

III INTERNATIONAL MEETING OF SOCIOLOGY (ISSOW)
Education, Employment and Retirement: Transitions in risk societies

26th-27th November 2018 :: Faculdade de Letras, University of Lisbon
. Sessão 12 / Session 12

Strategic entrepreneurship from a gender perspective: its impact on business performance

António Nogueira de Sousa

dr.ansousa@gmail.com

<https://orcid.org/0000-0002-1298-6431>

Universidade de Coimbra

Benedita do Socorro Santos de Sousa

dra.bsms@gmail.com

<https://orcid.org/0000-0003-2262-2321>

Ciep/Uevora

Abstract

What are the effects of entrepreneurship education on business performance from a gender perspective? Although prior research has neglected and understudied some issues, this study investigates the impact of male and female entrepreneurial intentions upon entrepreneurial activity. Hence, a perspective of theories on equality of opportunity, considering female and male individual perception of men and women autonomy and self-determination, is needed. Subsequently, the relationship between entrepreneurship education and entrepreneurial intention is analyzed. The sample of this study included a total of 370 entrepreneurs in the state of Amapá, 197 male respondents in the age range from 18 to 64 years corresponding to the percentage of 53.2% (M = 33.17; (SD) = 9.11) and 173 female respondents with a percentage of 46.8% (M = 33.29; (SD) = 9.87). For the regression analysis, the dependent variable (entrepreneurship education, XO) was associated with the independent variables. In hypothesis testing, the hypothesis X5 (I am determined to create a firm in the future) (B = 0.0888187; p value 0.0068 *** <0.01) is positively associated with the hypothesis X9 (I am prepared to start a viable firm) (B = 0.322155, p value 0.0005 *** <0.01) in a 99% probability of statistical significance.

Keywords: entrepreneurship education, entrepreneurial intention, gender perspective, Amazonia region

Introduction

For the purposes of this study, some significant scientific theories on strategic entrepreneurship (Ireland, Hitt and Sirmon, 2003; Wright & Hitt, 2017), gender perspective (Zhang *et al.*, 2009; Marlow & Martinez Dy, 2018), and its impact on business performance (Wiklund & Shepherd, 2009; Brustbauer, 2016) were considered. Broadly, strategic entrepreneurship is entrepreneurial action with a strategic perspective (Hitt, Duane Ireland, Camp, & Sexton, 2001) and “results from the integration of entrepreneurship and strategic management knowledge” (Ireland *et al.*, 2003, p. 966). More specifically entrepreneurial action that is taken with a strategic perspective to exploit new entrepreneurial opportunities as the goal of strategic entrepreneurship is to continuously create competitive advantages that lead to maximum wealth creation (Hitt & Bierman, 2001; Ireland *et al.*, 2003).

Strategic entrepreneurship is an inspiring construct to be used for the survival mechanism of entrepreneurial activity. According to Ireland *et al.* (2003); Wright & Hitt (2017), strategic entrepreneurship suggests the adequate process for every situation through entrepreneurial orientation, in which the organization establishes its way and entrepreneurial criteria following organization's needs linked to the market.

As to Marlow & Martinez Dy (2018, p. 24), from a gender perspective and “as a foundational social ascription, gender really matters; it is a hierarchal valorisation construct which privileges masculinity over femininity, and manifests in a wide variety of ways”. Towards business performance, alliances and acquisitions provide two important mechanisms for accessing new features that can improve firm performance (Wiklund & Shepherd, 2009).

Strategic entrepreneurship offers a strategic knowledge opportunity for companies to stay in the market, but entrepreneurs have to adopt effective strategic planning and watch for organizational changes both internally and externally and thus overcome market turmoil. The business network needs the strategic entrepreneurship mechanism to consolidate itself in the market in a more competitive way.

As certain countries' economies are driven by factors such as efficiency and innovation in their move towards entrepreneurship development, their economic diversity has a negative impact on gender equality, especially on women's self-employment, when compared to that for men that is increasing (Klyver *et al.*, 2013).

