Journal of Business Venturing Insights 8 (2017) 41–49

Contents lists available at ScienceDirect

Journal of Business Venturing Insights

journal homepage: www.elsevier.com/locate/jbvi

A content adequate five-dimensional Entrepreneurial Orientation scale

Kaustav Saha[a,*], Rohit Kumar[a], Swarup Kumar Dutta[a], Tanusree Dutta[b]

[a] Strategic Management Area, Indian Institute of Management Ranchi, India
[b] Organizational Behavior and Human Resource Management Area, Indian Institute of Management Ranchi, India

ARTICLE INFO

Keywords:
Entrepreneurial Orientation
Content adequacy
EO scale
Five dimensions
Multi-dimensional EO

ABSTRACT

The purpose of this article is to derive a content adequate five-dimensional Entrepreneurial Orientation (EO) scale. Content adequacy is the most basic psychometric property that should be assessed of any measurement instrument. However, none of the few, extant five-dimensional EO scales have ever been assessed for content adequacy. Utilizing the methods developed by Schriesheim and colleagues, a two-stage study is undertaken first to explore and then confirm the content adequacy of a five-dimensional EO scale. The resultant scale shows excellent agreement with theory and would be instrumental in advancing research in the sparsely studied five-dimensional EO research domain.

1. Introduction

Entrepreneurial Orientation (EO) has been a subject of more than three decades of research and has become a cornerstone of literature on firm-level entrepreneurship (Wales, 2016; Wales et al., 2013). Though the historical roots of EO could be traced to the scholarships of Khandwalla (1972) and Mintzberg (1973), it was not until the publication of Miller (1983) that the concept gained scholarly attention. Miller (1983) positioned innovativeness, proactiveness, and risk-taking as the constituents of an EO and these were combined to create a higher-order indicator of firm-level entrepreneurship (Covin and Wales 2012; Rauch et al., 2009). However, an interesting point to note is despite Miller's theoretical contributions; it was not until the publication of Covin and Slevin (1989) EO scale that empirical research on firm-level entrepreneurship began in earnest (Wales et al., 2013). With a large number of studies utilizing this instrument, the nine-item self-response scale developed by Covin and Slevin (1989) popularized the exploration of EO in entrepreneurship research (Rauch et al., 2009). Thus, the presence of a robust measuring instrument provided the necessary impetus for the proliferation of research around the Miller (1983) EO concept, which currently forms the major corpus of extant research in EO.

Subsequently, Lumpkin and Dess (1996) argued that EO can be conceived as a multidimensional phenomenon in which the dimensions represent independent predictors. They suggested two additional dimensions – competitive aggressiveness and autonomy – in addition to the original three to further describe the domain of EO (Rauch et al., 2009). By arguing that the dimensions of EO need not co-vary for a firm to be considered entrepreneurial, Lumpkin and Dess (1996) attempted a radical shift in the concept's definition, thereby marking the beginning of a significant theoretical division (Bouchard, Basso, and Fayolle, 2009). However, despite being present for almost two decades and garnering a large number of citations, empirical studies to examine the Lumpkin and Dess (1996) conceptualization of EO have been few and rare. Almost all the recent literature reviews on EO (e.g. Wales et al., 2013; Wales,

* Corresponding author.
E-mail addresses: kaustav.saha12fpm@iimranchi.ac.in (K. Saha), rohit.k@iimranchi.ac.in (R. Kumar), swarup.dutta@iimranchi.ac.in (S.K. Dutta), tanusree@iimranchi.ac.in (T. Dutta).

http://dx.doi.org/10.1016/j.jbvi.2017.05.006
Received 28 March 2017; Received in revised form 19 May 2017; Accepted 26 May 2017

2016) corroborates this observation. Scholars, thus, call for in-depth studies pertaining to the five-dimensional formulation of EO as co-existence of both the conceptualizations would provide unique insights for EO theory (Covin and Wales 2012; Covin and Lumpkin, 2011; Miller, 2011).

Theoretical advances in an academic field depend on the existence of well-defined constructs and their psychometrically sound measures (Lumpkin et al., 2009). The differential popularity in investigating the two competing EO conceptualizations is one such prominent illustration in case. A closer examination of the extant literature in the two competing conceptualizations of EO would easily suggest that the lack of a well-researched measurement instrument might be a critical reason for the dearth of empirical studies on the Lumpkin and Dess (1996) formulation of EO. Thus, systematic advancement of knowledge around the five-dimensional EO, for which entrepreneurship and strategic management scholars have recurrently appealed in recent times, warrants the need for a sound measurement instrument of the construct.

