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## Research Proposal

### Modeling Entrepreneurial Orientation: Conceptualization and Measurement issues

#### 1. Purpose & Significance

Entrepreneurial Orientation EO is a central construct in entrepreneurship research to the extent that it became a separate section in conferences (e.g., AoM) and journals (e.g., ETP). Yet how exactly EO should be defined and how it should be modeled with empirical data remains open to question. The lack of shared definition and empirical procedures leads to incommensurability of research. That is, EO as conceptualized and operationalized in one study can be incompatible with how the same is done in another study, severely limiting the progress of EO research.

#### 2. Conceptualization issues

Starting from (Covin & Slevin, 1991), innovativeness, risk-taking, and proactiveness have played central roles in EO research, at least on the empirical level. Yet, on the conceptual level there is much less agreement on whether EO should be defined in terms of these dimensions. For example, Covin and Wales recently defined EO as “Attribute of an organization that exists to the degree to which that organization supports and exhibits a sustained pattern of entrepreneurial behavior reflecting incidents of proactive new entry” (Covin & Wales, 2019, p. 5), thus implying that while innovativeness and risk-taking can be useful measures of EO, they are not a part of its concept definition. Yet, others tie the conceptual definition of EO directly to the dimensions: “EO is conceptualized as a set of distinct but related behaviors that have the qualities of innovativeness, proactiveness, competitive aggressiveness, risk taking, and

autonomy.” (Pearce et al., 2010, p. 219). As such, there is disagreement on whether EO exists independently from its dimensions.

There is a mismatch between EO conceptualization and entrepreneurship aims. Although EO was conceptualized to study “new entry”, most of the current research stream investigate the relationship between EO and various firm’s performance. This is problematic since it is not clear what is being conceptualized when we use EO to predict any outcome. That being said, regardless of other important shortcomings such as 1) whether EO is behavioral or dispositional, 2) being entrepreneurial depends on the context, we do not know if EO is sufficient to prescribe to organizations on how to be entrepreneurial. This becomes a mereological argument, why prior researchers assigned either three or five dimensions to EO without proper justification.

We argue this by answering the questions such as “Are risk-taking, innovation, and proactiveness always entrepreneurial and are all entrepreneurial actions always risky, innovative, and proactive?”. To give an example, when it comes to risk-taking, especially in high velocity environment, we need to ask the question: which of these two hypothetical organizations’ managerial teams are more entrepreneurial? 1: a managerial team of an organization which takes many risky actions or has an extreme positive predisposition towards taking risks or 2: a managerial team that explores most of the possible outcomes of a potential risky action and calculates and anticipates the possible consequences of its actions to have higher dynamic capabilities.

We argue that the second hypothetical organization is more entrepreneurially oriented for two main reasons. First, the second organization has both elements of behavior and predisposition as it requires the willingness and action together. And second, firms classified as having high EO reported to have a culture that “tolerates risk, does not unduly punish failure, and

are optimistic in outlook” (McNaughton & Sembhi, 2021, p. 136). These three reported attributes of highly entrepreneurial firms jointly demonstrate that a firm which takes calculated risks and foresees the future to increase its dynamic capabilities, and is more likely to take risks at first, stays optimistic during uncertainty, and does not unduly punish failure because its risky actions are well planned. Despite that EO was conceptualized to study if new entry happens as the dependent variable, financial firms’ performance became the dominant DV of EO framework. Evidence from empirical studies indicates that in some scenarios the relationship between risk-taking and performance (e.g., sale growth, and Tobin’s q) is negative (Short et al., 2010).

Although EO is conceptualized to be a positive attribute of an entrepreneurially orientated firm, the negative relationship between risk-taking and performance is observed more often compared to innovativeness and proactiveness. This might be an indication that risk-taking itself is not an entrepreneurial attribute or action of an organization but necessary to enable new entry, at least for creation of new organizations. At the same time, we believe that in existing organizations risk-taking and uncertainty are not the same thing. In fact, they are radically distinct in the context of entrepreneurial orientation and should be separated as we believe that sometimes not taking risks can be a more entrepreneurial action than taking risks. The difference between risk-taking as an antecedent of being entrepreneurial compared to an organization’s decision-making approach to vague, complex and equivocal uncertainty (basically results in foreseeing the future and possible outcomes to the best ability) is that the approach to uncertainty could result in calculated risk-taking or no risk-taking at all in some scenarios. Thus, this approach helps firms to accept and bear the consequences if either decision is taken.