In the scope of the present research, the main objective was to analyze the impact of men and women entrepreneurial intentions upon their entrepreneurial activity, examining the effects of entrepreneurship education on entrepreneurial intention from a gender perspective (Bae *et al.*, 2014; Van der Zwan, Verheul and Thurik, 2012) and drawing on theories of equality of opportunity (Black, 1989). Regarding female and male individual perceptions of men and women autonomy and self-determination (Lerner, 1971), both genders are equally capable (Ahl, 2006). Finally, we compared the relationship between entrepreneurship education and entrepreneurial intention, in this case a lower acceptance in the male gender than in the female gender was achieved (Bae *et al.*, 2014).

This article is structured as follows. In the introduction, we make an analysis of the empirical problem, presenting the objectives and also the theory of the study. In the literature review, the topics on entrepreneurship are presented from a gender perspective, addressing entrepreneurship education and entrepreneurial intention. In the methodology, research scope, procedures and statistical analyses are presented. Finally, study results, conclusions and discussions are mentioned.

Literature review

Entrepreneurship from a gender perspective

If the environment provides different levels of resources, opportunities and support for women versus men, then it is possible that there are gender differences affecting male and female entrepreneurial activity (Zhang et al., 2009). In addition, we must confront and discontinue presumptions about the gendered role and ideas peculiar to the discussion on entrepreneurship (Marlow & Martinez Dy, 2018). According to Terjesen, Sealy, & Singh (2009), we need to find evidence to show gender diversities in all of their iterations that influence entrepreneurial activities and also recognize effectiveness through a variety of entrepreneurship action (Marlow & Martinez Dy, 2018). Furthermore, "liberal feminism suggests that gender differences in export propensity are associated with systemic gender differences in owner- and firm-level attributes that are also associated with firm performance" (Orser *et al.*, 2010, p. 934). "Gender-specific differences become apparent when we look at the impact of socio-demographic characteristics. The SE status of women is much less sensitive to age than that of men" (Leoni & Falk, 2010, P. 181).

Evidence of gender differences in entrepreneurship depends on the specific stage of the process. But in terms of entrepreneurship early stages, when entrepreneurship is referred to, there are few studies comparing entrepreneurial preferences and intentions between genders (van der Zwan *et al.*, 2012). "On the other hand, their sense of identity is shaped by social opportunity, but these women also have activity to simulate gender practices and collaborate to build their identity" (García & Welter, 2013, p. 398). "The team average increases in skill/knowledge levels turn out to be unrelated to teams' gender composition. There is thus not more or less learning in gender diverse teams than in other teams" (Hoogendoorn *et al.*, 2013, P. 1526).

Nevertheless, the relationship between entrepreneurship education and entrepreneurial intention is considerably influenced by culture with variations in entrepreneurs' added value goals. However, “identities and self-efficacies required for instilling social salience into a new venture are often already present for female gender self-schemas” (Lortie, Castrogiovanni, & Cox, 2017, p. 159). “In a hierarchically organized enterprise or owner-run small business, the gender of the one being finally responsible for (merger and) acquisition may be decisive” (Di Cagno, Galliera, Güth, Pace, & Panaccione, 2017, p. 73).

Successful entrepreneurship is a desirable life event that can result from good social relationships derived from entrepreneurship education and entrepreneurial intention and influence women to become entrepreneurs as compared to men (Zhang *et al.*, 2009). The analysis of relationships established from a gender perspective will allow advancing a fundamental idea in business creation so that entrepreneurial activity can be instituted taking into account the social relationships established from entrepreneurship education.

When a gender lens, followed by an emergent process, is applied positively to provide a space in the feminine or masculine identity, nevertheless, it becomes necessary something more as a complement to an emergent entrepreneurial identity, mainly with regard to nascent entrepreneurs (Swail & Marlow, 2018). Entrepreneurship education fosters entrepreneurial intention, interpersonal, legal and financial difficulties, given the gender differences, in determining whether men and women become entrepreneurs (Zhang *et al.*, 2009). However, this trend is shared in everyday life leading to certain influences on business relationships. According to Swail & Marlow (2018), the addition and use of resources that are fundamental to initiate the creation of new ventures will translate into quality, scope of opportunities and market recognition.

