

Magalhães, Rodrigo; Abouzeid, Mohamed A.

Article

Does effectuation apply across cultures? A study amongst entrepreneurs in Kuwait

Journal of Global Entrepreneurship Research

Provided in Cooperation with:

Springer Nature

Suggested Citation: Magalhães, Rodrigo; Abouzeid, Mohamed A. (2018) : Does effectuation apply across cultures? A study amongst entrepreneurs in Kuwait, Journal of Global Entrepreneurship Research, ISSN 2251-7316, Springer, Heidelberg, Vol. 8, Iss. 22, pp. 1-18, <https://doi.org/10.1186/s40497-018-0108-4>

This Version is available at:

<https://hdl.handle.net/10419/196956>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/4.0/>

RESEARCH

Open Access



Does effectuation apply across cultures? A study amongst entrepreneurs in Kuwait

Rodrigo Magalhaes^{1*}  and Mohamed A. Abouzeid²

* Correspondence: rodrigo.magalhaes@inov.pt

[magalhaes@inov.pt](mailto:rodrigo.magalhaes@inov.pt)

¹Kuwait College of Science and Technology, Doha District, Block 4, Ring Road 7 Spur Motorway, 13133 Doha, Kuwait

Full list of author information is available at the end of the article

Abstract

This exploratory study is aimed at examining the entrepreneurial process in the light of the cultural attributes of Kuwaiti society, using Effectuation theory as the epistemological background. The research question is centred on whether or not the principles of effectuation hold in the cultural context of Kuwait. A qualitative research methodology was followed with the analysis of the interviews using the "Nvivo" Qualitative Analysis Software. From a sample of 13 entrepreneurs, the findings show that, in the main, entrepreneurs favour an effectual approach in the setting up of new ventures. The results also suggest that some cultural dimensions inherent to the Kuwaiti culture, such as high uncertainty avoidance, are not a hindrance to the effectuation theory attributes of non-predictive control, affordable loss, partnerships and leveraging contingencies, as would be expected from the cultural profile of the society. Finally, it can be concluded that the dichotomy between effectuation and causation needs to be further researched taking into account not only cultural variables, but also variables of a social and economic nature. This study is unique in the sense that it brings together two variables that have been kept apart, effectuation and culture. It is also carried out in a geographical location where this type of research is very sparse.

Keywords: Effectuation, Causation, Culture, Cultural dimensions, Socio-economic variables

Background

Effectuation is a novel theoretical approach for the entrepreneurial process put forward by Sarasvathy (2001). Whereas under a logic of causation, the entrepreneur is focused on the causes behind his decisions to launch the new venture, under a logic of effectuation, the entrepreneur is concerned with the effects that his decisions will bring about, in terms not only of the business itself but also of the surrounding environment. Effectuation processes are coherent with the notions of non-predictive or emergent strategies (Wiltbank et al., 2006). The introduction of effectuation and the various contributions, which have subsequently enriched the concept (Dew et al., 2009; Read & Sarasvathy, 2005; Read et al., 2009; Sarasvathy, 2003; Sarasvathy et al., 2008; Wiltbank et al., 2006), has opened up the way for a global debate about effectuation. Relevant to this effort are the studies by Chandler et al. (2007), Chandler et al. (2011) and McKelvie et al. (2013) into the validity of causation and effectuation as research paradigms, as well as the works by Andersson (2011), Harms & Schiele (2012) and Lutsch

& Mortensen (2013) about the relationship between new venture creation and the effectual logic. A recent controversy has cast doubts about the validity of effectuation as a theory (Arend et al., 2015), but the key supporters of the concept have responded arguing that effectuation has been validated empirically in a considerable number of studies, while also recognizing that the notion is not yet a complete body of knowledge and that further research is still required (Read et al., 2016).

Eckhardt and Shane (2003, p. 336) define entrepreneurship as the “discovery, evaluation, and exploitation of future goods and services” and include in the definition the study of opportunities, defined as “situations in which new goods, services, raw materials, markets and organizing methods can be introduced through the formation of new means, ends, or means-ends relationships”. Entrepreneurship plays a critical role in economic development by creating new firms, absorbing surplus labour from traditional markets, providing innovations and intermediate inputs to final goods (Gries & Naudé, 2010), and being inevitably linked to the creation of new ventures and even new markets (Moroz & Hindle, 2012). Indeed, according to Schumpeter (1961) entrepreneurs are the driving force for all economic transformation and development under a capitalist system.

In the literature attempting to explain business creation and entrepreneurial intention and success, a link has been established with the entrepreneur’s personality traits (De Pillis & Reardon, 2007; Rauch & Frese, 2007; Schmitt-Rodermund, 2004). Indeed, in taking actions and decisions, entrepreneurs use their basic personality make-up, and given that personality and behaviour are closely related to the national culture, it is likely that entrepreneurs in different cultures might behave differently and have distinct preferences in creating new ventures (Hayton et al., 2002). Goel and Karri (2006) have suggested that the effectuation logic might be altered by personality factors, such as over-trust or the tendency to trust more than what is warranted. In the same way that in applying an effectual logic to an entrepreneurial process, the personality traits of the entrepreneur make him or her more susceptible to over-trust, characteristics of national culture will make entrepreneur more prone to some attributes of the effectual logic than others. Taking up this line of enquiry, several authors have argued that culture is a factor that influences certain aspects of effectuation and causation (Kistler & Gillig, 2015; Kraaijeveld, 2015; Krijgsman, 2012; Stienstra et al., 2012).

Thus, the multi-cultural dimension of entrepreneurship (and effectuation) is clearly as an area requiring further investigation. As a research topic, it is very relevant to emerging economies, given the fact that entrepreneurship both as an occupation and as a field of study, is becoming ever more prevalent. In economies whose future is vastly dependent on oil revenues, such as Kuwait’s, the increased oil supplies from non-OPEC countries has been a major shake-up. The resulting downward pressure on oil prices is forcing Kuwait, as well as other oil dependent economies, confront the need to diversify sources of income, and foster entrepreneurship engagement through the encouragement of entrepreneurial ventures. Interestingly, Kuwait is especially prone to the creation of small business ventures, given that for every two Kuwaitis there is one private business (Cader, 2014). Another reason for the rise of entrepreneurship in Kuwait is the very high dependence of the country’s economy on expats workers (about 83% of the total labour force of 2.3 million). As a reaction to this, the Kuwait National Assembly approved in 2010 a national fund of two billion Kuwaiti Dinar for the support of SMEs (Al-Kharafi, 2014; Kuwait Mid-Range Development Plan, 2015).

