studies, background paper,70 pages, Geneva: Switzerland.

Hurst, /d. (2017). Entrepreneurs in North Korea? Not as rare as you'd think. Asia Times, July 6, 20117. http://www.atimes.com/article/entrepreneurs-north-korea-not-rare-youd-think/ viewed Oct. 18, 2017.

Jacobs, A., & Richtel, M. (2017). How big business got Brazil hooked on junk food. New York Times, Sept. 16, 2017.https://www.nytimes.com/interactive/2017/09/16/health/brazil-obesity-nestle.html viewed, Oct. 16, 2017.

Katz, J.A. (2003). The chronology and intellectual trajectory of American entrepreneurship education: 1876–1999. *Journal of Business Venturing*, *18*(2), 283-300.

Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of management learning and education*, *4*(2), 193-212.



Kolb, D. A. (2014). Experiential learning: Experience as the source of learning and development. New York, NY: Pearson Education.

Kolb, D. A., Boyatzis, R., & Mainemelis, C. (2001). Experiential learning theory: Previous research and new directions. In R. Sternberg and L. Zhang (Eds.), *Perspectives on cognitive learning, and thinking styles*(pp. 228-247). Mahwah, NJ: Erlbaum

Kuratko, D.F. (2005). The emergence of entrepreneurship education: Development, trends, and challenges. *Entrepreneurship Theory and Practice*, *29*(5), 577-598.

Levine, D. U., & Levine, R. F. (1996). *Society and education*. Prentice Hall, Allyn and Bacon, 200 Old Tappan Road, Old Tappan, NJ 07675.

Osterwalder, A., & Pigneur, Y. (2010). Business model canvas. Self published. Last.

Piketty, T. (2017). Capital in the twenty-first century. Harvard University Press.

Prabhu, J., & Jain, S. (2015). Innovation and entrepreneurship in India: Understanding jugaad. *Asia Pacific Journal of Management*, 32(4), 843-868.

Radjou, N., Prabhu, J., & Ahuja, S. (2012). *Juga ad innovation: Think frugal, be flexible, generate breakthrough growth.* John Wiley and Sons.

Reynolds, P. D., Hay, M., & Camp, S. M. (1999). Global entrepreneurship monitor.

Roth-Gordon, J. (2016). Race and the Brazilian Body: Blackness, Whiteness, and Everyday Language in Rio de Janeiro. Univ. of California Press.

Sastre-Merino, S., Negrillo, X., and Hernández-Castellano, D. (2013). Sustainability of rural development projects within the working with people model: Application to Aymara Women Communities in the Puno Region, Peru. *Cuadernos de Desarrollo Rural*, 10 (SPE70), 219-243.

Saxenian, A. (1996). Regional advantage. Harvard University Press.



Senor, D., & Singer, S. (2009). Start-up nation: The story of Israel's economic miracle. McClelland & Stewart.

Smith, B., &Viceisza, A. (2017). Bite me! ABC's Shark Tank as a path to entrepreneurship. Small Business Economics, 1-17.

United Nations Development Programme, (2016). Human Development Reports, http://hdr.undp.org/en/content/income-gini-coefficient viewed, Oct.18,2017.

Valdivia, W. D. (2013). University start-ups: Critical for improving technology transfer. Center for Technology Innovation at Brookings. Washington, DC: Brookings Institution.

Valente, R. R. (2017). The vicious circle: effects of race and class on university entrance in Brazil. *Race ethnicity and education*, *20*(6), 851-864.

Watts, J. (2016). More than a million Brazilians protest against 'horror' government. The Guardian, March 14, 2016.

Williams, C. C. (2007). Entrepreneurs operating in the informal economy: necessity or opportunity driven?. *Journal of Small Business and Entrepreneurship*, *20*(3), 309-319.

Vygotsky, L. S. (1980). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard university press.

Zeng, Z;Honig, B. (2016) How should entrepreneurship be taught to students with diverse experience? A set of conceptual models of entrepreneurship education. in Jerry Katz and Andrew Corbett, (eds) *Advances in Entrepreneurship, Firm Emergence and Growth*, Models of Start-Up Thinking and Action: Theoretical, Empirical, and Pedagogical Approaches Emerald, 237-