Nevertheless, certain situations continue to occur in which individual abilities and skills, inserted in a professional context, not always deserve recognition because some perceptions contradict their special competence.

Entrepreneurship education and entrepreneurial intention

Entrepreneurship in general has become increasingly popular in business schools, engineering schools, universities, and educational institutions. There is commitment, intellectual and emo-

tional investment and also passion among educators, instructors and all those involved in entrepreneurship education (Fayolle, 2013). Entrepreneurship education and training (EET) is growing rapidly in universities and colleges around the world, and governments support it directly and by funding large investments in providing advice to existing future entrepreneurs and small businesses. Unfortunately, there is little evidence to show how EET contributes to creating more or better entrepreneurs (Martin, McNally, & Kay, 2013).

Early academic entrepreneurship activities evolved outside the university's formal structures, especially at some of the leading universities with research in this area. More universities have recently taken formal steps to invest in the creation of internal organizational structures and support mechanisms, with the intention of accelerating the process and encouraging marketing that would otherwise not occur (Grimaldi, Kenney, Siegel, & Wright, 2011).

It is understandable and reasonable that education for entrepreneurship is more strongly related to entrepreneurial intentions because entrepreneurship education is better suited to the development of entrepreneurship skills and knowledge (Lans, Verstegen, & Mulder, 2011) of active professionals in the development of the sector, support for small businesses, and education and training. For example, entrepreneurship education offers courses in new business development or business planning, which can promote student employment prospects and risk-prone learning (Bae *et al.*, 2014). It is clear that entrepreneurship-friendly policies are those that somehow make it easier or less costly for a person to start a new business, perhaps or not, depending on whether they have developed a new business idea or invented something (Acs, Åstebro, Audretsch, & Robinson, 2016).

In this way, institutions tend to promote the creation of useful knowledge and value that can later be transformed into innovative / entrepreneurial initiatives (Guerrero *et al.*, 2016). These trends and the growing involvement of governmental and nongovernmental institutions in innovation and marketing have led to increasing international recognition of the narrowness of technology management education as it is practiced today. Some business and engineering schools have responded to these developments by creating new courses and curricula related to technological entrepreneurship (Phan & Siegel, 2009). Learning in action within an organizational context

implies learning through involvement with the internal dynamics of the company (Byrne, Delmar, Fayolle, & Lamine, 2016).

Entrepreneurial intentions provide a practical insight into any planned behavior. This allows us to better stimulate the identification of personally viable and personally credible opportunities. Teachers, consultants, advisors, and entrepreneurs should benefit from a better general understanding of how intentions are formed, as well as a specific understanding of how the founders' beliefs, perceptions, and motives merge with the intention to start a business (Krueger, Reilly, & Carsrud, 2000).

However, specific human capital for entrepreneurship can be a better guide for entrepreneurs to identify opportunities than the overall human capital in isolation. Specific human capital for entrepreneurship can provide an entrepreneur with the knowledge of where to look for opportunities as well as the ability to identify an opportunity that can be ignored by entrepreneurs who depend exclusively on their overall human capital (Ucbasaran, Westhead, & Wright, 2008).

Thus, a culture unfavorable to entrepreneurship can lead to a greater proportion of autonomous individuals and therefore to a smaller average company size. However, this would be compatible with less entrepreneurial activity (tentative start-ups). On the other hand, it could be argued that a culture of support would lead to greater entrepreneurial intentions among the population and therefore more new ventures being tried (Linan & Chen, 2009).

Some skills and knowledge will have to be unlearned, that is, replaced by others and better knowledge and skills. So the willingness, effort and ability of a business owner to learn quickly and continuously will probably be the key to sustained competitive advantage (Unger, Rauch, Frese, & Rosenbusch, 2011).