In the main, the entrepreneurship literature does not include the Middle East or specifically the Gulf countries, as a region of the world with well-defined cultural traits. In the light of this gap, it was decided to carry out a study aimed at exploring the logic of Kuwaiti entrepreneurs in starting-up their ventures, and more specifically investigating whether or not the entrepreneurial process in Kuwait follows the key principles of effectuation theory. Thus, the aim of the present study is to give a contribution towards the broad research question outlined in the title of the paper – does effectuation apply in the cultural context of Kuwait? This is achieved with the methodological assistance of Hofstede's work on culture (Hofstede, 1983; Hofstede, 2001), particularly his framework of cultural dimensions and its original scores, as applicable to the culture of Kuwait. The findings of the study might be applicable to countries in the region with similar socio-economic and cultural characteristics.

Literature overview

Focal to the entrepreneurial process is the issue of business planning, and the crucial question of its impact on the success of new ventures or start-ups (Brinckmann et al., 2010). The question centres on whether the orientation of the entrepreneurial process should be on control or on prediction or, more specifically, on a logic of planning or on a logic of transformation (Wiltbank et al. 2006). The planning logic places high emphasis on prediction and low emphasis on control, whereas the logic of transformation places high emphasis on control and low emphasis on prediction. Planning is a well-established school of thought, familiar to most would-be entrepreneurs, and based on the belief that rational planning is behind the success of new ventures. This school of thought asserts that as uncertainty increases, organizations that invest actively in the analysis and prediction of the business environment in which they operate “will outperform those that do not” (Ibid, p. 985). On the opposite side of the spectrum, the logic of Transformation emphasizes the control that expert entrepreneurs exert in the transformation of the business environment and the creation of “new markets and new environments” (Ibid, p. 991). The dichotomy between planning and transformation matches the dichotomy between the logics of causation and effectuation.

Uncertainty

One of the key assumptions of effectuation is that under conditions of uncertainty, it is impossible to predict or infer about the future. There is no possible way to calculate the expected returns for a specific course of action, therefore in starting up a new business the entrepreneur tends to select alternatives based on his calculation of the loss he can endure. Then, he utilizes his experience and his networks of cooperative relations with suppliers, customers and competitors to try to exert some control over the future, while maintaining flexibility at all times. (Dew et al., 2009).

The uncertainty entrepreneurs face when creating new ventures is a distinctive type of uncertainty that cannot be predicted through statistical inference or causal thinking. This is known as Knightian or true uncertainty, a type of uncertainty that involves factors that cannot possibly be predicted and variables that are unidentified. Accepting that one can predict the future through gathering enough relevant information, probably by means of market research, creates a wide-spread view of certainty, where decisions are based upon conviction

that the future can be predicted. This is the fundamental assumption of the causation logic which much of management theory is based upon. Effectuation theory advocates that rather than trying to predict the future, entrepreneurs actually concentrate on the controllable aspects of the new venture, and the future is understood as having been created by means of the entrepreneur's actions (Sarasvathy, 2001).

Effectuation

Having briefly set out the foundational arguments of effectuation theory, we now summarize the five key concepts, which characterize this novel framework.

1. Means driven rather than goal driven: The emphasis is on using existing resources or means, rather focusing on objectives predicting aspects of the uncertain future (Sarasvathy, 2003). An entrepreneur using the effectual approach will start by assessing what he possesses, who he is, what he knows, and who he knows. He starts his entrepreneurial activity with no set goals or targets, but instead seeks an array of different possibilities as he takes actions. By using the means in his disposal, the entrepreneur starts envisioning what could be the possible outcomes of these means and his actions (Sarasvathy, 2001). In contrast, the causal logic emphasis is on goal driven action. Given the dynamic nature of the market associated with uncertainty, accurate prediction of the future is crucial for firms to outperform competition (Wiltbank et al., 2006).
2. Non-predictive rather than predictive control: The effectuation approach emphasizes dealing with uncertainty by knowing how to control and by dealing with what is known and controllable, rather than by trying to eliminate it by predicting the unknown. From the perspective of a business venture in its early stages, the causal logic is not fit to deal with Knightian uncertainty. When uncertainty cannot be calculated and quantified, like in the case of early start-ups creating new markets, then the effectuation logic becomes the approach of choice. This is the reason why expert entrepreneurs focus on their means, and on how much they can afford to lose, rather than predicting the future through market research and analysis.
3. Affordable loss rather than expected returns: This concept emphasizes committing beforehand to the loss one can endure, as opposed to investing in calculating expected returns (Sarasvathy, 2003). Entrepreneur following the effectual logic evaluates what he can afford to lose and try to minimize the downside, rather than predicting the expected returns and trying to maximize the upside (Chandler et al., 2011). The investment margin here is subjective and varies from one individual to the other based on his personal circumstances or beliefs. In contrast, in the causation approach expected returns weight upside and downside information equally.
4. Partnership rather than competitive analysis: Partnerships refer to how an entrepreneur or an organization looks at the outside world. According to the effectuation approach, the entrepreneur seeks to build strategic partnerships instead of focusing on competitors and engaging in competitive analysis. The goal is to bring stakeholders to the venture and to get early commitments from the

partners so that the future can be controlled rather predicted (Read & Sarasvathy, 2005). Also, focusing on co-operation enables an individual or firm to expand its resources (means) and to make use of the core competencies of other external entities – organizations or individuals. Establishing pre-commitments helps to reduce the uncertainty and by forming alliances the potential risk associated with the venture gets distributed among the partners. For an organization such partners can be the suppliers, customers, distributor or anyone who has a stake in the firm's product or service.

5. Leveraging rather than avoiding contingencies: The focus of effectuation is on recognizing unforeseen events by managing surprises as opposed to trying to overcome or avoid them beforehand (Sarasvathy, 2003). The effectual entrepreneur accepts the changed reality and capitalizes on the unexpected opportunities that contingencies present. Contingencies serve as a course correction measurement to the effectual stakeholder necessary to re-evaluate the decisions and goals (Wiltbank et al., 2006).

Figure 1 summarizes the key differences between the effectual and the causal logic.