To understand what EO is, we can look up the dictionary definition of “Orientation”. Cambridge Dictionary (Cambridge University Press, n.d.) defines orientation as “the type of

interests, activities, or aims that an organization, business, or project has, or the act of giving attention to a particular thing”, and “the particular interests, activities, or aims of an organization or business”. Based on this definition, Entrepreneurial Orientation is a set of actions, interests, and activities that an organization must follow in order to be considered entrepreneurial. The problem arises when the aim of entrepreneurship is recently changed to be “opportunity discovery and exploitation” (Shane & Venkataraman, 2000). That being said, although researchers correctly argue that “being entrepreneurial” can refer to many things, the current conceptualization of EO still suffers from 1: not capturing what being entrepreneurial is, as it is supposed to, and 2: external validity of the construct.

About the conceptualization issues that we mentioned before, overlapping with other similar concepts ranks the next most important shortcoming to us. The first and most probable reason why there is no shared meaning is lack of construct clarity. The lack of clarity results in problems with both conceptualizing and measurement of the construct (Podsakoff et al., 2016) which leads to “concept proliferation”. The disagreements about the definition of entrepreneurship resulted in the undermining of discriminant validity of most of the constructs that have the words “entrepreneurship” and “entrepreneurial” in them. EO is a latent variable, and it is not surprising to encounter almost similar definitions or operationalization under different names. These constructs include “Entrepreneurial Style”, “Entrepreneurial Mode”, “Entrepreneurial Orientation”, “Entrepreneurial Posture”, and “Corporate Entrepreneurship” (Covin & Lumpkin, 2011, p. 857).

### 3. Measurement issues

Notwithstanding the conceptual disagreement, there appears to be a consensus that regardless of how EO is defined, it should be measured through some kind of combinations of

the three dimensions. However, there is disagreement on what kind of combination it is or should be modeled as. There are three main perspectives. First, EO has been viewed as requiring simultaneously occurring innovativeness, proactiveness, and risk-taking on the firm level. This is known as a unidimensional approach to measuring EO. Second, Lumpkin & Dess (1996) advanced the view of EO as having dimensions that do not necessarily covary (multidimensional structure), and represent a profile rather than a unidimensional aggregate measure. Third, Anderson et al., (2015) suggest a reconceptualization of entrepreneurial orientation (EO) based on the idea of aggregation of distinct dimensions. The implications of choosing between the positions have received much attention (Covin & Wales, 2012). For example, based on conceptual grounds, George (2011) argues that most of the research on EO has modeled the EO construct inappropriately leading to incorrect conclusions. In this part, we discuss the shortcomings of measuring EO as both formative and reflective construct.

#### 4. Methodology

This paper will consist of theoretical and empirical parts. In the theoretical part we attempt to justify our opinion on why researchers either should abandon EO or only focus on its dimensions until further clarification of the construct. The empirical part of our research consists of two studies. The first study is a meta-analysis in which we analyze whether existing empirical evidence supports imposing proportionality constraints on the causes or consequences of the dimensions commonly associated with EO. We primarily relied on the articles with systematic literature reviews on EO (Covin & Wales, 2012; Rosenbusch et al., 2013), which we complemented with more recent studies identified through a systematic protocol resulting in 361 primary articles. We selected the studies that reported separate effects of the three dimensions of innovativeness, proactiveness, and risk-taking on various outcomes. In the first study,  $\chi^2$

significance test clearly rejected the constant proportions hypothesis implying that modeling EO as a shared cause or shared consequence of the three dimensions is not empirically supported.

In the second study, the simulation results show that manipulating the dimensions has no effect on the estimated structural paths between the EO and outcome variables. The apparent large effect of measurement model misspecification in George (2011) is an illusion caused by ignoring the scaling differences between the variables.

## 5. Conclusion

Entrepreneurship researchers commonly use the three dimensions of innovativeness, proactiveness, and risk-taking as a way to conceptualize or measure EO. We critically assess this practice both conceptually and empirically. On the conceptual side, we demonstrate that the three dimensions unnecessarily constrain how the EO concept can be developed along with the developing entrepreneurship construct. On the empirical side, we note that a unidimensional reflective model that assumes that the three dimensions are highly correlated is not very realistic. However, this does not mean that the second-order formative model to measure EO is correct because it suffers from severe identification problems.

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