Methodology

The sample of this study included a total of 370 entrepreneurs in the state of Amapá, distributed among 197 male respondents in the age range of 18 to 64, with a percentage of 53.2% ($M = 33.17$, $SD = 9, 11$) and 173 female respondents in the same age group corresponding to the percentage of 46.8% ($M = 33.29$; $(SD) = 9.87$).

Scope of the research

For the purposes of this research, we intend to discuss the theme - strategic entrepreneurship from a gender perspective: its impact on business performance - in which the effects of entrepreneurship education on business performance from a gender perspective are studied. In this way, the main objective is to analyze the impact of entrepreneurial intention on the female and male entrepreneurial activity. As such, gender is a subject of great interest in scientific research in order to perceive the human relationship between the two opposite sexes, especially within entrepreneurial activity.

In addition, there has been consensus in some business institutions regarding conducting a randomized study to identify reasons that led to the decision to start a business, how they succeeded in raising seed capital, and reached different levels of success between men and women (Lim & Envick, 2013). “But also as an institution embedded in the workplace, occupations, and occupational environments through formally defined rules, roles, and responsibilities and the ‘habitus’ of mental structures through which individuals think about their social world” (Terjesen *et al.*, 2009, p. 324). And still in the perspective of entrepreneurship, as a way of establishing development through entrepreneurial intention, bearing in mind the hypothesis of practicing business within developed regions in which entrepreneurs can develop the mechanism for economic growth (Jennings, Jennings, & Sharifian, 2016). However, gender differences in entrepreneurship still influence a lot of business decision making because of the culture of individualism that some entrepreneurs have created unconsciously as a barrier to the reality of the market and, in consequence, fail to innovate their decisions.

Procedure

This study was based on population data provided by the National Service for Commercial Apprenticeship (SENAC). A simple random sample was considered and later stratified by sectors of activity. Thus, the sample of 400 elements was stratified as follows: 50 elements in the repair and maintenance of personal and household objects and equipment; 50 elements in the hairdressing industry and other beauty treatment activities; 150 elements in the retail sector of merchandise in general, with predominance of food products - mini-markets, grocery stores and warehouses; 50

elements in the itinerant commerce sector and other types of retail trade; 50 elements in garments confectionery, except underwear; and 50 elements among various diversified sectors.

Statistical analyses

The t test was applied to analyze the dependent and independent variables carefully and in detail to perceive the statistical difference between groups and to determine the p value < 0.01 , 0.05 and 0.1 in a 99%, 95% and 90% probability of statistical significance.

To measure the level of effectiveness, two important statistical values were considered – reliability and validity – measures to verify a statistical relationship consistent with the use of Cronbach's alpha coefficient. The validity and reliability of the instrument, the scale evaluation, Cronbach's alpha, correlation and standard deviation were considered. The validity of the scale for a group having a Cronbach's alpha ranged from 0.50 to 0.66 in the dummy variable (Staniewski & Awruk, 2018) (Awruk, 2018) in relation to the total score of the group, the validity of the scale and reliability of the instrument is critical to the construct. However, the intensity of the dependent and independent variables is perceived in the Varimax environment of the component (Westhead & Solesvik, 2016). The Likert scale consisted of questions from 1 to 7, where 1 = strongly disagree and 7 = strongly agree. "To measure the bivariate relation of variables representing different measurement classes, one should use an interclass correlation coefficient, of which there is only one in common, the Pearson" (McGraw & Wong, 1996, p. 30).

For the eleven-item scale analysis, the Kaiser-Meyer-Olkin (KMO) test was used, initially to assess the sample adequacy when conducting a factor analysis to the 11 variables under study. "After a factor analysis has been completed, it is of interest to assess how good the solution is, in the sense of how simple – and thus how interpretable – the final factor pattern matrix is" (Kaiser, 1974, p. 31).

Results

Statistical analysis of the scales of the sample separated by groups, male gender and female gender, allowed to determine 197 male respondents ($M = 89.92$; $(SD) = 17.36$) and Cronbach's alpha 0.66 and 173 female respondents ($M = 89.72$; $(SD) = 15.64$) and Cronbach's alpha 0.50.