Effectuation theory has not been with criticism. In a recent article by Arend et al. (2015) published in the reputed *Academy of Management Review*, it is suggested that effectuation might be ineffectual as a new theory of entrepreneurship. The key contention is that effectuation has been subjected to insufficient empirical testing and critical analysis. In response to the rather critical evaluation of effectuation theory, its main supporters (Read et al., 2016) argue that that the evaluation is carried out from a wholly positivist view point, while the entire idea of effectuation is informed by a pragmatist epistemology. As part of their response Read et al. (2016) have outlined the topics which need to be tackled, in order to give effectuation, the additional theoretical backing it lacks. The list of topics is as follows (Ibid, p. 535–6):

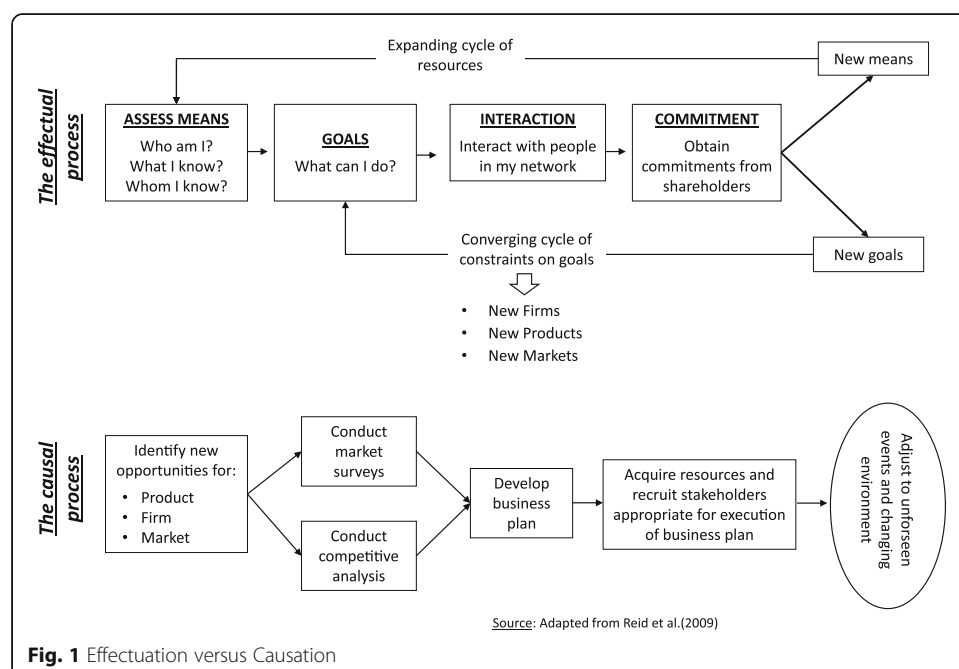


Fig. 1 Effectuation versus Causation

- Clarifying the concept of effectual control
- Specifying the unit of deliberate practice in developing entrepreneurial expertise
- Transitioning from effectual to causal approaches and vice versa
- Understanding goal hierarchy and pre-commitment
- Endogenizing selection mechanisms
- Delineating means and resources
- Exploring equity and co-creation

The second point on the list - *Specifying the unit of deliberate practice in developing entrepreneurial expertise* – provides the strongest theoretical justification for the present paper. The authors explain that the literature on expertise has identified the role of deliberate practice as the mechanism through which expertise is acquired, however it has not identified the eventual mechanism for the acquisition of effectual expertise in entrepreneurship. Thus, we submit that the cultural dimension of effectual expertise is bound to be part of such a mechanism, and therefore consider this paper to also contribute towards this ongoing research effort.

Dimensions of culture

Culture has been succinctly defined as the “collective programming of the mind which distinguishes the members of one group or category of people from another.” (Hofstede et al., 2010, p. 6). Culture has been approached from many points of view. However, it might be summarized as a system of established values and traditions that are substantially adopted by the individual to become part of his personality makeup, influencing his interactions with other people. Personality traits, the dispositional motives employed by individuals to achieve certain goals, are thus heavily influenced by culture (Krijgsman, 2012).

Cultural dimensions are descriptive variables widely applied in cross-cultural management literature, which can be quantitatively measured. They are made up of principles or personal preferences that distinguish countries or regions of the world from each other. From the various models that have been developed to approach cultural differences, Hofstede’s framework is the most widely used in management studies, and the most cited work in the area of cross-cultural research (Jacobs, 2013). The dimensions that have been put forward and several times revised (Hofstede, 2001; Hofstede et al., 2010; Minkov, 2012) are as follows: Power Distance, Masculinity versus Femininity, Uncertainty Avoidance, Individualism versus Collectivism, Long Term Orientation and Indulgence versus Restraint. In this research we have opted to use only the first four dimensions put forward in Hofstede’s (2001) original work, given the simplicity with which they describe national culture.

Given the newness of effectuation as a body of knowledge, there are very few references to research combining Hofstede’s cultural dimensions and effectuation theory. One of the most active centres is located at the University of Twente, in the Netherlands (Jacobs, 2013; Kraaijeveld, 2015; Krijgsman, 2012; Stienstra et al., 2012; Versluijs, 2012). Most of the studies from this centre confirm the findings from earlier research regarding the fact that culture does affect perceptions of the entrepreneurship process (see, for example, McGrath et al., 1992 or Swierczek & Quang, 2004): Thus, in the present study, we have opted for sticking to the original descriptions of the four

cultural dimensions, and to the characterization of different regions of the world (by means of scores) by Hofstede and his associates. From this characterization, we have identified the features of the Kuwaiti culture, as described below.

Kuwaiti culture from the view point of Hofstede's four dimensions

In general, the culture of Kuwaiti society is conservative, with Islamic values and traditions, along with family, family obligations and commitment to traditions as dominant factors. While a significant number of Kuwaitis feel that political and social reform is a necessity, an equally significant percentage feels that it is only by maintaining customs and traditions that the country can avoid social problems experienced in the western countries such as drug abuse, high crime rates, and illegitimate births (Al-Omari, 2008).

At the core of the Kuwaiti culture is the Diwaniyah, a separate part of the house that serves as a venue for friends and relatives to gather and discuss, everything from politics to personal affairs. Many business deals take place in these Diwaniyah gatherings, and most Kuwaitis prefer to rely on them, rather than formal meetings and legal contracts. In the Kuwaiti business culture, the will of individuals is subordinate to the will of the family or the tribe, and decisions depend mostly on group consensus. Therefore, identity and leadership are greatly shaped by one's lineage, family, and close social groups (Kabaskal & Dastmalchian, 2001).