Review of extant literature in strategic management and entrepreneurship yields *few* instruments that have been developed and employed to measure the five-dimensional EO construct. Though some of these scales reported reliability and validity measures to various extent, there is a lack of evidence regarding a thorough empirical content adequacy assessment of any of these scales. Content adequacy relates to "the degree to which a measure's items are a proper sample of the theoretical content domain of a construct" (Schriesheim et al., 1993, 386). It is an essential psychometric property of any measuring instrument because inferences are drawn from the administration of an instrument, and it is, therefore, crucial that the items contained in that measure be a representative sample of the content universe of the underlying theoretical construct (Schriesheim et al., 1993). Thus, for a measure to be a valid operational procedure for assessing a theoretical variable of interest, the content of the research instrument has to be adequate (Nunnally and Bernstein, 1994; Guion, 1997).

Conventional instrument validation in management research is predominantly based upon the agreement of empirical data produced by a measure with the underlying theory and thus, is pertinent to a measure's construct validity (Schriesheim et al., 1993). However, since content adequacy is based upon the theoretical (and not empirical) correspondence between a measure' items and a construct's delineated content domain, such data do not directly address the issue of content adequacy (Schriesheim et al., 1993). Neither do the subjective appraisals by one or few persons of an instrument's items and the procedures involved in developing them (Schriesheim et al., 1999), as has been the common practice in organizational as well as entrepreneurship research. This suggests that content adequacy be "the first psychometric property of any paper-and-pencil measure that should be assessed, because there is no guarantee that an empirical indicator (measure) of a construct necessarily will correspond with its theoretical definition and because finding inadequate content may negate any need for further examination of a measure's construct validity, at least until such content adequacy problems are resolved" (Schriesheim et al., 1999, 141). However, the apathy towards such assessments is apparent in literature and most likely stems from the substantial amount of time and effort required in collecting multiple samples to adequately test a measure, revising it, and testing it again (cf. Castro, 2011), though the content adequacy methods have been known for a long time.

The lack of content adequacy assessment is a potential source for serious impediment to the advancement of scholarly discourse in EO because such concerns may result in the generation of unwarranted substantive conclusion (cf. Schwab, 1980), which restricts the field's ability to build on it in future studies. Such state-of-affairs would result in a corpus of literature that might be uninterpretable or at best, severely compromised on interpretability; as had been the case with much of leadership research (cf. Schriesheim and Kerr, 1974; Podsakoff and Schriescheim, 1985; Schriesheim et al., 1991). About construct measurement practices specifically in entrepreneurship research, Crook et al. (2010) noted that all the measures used in entrepreneurship research did not have high content validity and though the construct measurement practices are improving, there remains room for improvement. Thus, to avoid the pitfalls of compromised interpretability in the five-dimensional EO research as well as to ensure appropriate measurement quality, an objective content adequacy assessment of EO scale is vital.

Additionally, given the current state of empirical five-dimensional EO research, which is only gaining traction in contemporary scholarly discussions, it appears well timed to assess the content adequacy of a five-dimensional EO scale. That is because the right moment to evaluate the content adequacy is "immediately after a measure has been developed or modified, before further time and resources are devoted to its application" (Schriesheim et al., 1993, 389). Such a content adequate measure would provide the field with a robust measurement instrument that would allow deduction of accurate substantive conclusions as well as provide an impetus for building a nomological network surrounding the five-dimensional EO concept. Thus, the current study to formulate a content adequate five-dimensional EO scale is not only essential for enhancing the conversation among EO scholars and practitioners, but also timely.

2. Literature review

Studies of the five-dimensional EO construct, though few, have explored a variety of settings including for-profit and non-profit, developed and emerging economies context. These studies have employed a multitude of instruments for measuring the five dimensions of EO. A review of the existing five-dimensional EO measures is presented in Table 1. However, except in Lumpkin et al. (2009), evidence of content adequacy of an EO scale has not been found in any of the remaining articles. Their article illustrated the application of content adequacy procedures in EO context and hence, is a precursor to the current study. However, owing to two shortcomings, the results of Lumpkin et al. (2009) could not suffice the requirement of a content adequate five-dimensional EO scale.

First, most of the items pertaining to the dimensions of EO, except autonomy were adapted from Covin and Slevin (1989) scale. This scale measures EO as a first order reflective construct and is consistent with the conceptualization of a basic, unidimensional strategic orientation (Covin and Wales 2012). Thus, employing the Covin and Slevin (1989) instrument is inappropriate to