Table 1 shows the mean of the total of the individual study items, standard deviation, correlation coefficients and Cronbach's alpha. The average of the total of individual items was 5.64, item 7 5.29 (I have the firm intention to start a firm some day), item 9 5.92 (I am prepared to start a viable firm). The correlation coefficients found two minor variables, 0.03 and 0.22, corresponding to items 11 (I know the necessary practical details to start a firm) and 5 (I am determined to create a firm in the future). Cronbach's alpha was medium, but with a probability of statistical significance.

Table 1. Mean, standard deviation, correlation, Cronbach's alpha and VIF

Item	M	Corrected item-total correlation	Cronbach's alpha if an item is excluded	VIF
X1. Age	33.23	0.03	0.88	1.07
X2. I am ready to do anything to be an entrepreneur	5.82	0.64	0.53	3.01
X3. My professional goal is to become an entrepreneur	5.71	0.66	0.52	3.11
X4. I will make every effort to start and run my own firm	5.93	0.59	0.54	2.77
X5. I am determined to create a firm in the future	4.01	0.22	0.58	1.29
X6. I have very seriously thought of starting a firm	6.04	0.56	0.55	2.35
X7. I have the firm intention to start a firm some day	5.29	0.29	0.57	1.50
X8. To start a firm and keep it working would be easy for me	5.88	0.52	0.55	2.15
X9. I am prepared to start a viable firm	5.92	0.52	0.55	2.54
X10. I can control the creation process of a new firm	6.02	0.56	0.54	2.40
X11. I know the necessary practical details to start a firm	5.99	0.03	0.88	1.51

Source: Survey results

The multicollinearity individual coefficients are not shown in the report, but through VIF analysis, no collinearity problem was detected among variables since the literature determines that through the analysis of Variance Inflation Factor (VIF) the minimum possible value = 1.0 and the final values must have a value lower than ten, in case of presenting values higher than ten it indicates a collinearity problem as in certain variables (2: 3.01 and 3: 3.11). The parameter of the hypothesis test estimators does not reveal any reason for multicollinearity through the VIF analysis, all initial points are lower than ten (Cohen *et al.* 2003). (See Table 1).

Factor analysis

For all factor analysis processes, the KMO and the Bartlett's test of sphericity, factor extraction techniques, rotation, scores and the options given to perform the factor analysis are highly relevant to perceive the search engine and obtain the necessary results to determine the comparisons of parallel analyzes such as the use of factor scores (Kaiser, 1974; Hayton, Allen, & Scarpello, 2004; Ruscio e Roche, 2012).

The decision of how many factors to maintain is a critical component of exploratory factor analysis. This may be especially useful under certain data conditions, with the purpose of sampling suitability so much closer to a better specification test. In the KMO and Bartlett tests, the sampling adequacy measure (KMO 0.91) determines that the corrected correlation matrix is adequate to perform a factor analysis with $p > 0.01$ at a 99% probability of statistical significance.

Table 2 shows the principal components of the factorial actions, after reducing the size of variables by the use of Varimax rotation and reports the communality of the h^2 extraction of the variables in progress. However, it reveals a difference between factor 1 (load) and factor 2 (load), for example, most factor 1 values are higher than factor 2 values. In other words, the factor that obtained the highest factorial loads in the dimension reduction analysis. Thus, in communality extraction, most of the values are above 0.5, meaning that the factorial studies are relevant according to the Kaiser criterion (1974), the higher the extraction the better factorial loads.

Table 2. Factorial actions

Item	Factor 1	Factor 2	h^2
X3. My professional goal is to become an entrepreneur	0.85	0.04	0.73
X2. I am ready to do anything to be an entrepreneur	0.84	0.08	0.71
X4. I will make every effort to start and run my own firm	0.83	0.07	0.70
X10. I can control the creation process of a new firm	0.82	-0.04	0.67
X6. I have very seriously thought of starting a firm	0.81	0.10	0.66
X9. I am prepared to start a viable firm	0.80	0.09	0.65
X8. To start a firm and keep it working would be easy for me	0.77	0.00	0.59
X11. I know the necessary practical details to start a firm	0.58	0.21	0.38
X5. I am determined to create a firm in the future	0.15	0.80	0.67
X7. I have the firm intention to start a firm some day	0.35	0.76	0.70
X1. Age	0.11	-0.33	0.13