From the view point of Hofstede's four dimensions of culture, this cultural context can be described as follows:

Power distance

Kuwait has a high score of 90 (out of 100) on this dimension, meaning that it is a society where the less powerful members accept the unequal distribution of power, i.e. the hierarchical order of the society is acknowledged and expected. Power Distance expresses the attitude of the people in a given society towards the inequalities found in that social group. In organizations, hierarchy is perceived to reflect the inequalities inherent in the society and individuals are expected to be told what to do.

Individualism

Kuwait scores a low 25 in this dimension (out of 100), indicating that it is a collective society. The Individualism/Collectivism dimension measures the degree of interdependence that a society builds and maintains among its members. Hence, loyalty and obligations for the members of the group (family, tribe or company) are of a paramount importance and they outweigh societal rules and regulations, if the society is Collectivist. Decisions about promotion and hiring often take into consideration the social links or lineage of the employee.

Masculinity

On this dimension, Kuwait scores 40 (out of 100) therefore it can be considered a feminine society. The masculine end of this dimension represents a society that is competitive, with an emphasis on achievement, assertiveness and material rewards, where success is defined by being the winner or the best. In societies with low Masculinity

people put great value on cooperation, unity, caring and quality in their operational environment. In organizations belonging to feminine societies, managers aspire for consensus and disputes are settled through compromise and negotiation.

Uncertainty avoidance

Kuwait scores 80 on this dimension (out of 100), thus showing a type of society where people **are fearful of the unknown and strongly** avoid uncertainty. In societies exhibiting high uncertainty avoidance people have an urge to be diligent and keep busy, while clinging to strict codes of behaviour. In these cultures, unconventional ways and ideas are not well tolerated and innovation may be resisted. In organizations, uncertainty avoidance manifests itself, for example, in a marked emphasis on rules, policies and procedures.

Methods

Research question

The research question tackled in this paper is stated as follows: *does the entrepreneurial process in Kuwaiti follow the key principles of effectuation theory, namely means driven, non-predictive control, affordable loss, partnerships and leveraging contingencies?*

Conceptual framework and research propositions

Based on the five concepts of effectuation theory and on Hofstede's four dimensions of culture applied to Kuwaiti society, a conceptual framework has been developed (Table 1). The table features eight proposed intersection points, where the cultural dimensions are believed to have an effect on the logic of effectuation. In other words, it is proposed that the behaviours of entrepreneurs in Kuwait may or may not follow the patterns suggested by effectuation theory, due to prevalent cultural norms.

Proposition 1: *The “means driven” attribute is motivated by high power distance, facilitated by low individualism and driven by the consensus seeking characteristic of low masculinity.*

The means driven concept emphasizes developing something new using existing means, rather than focusing on predicting aspects of an uncertain future (Saravathy, 2003). On the other hand, high power distance indicates that individuals perceive the hierarchical order of the society as an integral feature of every day's life, where everyone has his position and status with no need for justification. Our proposition suggests that

Table 1 Proposed intersections between Effectuation theory and Hofstede's four dimensions of culture

		Concepts/Principles of Effectuation Theory				
		Means Driven	Non-Predictive Control	Affordable Loss	Partnerships	Leveraging Contingencies
Cultural Dimensions	High Power Distance	Motivates				
	Low Individualism	Facilitates			Facilitates	
	Low Masculinity	Facilitates				
	High Uncertainty Avoidance		Hinders	Hinders	Drives	Hinders

in a society that is dominated by high power distance, the drive towards “means” is high. In other words, in this type of society entrepreneurs will be more motivated to search for means in setting up their business ventures than in a low power distance society.

Likewise, low individualism (i.e. collectivism) is indicative of a society in which long-lasting relationships and loyalty to direct family, close relationship, and group membership is of utmost importance. Given that individuals are integrated in these kinships from birth, it is expected that they will act as facilitators for a means-driven attitude on the part of entrepreneurs.

On the other hand, societies with low masculinity have a strong tendency towards consensus, meaning that they prefer to settle disputes or disagreement through concession rather than through conflictual means, such as the courts. On the other hand, means are easier to obtain through consensus than through hard bargaining, which makes us expect that in a low masculinity society a means-drive stance will be facilitated.

Proposition 2: *The “non-predictive control” attribute is hindered by high uncertainty avoidance.*

The non-predictive approach of effectuation theory emphasizes the controllable aspects of an unpredictable future (Sarasvathy, 2001). The theory posits that entrepreneurs favour situations where the focus is on the features of the future that can be controlled, rather than relying on predictions. On the other hand, uncertainty avoidance can be defined as the extent to which individuals in the society feel threatened by uncertain or unknown situations. Thus, high uncertainty avoidance implies that individuals in the society prefer secure and stable situations, with clear outcomes (Hofstede & Hofstede, 2005). In this context, we propose that the high level of uncertainty avoidance found in Kuwait hinders an attitude of non-predictive control and suggest that it limits the preference of entrepreneurs to adopt a non-predictive control approach. This cultural dimension may cause entrepreneurs to become unduly preoccupied with predicting the future, rather than trying to control and overcome the obstacles.

Proposition 3: *The “affordable loss” attribute is hindered by high uncertainty avoidance.*

The affordable loss characteristic emphasizes a commitment at the outset to the loss one can endure, rather than an investment in calculating expected returns (Sarasvathy, 2003). On the other hand, uncertainty avoidance can be defined as the extent by which individuals feel threatened by uncertain or unknown situations, in a given society. Low uncertainty avoidance implies that individuals in the society are not in favour of risk taking or embarking on something with unknown outcome, but on the contrary they prefer secure and stable situations, with clear outcomes. Thus, we propose that the high uncertainty avoidance of the society hinders entrepreneurs’ preference for affordable loss, owing to the fact that they will tend to follow a more traditional approach for creating new ventures through careful planning and prediction of expected returns.

Proposition 4: *The “partnerships” attribute is facilitated by low individualism and driven by high uncertainty avoidance.*

Partnerships refer to how an entrepreneur looks at the outside world, emphasizing the fact that strategic partnerships and alliances overcome uncertainties and establish barriers to entry (Sarasvathy, 2001). Low individualism (collectivism), on the other

hand, is indicative of a society in which long-lasting relationships and loyalty to family and group membership is of the utmost importance. Individuals are integrated in these kinships from birth, and they act as their security and support. Thus, it is proposed that the partnerships attribute is facilitated by the low individualism of the Kuwaiti society.

On the other hand, high uncertainty avoidance implies that individuals in the society are not in favour of risk taking or embarking on something with unknown outcome, but on the contrary they prefer secure and stable situations, with clear outcomes. This characteristic should be conducive to an attitude of actively seeking partnerships or alliances, as a means of limiting the exposure of aspiring entrepreneurs to uncertainties and risk. Thus, it is proposed that the high uncertainty avoidance of the society will drive the establishment of partnerships or alliances.

Proposition 5: *The “leveraging contingencies” attribute is hindered by high uncertainty avoidance.*

The leveraging contingencies concept emphasizes the recognition that unforeseen events will take place, as opposed to trying to overcome or avoid them before they happen. Effectuation theory argues that contingencies serve as measurements, against which to evaluate decisions and goals with the purpose of taking corrective action (Wiltbank et al., 2006). Rather than avoiding them, the effectual entrepreneur embraces contingencies and capitalizes on the unexpected opportunities that they present. On the other hand, uncertainty avoidance implies that individuals in the society are not in favour of risk taking or embarking on something with unknown outcomes, but in the contrary prefer secure and stable initiatives. Thus, we propose that the high uncertainty avoidance of the Kuwaiti society hinders the leveraging contingencies attribute, as it limits the preference of entrepreneurs in trying to utilize surprises and unforeseen events. Rather, we expect that uncertainty avoidance will cause entrepreneurs to try to predict the future and avoid contingencies, thus opting for a causation-type of approach.

Data collection

In order to approach the research question, semi-structured narrative interviewing was used, a qualitative technique that enables the interviewer to reconstruct social events from the perspective informants (Jovchelovitch & Bauer, 2000). The interviewing period took place at the end of 2014, conducted with 13 Kuwaiti entrepreneurs, owners and/or partners of successful ventures, ranging in size from micro to medium size ventures. All interviews were conducted and recorded in a face-to-face setting, ranging from 20 to 60 min in length.

The interviewees were requested to tell their own stories, with a minimum amount of structure outlining themes, questions or language. This kind of interview allows the researcher to tune the questions according to the interviewee responses, allowing a two-way communication, but with strict focus on the interviewees' accounts, in terms of their personal stories, intentions, actions, and perceptions about their business environments. In order to keep a good balance between what the interviewees said and the need to gather relevant information, while attempting not to influence the narratives, follow-up questions were used, such as “*Could you elaborate?*” or “*Why did you choose to do that?*” and etc. This approach ensured that the interviewer's influence on the responses was minimized (Denzin & Lincoln, 2003).

Also, the interviews were conducted in an informal setting in order to ensure that the interviewees “spoke from the heart”. Some interviews were conducted at cafés or similar surroundings, and while this presented some advantages, it also created difficulties due to distractions from the surroundings and background noise. The interview guide was used as a reference during the interview, ensuring that each focus area was covered. As regards the demographics of the sample, most interviewees were Kuwaiti nationals, belonging to the 30–40 age group, all degree-holders, some trained abroad. Most have either a unique, one-of-a-kind venture in Kuwait, or they were credited with an innovative idea, which added significant value to an existing product or service in Kuwait. For the method of data analysis and interpretation, “Nvivo” Qualitative Analysis Software assisted in the descriptive, analytical and thematic coding of the interviews. See Additional file 1 for further details about the interview guide and data analysis.

Results

Proposition1: *The “means driven” attribute is motivated by high power distance, facilitated by low individualism and driven by the consensus seeking characteristic of low masculinity.*

High power distance

Firstly, our findings reveal that the entrepreneurs in the sample exhibit the traditional values of high power distance characteristic of the Kuwaiti culture. This means that the participants expect and admit the unequal distribution of power in their society and accept it as normal behaviour. Also, the findings suggest that in this type of social setting, the dividing line between means and goals becomes somewhat blurred, in the sense that while showing that they were driven by the means at their disposal, the participants kept referring to their goals. When talking about the possible outcomes of both the means and their actions, there was quite strong emphasis on the power and status associated with the new venture. One of the interviewees stated “*so, I achieved one of my dreams which is to become a general manager*”. Hence, authority and power and the respect they bring in society, was frequently mentioned as a goal associated with means and resources. While this pattern of response was consistent for the male interviewees, for the female interviewees the issues of power and authority were mentioned, either as a means or a goal.

Thus, in what concerns high power distance being a motivator for the means driven stance, there was no obvious evidence to enable us to confirm the proposition. What did emerge was a blur, in conceptual terms, between “means” and “goals”, i.e. in order to obtain the means, having authority was a must, and at the same time, wishing for a position of power and authority was a natural (i.e. cultural) ambition for the male participants. However, for the women in the sample the desire for authority and power was not evidenced, and the means-driven stance was clearer.

Low individualism

Regarding the low individualism characteristic of the Kuwaiti society, the findings reveal that the commitment and loyalty to family, close relations, and network did act as

facilitators for entrepreneurs in starting up their new ventures. In other words, having access to means, resources and partnerships provided by their families, close relations and networks (help, favours, financial support, and etc.) proved to be crucial.

Several of the interviewees implied that they seek help from family and friends, particularly in bringing clients to their new businesses, and/or when they need financial support. One interviewee stated that *“money is not a problem, even if I couldn’t get the bank loan, I would have got the money from my family”*. Thus, we argue that the low individualism of the Kuwaiti society acts not only as a facilitator but as a *catalyst* in the decision process of entrepreneurs to pursue their own ventures.

Low masculinity

Since the Kuwaiti society is characterized by low masculinity where individuals are more concerned with security and stability in life, we expected this cultural trait to act as a driving force for the means-driven attitude. However, the findings show a different picture. Firstly, from the results it became clear that one of the most important means available to the participants was time or the availability of time for setting up the new business venture. Several participants stated that they had enough free time in which to do their private businesses, and therefore there was no reason to leave their full-time jobs. One interviewee stated: *“I leave work whenever I want, or in the worst case at 1 pm, and I spend the rest of the time looking over my business”*. Indeed, for most of the participants, creating their own businesses was considered a part-time job and as a way to earn some extra income.

Secondly and in parallel with the availability of time, there was the problem of taking the decision to become a full-time entrepreneur and the finding here was that such a decision was hampered by the low masculinity of the society. Given the stability and security of jobs and relatively high level of pay in the public sector (76% of nationals work in the public sector), becoming an entrepreneur was not an easy decision to make, requiring the blessing of family, relatives or close friends. Some male participants even claimed that getting married or maintaining a marriage is much harder if you are an entrepreneur.