Source: Survey results

Regression analysis

For the regression analysis we associated the dependent variable (entrepreneurship education, XO) with the independent variables and the model was processed electronically to verify the coefficient values, standard errors, t ratio and p value. The development of the iteration between the dependent and independent variables allowed to obtain the coefficient of the constant: 4.45764 and standard error = 0.560166, p value 2.33e-014 *** < 0.01, then in hypothesis X5 (I am determined to create a firm in the future (B = 0.0888187; p value 0.0068 *** < 0.01) and the hypothesis X9 (I am prepared to start a viable company) (B = 0,322155; p value 0, 0005 *** < 0.01), and hypothesis X3 (my professional goal is to become an entrepreneur) p value 0.0400 ** < 0.05 and hypotheses X6; X8 and X10, corresponded to p value < 0.05. According to Bae *et al.* (2014), *The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review*, the entrepreneurship education hypothesis is positively associated with entrepreneurial intention when a p value < 0.05) is obtained, in a 95% probability of statistical significance.

Table 3. Model: Ordinary least squares (OLS), using 1-370 observations dependent variable: XO

	Coefficient	Standard error	T ratio	p value
Constant	4.45764	0.560166	7.958	2.33e-014 ***
X1	-0.0213383	0.00952933	-2.239	0.0258 **
X2	0.0574163	0.0728356	0.7883	0.4310
X3	-0.144399	0.0700544	0.2629	0.0400 **
X4	0.0340672	0.0587933	0.5794	0.5627
X5	0.0888187	0.0326156	2.723	0.0068 ***
X6	0.162306	0.0800743	2.027	0.0434 **
X7	-0.0507661	0.0595848	-0.8520	0.3948
X8	-0.165977	0.0742941	-2.234	0.0261 **
X9	0.322155	0.0909663	3.541	0.0005 ***
X10	-0.189998	0.0834442	-2.277	0.0234 **
X11	0.111720	0.0715540	1.561	0.1193

Source: Survey results

***p < 0.01. **p < 0.05. *p < 0.1. 99%, 95% and 90% probability of statistical significance.

Conclusion and discussion

In the scope of this research, we sought to discuss the theme – strategic entrepreneurship from a gender perspective: its impact on business performance – and the effects of entrepreneurship education on business performance from a gender perspective were studied. In this way, the main

objective was to analyze the impact of entrepreneurial intention on male and female entrepreneurial activity.

The estimation for the entrepreneurial intention scale was based on the study of Linan & Chen (2009). The results of this research, regarding the analysis of the hypothesis, were submitted in the specialized software to identify the average between the individual values of Cronbach's Alpha 0.55), valid value for this study when compared to the previous one.

Regarding multicollinearity analysis, the correlation matrix was run and some variables above 0.5 were assessed as a previous study identified that the correlations may alter the data. But to identify multicollinearity in the model we have Variance Inflation Factor (VIF), which performs analysis on the model to detect a multicollinearity problem. In this case the correlation matrix was not explicit in this study, but some individual multicollinearity coefficients can be verified (see table 1, VIF results do not display values > 10 , that is, all are < 10). So, it does not check constraint on the model. The VIF results reveal acceptable values in this study that are lower than 4.0, and multicollinearity is also not a serious problem in the present study (Hair, Black, Babin, & Anderson, 2014; Kang, Kim, & Bock, 2010).

For the regression analysis, the dependent variable was associated with the independent variables and software was used to identify the hypotheses that have the p values with significance level relevant to the study. In the case of the constant, the p value 0.00; < 0.01 was obtained, in the hypothesis age range, X1, p value 0.014; < 0.05 was achieved and the age group variable has a 95% probability of statistical significance. The hypothesis (My professional objective is to become an entrepreneur, X3) was supported statistically at a p value 0.01; < 0.05 in a 95% probability of statistical significance. The hypothesis (I know the practical details necessary to start a company, X11) shows p value 0.02; < 0.05 . These results indicate that the three hypotheses have a 95% probability of statistical significance. In comparison to the hypothesis of the study by Bae *et al.* (2014), when considering the value of 0.05 in a 95% probability of statistical significance, the model is relevant for the study.