From these findings it is not possible to be conclusive about the type of link between masculinity and the means driven principle. As regards the first big decision that would-be entrepreneurs have to take, i.e. the decision to become a full-time entrepreneur, the means driven stance seems to be *hindered* by low masculinity. However, the institutional set up of the country is such that it facilitates a situation where would-be entrepreneurs can continue in their full-time employment and are not unduly pressured into the decision to become full-time entrepreneurs.

Proposition 2: *The “non-predictive control” attribute is hindered by high uncertainty avoidance.*

The Kuwaiti society is characterized by high uncertainty avoidance, implying that in general members of the population are not in favour of taking risks, preferring situations with known and stable outcomes. However, our findings showed that the entrepreneurs in the sample contradicted the trend and exhibited low levels of uncertainty avoidance. Mostly, they are risk-takers who have invested their own money or took personal loans to finance their ventures. In most cases, they did not prepare business plans or gave much significance to the uncertainties and risks associated with their new

ventures. It was clear that most of the participants showed a tendency towards a non-predictive control approach. One interviewee stated *"In real life I have discovered that planning is only one way of doing things. You have to be organized, you have to know what you want, but plans can always change"*, and added *"doing a plan would take a lot of time and you do not have enough information to plan what you will do in the next five years. I disagree with the academic school of thought"*.

Thus, it is suggested that even in a society characterized by high uncertainty avoidance, entrepreneurs are still risk-takers and therefore the non-predictive control attribute can be said as *not hindered* by this characteristic.

Proposition 3: *The "affordable loss" attribute is hindered by high uncertainty avoidance.*

The notion of affordable loss focuses on committing beforehand to the loss the entrepreneur can afford, rather than focusing on expected returns (Sarasvathy, 2003), while uncertainty avoidance can be defined as the extent by which individuals feel threatened by uncertain or unknown situations, in a society (Hofstede et al., 2010). High uncertainty avoidance implies that individuals in the society are not in favour of risk taking or embarking on something with unknown outcome, but prefer secure and stable situations, with clear outcomes.

In line with our findings in Proposition 2, the participants' low levels of uncertainty avoidance did not affect the affordable loss attribute, i.e. there was no evidence of concerns with expected returns. One interviewee stated that *"we were trying to be very clear about producing good projects, we did not care about the returns, and we just needed to present a valuable service. We knew the profits would come later"* while another said *"I reached a point in my life where I was not afraid of failing. If you are afraid to fail, you will never proceed"*. This and similar statements suggest that entrepreneurs in Kuwait are not concerned with expected return, although we did not find enough evidence to state that an attitude of affordable loss was adopted. Nevertheless, it may be concluded that the high uncertainty avoidance of the society *does not* hinder the affordable loss attribute.

Proposition 4: *The "partnerships" attribute is facilitated by low individualism and driven by high uncertainty avoidance.*

Low individualism

Our findings revealed that the entrepreneurs in the sample seek partnerships or alliances at some point in their venture creating process, either through their connections and networks or through direct contacts. Most of the partnerships or alliances were achieved through family, friends or close connections. For example, one participant stated that *"we started to contact our best friends, and we had three to join us as partners"*, and also added *"we were a company that was poor in resources, so we needed to find untraditional partners because the traditional ones did not need us. We were looking for companies who believed in us and needed us"*. These quotes are representative of a trend whereby seeking partnerships and alliances was a key consideration when creating new entrepreneurial ventures in Kuwait.

Hence, it may be concluded that the "partnerships" attribute *is* facilitated by the low individualism characteristic of the society.

High uncertainty avoidance

In line with propositions number 2 and 3, the tendency of the society towards high levels of uncertainty avoidance was not reflected in the behaviour of the entrepreneurs as reported in the interviews. Notwithstanding the low levels of uncertainty avoidance, the participants in the study showed strong signs of a willingness to seek partnerships or alliances. The main reasons given for the establishment of partnerships or alliances, as expected, was the wish to diversify the risk of the venture and distribute the associated uncertainty. One of the interviewees said: *"I don't need the know-how to run the business, I just need support; like our partners at Padron Cigars, they send us promotions and samplers, this is help, but I don't need money from them, maybe credit. This is support"*.

Hence, it may be concluded that the partnerships attribute is neither driven nor hindered by high uncertainty avoidance. Entrepreneurs seem to seek partnerships or alliances irrespective of their level of uncertainty avoidance.

Proposition 5: *The "leveraging contingencies" attribute is hindered by high uncertainty avoidance.*

The analysis of the interviews reveals that the entrepreneurs in the sample were not substantially different from entrepreneurs in other parts of the world. It suggests that mostly entrepreneurs have a disposition in favour of leveraging contingencies and turning them into something that is beneficial for the venture. This was highlighted, for example, by one interviewee in saying that: *"The funny thing is that the whole business changed after two years. We started very different, and even if I did a start-up today I will expect that it will change in one year"*. Another representative comment was: *"one of the mottos we have is – 'if it's perfect, it is too late'"* – and added *"we acknowledge what we know and we go ahead with it, and what we don't know we experiment ..."*.

These quotes seem to suggest that the leveraging contingency attribute is *not hindered* by uncertainty avoidance, probably due to the lack of risk aversion characteristic of the entrepreneurs in our sample. From the responses received, it was apparent that entrepreneurs may apply a number of measures in order to try to predict and prevent surprises in the early stages of their start/up, but after the venture is launched they seem to be as apt as leveraging contingencies as any others, working in different cultural settings.

Discussion

Our analysis indicates that there is a clear tendency towards the adoption of the constructs of the effectuation model among the entrepreneurs in our sample. In some cases, there were signs of "causal thinking" among the participants, which reinforces the suggestion by some authors regarding the difficulty in making a clear separation between causation and effectuation (Chandler et al., 2011; McKelvie et al., 2013). However, with most of the participants in the study it was clear that pursuing their passions was more important than paying attention to market demands, and that they were not in any way constrained by future forecasts or business planning.

With regards to the cultural attributes of the Kuwaiti society and their effect on the entrepreneurial process for entrepreneurs in Kuwait, our findings indicate that most of the participants were in conformity with the prevailing high power distance, low individualism and low masculinity of the Kuwaiti society. However, in what concerns uncertainty

avoidance, the findings do not follow the same trend as the Kuwaiti society at large, and instead show significant low levels of uncertainty avoidance. This characteristic enables the entrepreneurs to accept the necessary risks and hence adopt elements of effectuation theory, such as non-predictive control, affordable loss, partnerships and leveraging contingencies. Thus, in not conforming to a pattern of high uncertainty avoidance, entrepreneurs in Kuwait display clear risk-taking tendencies, like entrepreneurs in other parts of the world.

In consideration to the power distance dimension and its effect on the means driven attribute, the findings show a blur in the logic of the entrepreneurs, between “means” and “goals”. In order to obtain the means, having authority was seen as a must, and at the same time, wishing for a position of power and authority was a natural ambition for the male participants. The word “natural” should be understood as a “culturally natural” disposition on the part of entrepreneurs. Whilst showing a tendency towards being driven by the means at their disposal, the male participants consistently brought up the issue of power and status as being closely associated with the search for means. However, for the women in the sample, the means driven attribute was not associated with a quest for power.

Moreover, the findings also revealed that social pressure from relatives, peers, and society in general makes it difficult for aspiring entrepreneurs to decide to leave the security of stable jobs. Almost all of the participants in the study were part time entrepreneurs motivated by the desire to have an extra source of income and showing a clear preference for keeping their full-time jobs for a considerable time after starting the new entrepreneurial venture. This is another example of a socio-economic condition that seems to indicate that there are factors other than culture that have a bearing on the cross-cultural application of effectuation theory.

Table 2 summarizes our findings, which are further detailed in the following.

Means driven

It is not clear that this attribute is motivated by high power distance or facilitated the low masculinity characteristic of the culture of Kuwait. However, regarding low individualism, we have concluded that more than a facilitator of the means-driven stance, it acts a catalyst.

Non-predictive control and affordable loss

Entrepreneurs are risk-takers in any society, therefore uncertainty avoidance does not seem to hinder either non-predictive control or affordable loss. As regards the latter, although it was clear that participants were not concerned with expected returns, there is no evidence to state that there was a propensity towards affordable loss.

Partnerships

In a similar fashion to the effect of low individualism on the means driven attribute, low individualism is more than facilitator to the partnership tendency of entrepreneurs in Kuwait. Low individualism acts a driver of partnership. As regards uncertainty avoidance, this dimension seems to have no bearing on the partnership attribute.

Table 2 Summary of the research findings

		Concepts/Principles of Effectuation Theory				
		Means Driven	Non-Predictive Control	Affordable Loss	Partnerships	Leveraging Contingencies
Cultural Dimensions	High Power Distance	Inconclusive				
	Low Individualism	Low Individualism, is catalyst of the Means-Driven concept			Low Individualism is driver of the Partnership principle	
	Low Masculinity	Inconclusive				
	High Uncertainty Avoidance		Not hindered	Inconclusive	Inconclusive	Not hindered

Leveraging contingencies

This attribute does not seem to be hindered by the high uncertainty avoidance characteristic of the Kuwaiti society.

Conclusions

Returning now to the question contained in the main title of this article – *does effectuation hold across cultures?* – our key conclusion is that effectuation theory does hold across cultures, yet it is also clearly affected by national cultures. While the core of the theory seems to hold, a variety of postulates of the theory need to be adjusted in varying cultural settings. This agrees with the conclusions of one of the latest studies on this topic (Kistler & Gillig, 2015) where it is posited that German entrepreneurs do follow the effectual approach although to a lesser degree than their US colleagues. Furthermore, it might also be concluded that other socio-economic variables, such as the employment situation or the level of income of the population, also play a role. This, in turn, means that the dichotomy between effectuation and causation needs to be further researched taking into account not only cultural variables, but also variables of a social and economic nature. As regards the broader remit of effectuation theory, our findings contribute towards the research objective put forward by Read et al. (2016), on the specific issue of *entrepreneurial expertise*.

Thus, as a key contribution of the paper, we suggest that *research into the cognitive mechanisms for the acquisition of effectual expertise in entrepreneurship must take into account the types of the cultural, social and economic variables, which form the decision-making context of effectuation*.

Limitations and suggestions for further research

This study has fulfilled its aims as an exploratory piece of research about the entrepreneurial process of Kuwaiti entrepreneurs, in the light of the cultural attributes of Kuwaiti society. However, the relatively small number of participants does not allow us to make any comprehensive statements about how effectuation theory is affected by the characteristics of national culture. Thus, it is recommended that our results are followed up by quantitative and qualitative studies, with a larger samples, aimed at validating the propositions raised and discussed in the present paper.

Additional file

Additional file 1: Appendix 1. Interview Guide. **Appendix 2.** Data Analysis. (DOCX 107 kb)

Funding

The authors received no funding for the design of the study, the collection, analysis, and interpretation of data or the writing of the manuscript.

Authors' contributions

The authors contributed equally to the manuscript. Both authors read and approved the final manuscript.

Competing interests

The authors declare that they have no competing interests.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Author details

¹Kuwait College of Science and Technology, Doha District, Block 4, Ring Road 7 Spur Motorway, 13133 Doha, Kuwait.

²Amwal Financial Consultants, Al-Umam Building, Office 408, P.O. Box 27026, Riyadh 11417, Kingdom of Saudi Arabia.