Implications, limitations and future research

From the evidences identified in this study, the relationship between entrepreneurship education and entrepreneurial intention was quite accentuated in the test of hypotheses, with a relatively positive result in the probability of statistical significance. As to the limitation of the study, results showed that some hypotheses were not likely to be statistically significant, and it is not possible to eliminate this hypothesis from the model since the Cronbach's alpha mean could be below 0.50. So, the scale's validity would be threatened. This research opens the way for future studies in the quantitative approach regarding the relationship of the variable's entrepreneurship education and entrepreneurial intention, raising relevant questions through literature review on data analysis. By developing this survey of the field and considering scientific research being done in entrepreneurship education and entrepreneurial intention throughout the world, potential questions for further research and discussion may also emerge providing novel insights worthy of continued or future research. For example, studies on the relationship between labor laws and entrepreneurial intentions could deserve more attention in future studies and might thus contribute to the deepening and development of this subject still understudied.

References

- Acs, Z., Åstebro, T., Audretsch, D., & Robinson, D. T. (2016). Public policy to promote entrepreneurship: a call to arms. *Small Business Economics*, *47*(1), 35–51. <https://doi.org/10.1007/s11187-016-9712-2>
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship: Theory and Practice*, *38*(2), 217–254. <https://doi.org/10.1111/etap.12095>
- Brustbauer, J. (2016). Enterprise risk management in SMEs: Towards a structural model. *International Small Business Journal*, *34*(1), 70–85. <https://doi.org/10.1177/0266242614542853>
- Byrne, J., Delmar, F., Fayolle, A., & Lamine, W. (2016). Training corporate entrepreneurs: an action learning approach. *Small Business Economics*, *47*(2), 479–506. <https://doi.org/10.1007/s11187-016-9734-9>
- Di Cagno, D., Galliera, A., Güth, W., Pace, N., & Panaccione, L. (2017). Experience and gender effects in acquisition experiment with value messages. *Small Business Economics*, *48*(1), 71–97. <https://doi.org/10.1007/s11187-016-9766-1>
- Edsall, J. T. (1976). Joseph F. Foster. *Nature*, *259*(5542), 433–433. <https://doi.org/10.1038/259433b0>
- García, M. C. D., & Welter, F. (2013). Gender identities and practices: Interpreting women entrepreneurs' narratives. *International Small Business Journal*, *31*(4), 384–404. <https://doi.org/10.1177/0266242611422829>
- Grimaldi, R., Kenney, M., Siegel, D. S., & Wright, M. (2011). 30 years after Bayh-Dole: Reassessing academic entrepreneurship. *Research Policy*. <https://doi.org/10.1016/j.respol.2011.04.005>
- Hayton, J. C., Allen, D. G., & Scarpello, V. (2004). Methodological resources Factor Retention Decisions in Exploratory Factor Analysis: A Tutorial on Parallel Analysis. <https://doi.org/10.1177/1094428104263675>