Received: 26 October 2017 Accepted: 27 July 2018

Published online: 14 August 2018

References

- Al-Kharafi, N. (2014). Lack of IPR protections deters entrepreneurs, Kuwait Times, 7 October
- Al-Omari, J. (2008). *Understanding the Arab culture: A practical cross-cultural guide to working in the Arab world*. Oxford, UK: How to Books.
- Andersson, S. (2011). International entrepreneurship, born globals and the theory of effectuation. *J Small Bus EnterpDev*, 18(3), 627–643.
- Arend, RJ, Sarooghi, H, Burkemper, A. (2015). Effectuation as ineffectual? Applying the 3E theory-assessment framework to a proposed new theory of entrepreneurship. *Academy of Management Review*, 40(4), 630–651.
- Brinckmann, J., Grichnick, D. & Kapsa, D., (2010) Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning-performance relationship in small firms, *J Bus Ventur*, 25, 24–40
- Cader, MH (2014). Entrepreneurial self efficacy and institutional forces on new business creation in Kuwait. In *Proceedings of the 3rd international conference on management and economics-ICME 2014*. Sri Lanka: University of Ruhuna.
- Chandler, GN, DeTienne, DR, Mckelvie, A, Mumford, TV. (2011). Causation and effectuation processes: A validation study. *J Bus Ventur*, 26, 375–390.
- Chandler, GN, DeTienne, DR, & Mumford, TV. (2007). Causation and Effectuation: Measurement Development and Validation, *Frontiers of Entrepreneurship Research*, 27(13), Article 3 Available at: <https://digitalknowledge.babson.edu/fer/vol27/iss13/3>
- De Pillis, E, & Reardon, KK. (2007). The influence of personality traits and persuasive messages on entrepreneurial intention: A cross-cultural comparison. *Career Dev Int*, 12(4), 382–396.
- Denzin, N, & Lincoln, YS (2003). *Collecting and interpreting qualitative materials*. Thousand Oaks, California: Sage.
- Dew, N, Read, S, Sarasvathy, SD, Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *J Bus Ventur*, 24, 287–309.
- Eckhardt, JE, & Shane, SA. (2003). Opportunities and entrepreneurship. *J Manag*, 29(3), 333–349.
- Goel, S, & Karri, R. (2006). Entrepreneurs, effectual logic, and Over-Trust. *Entrepreneurship Theory and Practice*, 30(4), 477–490
- Gries, T, & Naudé, W. (2010). Entrepreneurship and structural economic transformation. *Small Business Economics*, 34(1), 13–29.
- Harms, R, & Schiele, H. (2012). Antecedents and consequences of effectuation and causation in the international new venture creation process. *J Int Entrep*, 10, 95–116.
- Hayton, JC, George, G, Zahra, SA. (2002). National Culture and entrepreneurship: A review of behavioural research. *Entrep Theory Pract*, 26(4), 33–52.
- Hofstede, G. (1983). The cultural relativity of organizational practices and theories. *J Int Bus Stud*, 14(2), 75–89.
- Hofstede, G (2001). *Culture's consequences: Comparing values, behaviours, institutions, and organizations across nations*. Thousand Oaks: Sage Publications.
- Hofstede, G, & Hofstede, GJ (2005). *Cultures and organizations: Software of the mind*, (2nd ed.,). New York: McGraw-Hill.
- Hofstede, G, Hofstede, GJ, Minkov, M (2010). *Cultures and organizations: Software of the mind*, (3rd ed.,). New York: McGraw-Hill.
- Jacobs, S (2013). *The National Cultural Background of an entrepreneur as a driving force of effectual behavior in new venture creation*. the Netherlands: Dutch Institute for Knowledge Intensive Entrepreneurship (NIKOS), University of Twente.
- Jovchelovitch, S, & Bauer, MW (2000). Narrative interviewing. In MW Bauer, G Gaskell (Eds.), *Qualitative researching with text, image and sound: A practical handbook*, (pp. 57–74). London: Sage.
- Kabaskal, H, & Dastmalchian, A. (2001). Introduction to the special issue of leadership and culture in the Middle East. *Appl Psychol Int Rev*, 50(4), 479–488.

- Kistler, S., & Gillig, H. (2015). Is effectuation a cross-cultural concept? Decision principles of German entrepreneurs. In *26th ISPIM conference – Shaping the Frontiers of innovation management, Budapest, Hungary*.
- Kraaijeveld, L. (2015). *The influence of uncertainty avoidance on effectual reasoning*. Enschede The Netherlands: University of Twente.
- Krijgsman, J. (2012). *The influence of national culture on entrepreneurial processes a comparison between Mexican and Dutch entrepreneurs*. the Netherlands: University of Twente.
- Kuwait Mid-Range Development Plan (2015). Retrieved from www.scpd.gov.kw/archive/20150708%20Revamped%20KDP_PDF%20version_EN.pdf
- Lutsch, SG, & Mortensen, MT (2013). *Making strategic decisions in early-stage start-ups: An exploratory study of novice entrepreneurs and the use of effectual logic as a means to overcome Knightian uncertainty of early-stage entrepreneurship*. Denmark: Copenhagen Business School.
- McGrath, RC, Macmillan, IC, Yang, EA, Tsai, W. (1992). Does culture endure, or is it malleable? Issues for entrepreneurial economic development. *J Bus Ventur*, 7, 441–458.
- McKelvie, A, DeTienne, DR, Chandler, GN. (2013). What is the appropriate dependent variable in effectuation research? *Front Entrep Res*, 33(4), Article 4.
- Minkov, M (2012). *Cross-cultural analysis: The science and art of comparing the world's modern societies and their cultures*. Thousand Oaks: Sage Publications.
- Moroz, PW, & Hindle, K. (2012). Entrepreneurship as a process: Toward harmonizing multiple perspectives. *Entrep Theory Pract*, 36(4), 781–818.
- Rauch, A, & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *Eur J Work Organ Psy*, 16, 353–385.
- Read, S, Dew, N, Sarasvathy, S, Song, M, Wiltbank, R. (2009). Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing*, 73, 1–18.
- Read, S, & Sarasvathy, S. (2005) Knowing What To Do and Doing What You Know: effectuation as a form of entrepreneurial expertise, *The Journal of Private Equity*, 9(1), 45–62
- Read, S, Sarasvathy, S, Dew, N, Wiltbank, R. (2016). Response to Arend, Sarooghi, and Burkemper (2015): Cocreating effectual entrepreneurship research. *Academy of Management Review*, 41(3), 528–536.
- Sarasvathy, S. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243–263.
- Sarasvathy, S. (2003). Entrepreneurship as a science of the artificial. *Journal of Economic Psychology*, 24, 203–220.
- Sarasvathy, S, Dew, N, Read, S, Wiltbank, R. (2008). Designing organizations that design environments: Lessons from entrepreneurial expertise. *Organization Studies*, 29(3), 331–350.
- Schmitt-Rodermund, E. (2004). Pathways to successful entrepreneurship: Parenting, personality, early entrepreneurial competence, and interests. *Journal of Vocational Behavior*, 65, 498–518.
- Schumpeter, JA (1961). *The theory of economic development*, (3rd ed.,). New York: Oxford University Press.
- Stienstra, M, Harms, R, van der Ham, RA, Groen, A (2012). *Culture and entrepreneurial processes: Evidence of influence*. The Netherlands: University of Twente.
- Swierczek, FW, & Quang, T. (2004). Entrepreneurial Cultures in Asia: Business Policy or Cultural Imperative. *Journal of Enterprising Culture*, 12(2), 127–145.
- Versluijs, W (2012). *The influence of national culture on the use of effectuation and causation by American student entrepreneurs*. The Netherlands: University of Twente.
- Wiltbank, R, Dew, N, Read, S, Sarasvathy, S. (2006). What to do next? The case for non-predictive strategy. *Strategic Management Journal*, 27, 981–998.

Submit your manuscript to a SpringerOpen[®] journal and benefit from:

- Convenient online submission
- Rigorous peer review
- Open access: articles freely available online
- High visibility within the field
- Retaining the copyright to your article

Submit your next manuscript at ► springeropen.com