- Hitt, M. A., & Bierman, L. (2001). Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service Firms: A Resource-Based Perspective All things great and small: Organizational size, boundaries of the firm and a changing environment View project. *Article in The Academy of Management Journal*. <https://doi.org/10.5465/3069334>
- Hitt, M. A., Duane Ireland, R., Camp, S. M., & Sexton, D. L. (2001). Guest editors' Introduction to the Special issue Strategic Entrepreneurship: Entrepreneurial Strategies for Wealth Creation. *Strategic Management Journal Strat. Mgmt. J*, 22, 479–491. <https://doi.org/10.1002/smj.196>
- Ireland, R. D., Hitt, M. A., & Sirmon, D. G. (2003). A Model of Strategic Entrepreneurship: The Construct and its Dimensions. *Journal of Management*, 29(6), 963–989. https://doi.org/10.1016/S0149-2063_03_00086-2
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31–36.
- Kang, M., Kim, Y. G., & Bock, G. W. (2010). Identifying different antecedents for closed vs open knowledge transfer. *Journal of Information Science*, 36(5), 585–602. <https://doi.org/10.1177/0165551510375667>
- Klyver, K., Løwe Nielsen, S., & Evald, M. R. (2013). Women's self-employment: An act of institutional (dis)integration? A multilevel, cross-country study. *Journal of Business Venturing*, 28, 474–488. <https://doi.org/10.1016/j.jbusvent.2012.07.002>
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411–432.
- Lim, S., & Enrick, B. R. (2013). Gender and entrepreneurial orientation: A multi-country study. *International Entrepreneurship and Management Journal*, 9(3), 465–482. <https://doi.org/10.1007/s11365-011-0183-2>
- Linan, F., & Chen, Y.-W. (2009). "Development and cross-cultural application of specific instrument to measure entrepreneurial intention." *Entrepreneurship Theory and Practice*, 33(3), 593 – 612.
- Lortie, J., Castrogiovanni, G. J., & Cox, K. C. (2017). Gender, social salience, and social performance: how women pursue and perform in social ventures. *Entrepreneurship and Regional Development*, 29(1–2), 155–173. <https://doi.org/10.1080/08985626.2016.1255433>
- Marlow, S., & Martinez Dy, A. (2018). Annual review article: Is it time to rethink the gender agenda in entrepreneurship research? *International Small Business Journal: Researching Entrepreneurship*, 36(1), 3–22. <https://doi.org/10.1177/0266242617738321>
- Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, 28, 211–224. <https://doi.org/10.1016/j.jbusvent.2012.03.002>
- McGraw, K. O., & Wong, S. P. (1996). Forming Inferences about Some Intraclass Correlation Coefficients. *Psychological Methods*, 1(1), 30–46. <https://doi.org/10.1037/1082-989X.1.1.30>
- Orser, B., Spence, M., Riding, A., & Carrington, C. A. (2010). Gender and export propensity. *Entrepreneurship: Theory and Practice*, 34(5), 933–957. <https://doi.org/10.1111/j.1540-6520.2009.00347.x>
- Terjesen, S., Sealy, R., & Singh, V. (2009). Women directors on corporate boards: A review and research agenda. *Corporate Governance: An International Review*, 17(3), 320–337. <https://doi.org/10.1111/j.1467-8683.2009.00742.x>
- Ucbasaran, D., Westhead, P., & Wright, M. (2008). Opportunity identification and pursuit: Does an entrepreneur's human capital matter? *Small Business Economics*, 30(2), 153–173. <https://doi.org/10.1007/s11187-006-9020-3>
- Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26, 341–358. <https://doi.org/10.1016/j.jbusvent.2009.09.004>
- van der Zwan, P., Verheul, I., & Thurik, A. R. (2012). The entrepreneurial ladder, gender, and regional development. *Small Business Economics*, 39(3), 627–643. <https://doi.org/10.1007/s11187-011-9334-7>
- Wiklund, J., & Shepherd, D. A. (2009). The effectiveness of alliances and acquisitions: The role of resource combination activities. *Entrepreneurship: Theory and Practice*, 33(1), 193–212. <https://doi.org/10.1111/j.1540->

6520.2008.00286.x

Wright, M., & Hitt, M. A. (2017). Strategic {Entrepreneurship} and {SEJ}: {Development} and {Current} {Progress}. *Strategic Entrepreneurship Journal*, *11*(3), 200–210. <https://doi.org/10.1002/sej.1255>

Zhang, Z., Zyphur, M. J., Narayanan, J., Arvey, R. D., Chaturvedi, S., Avolio, B. J., ... Larsson, G. (2009). The genetic basis of entrepreneurship: Effects of gender and personality. *Organizational Behavior and Human Decision Processes*, *110*, 93–107. <https://doi.org/10.1016/j.obhdp.2009.07.002>