Submission # 12664

**Presenter Symposium**

**Science-Practice Interface:**
**Meta-Analyzing Theories for Performance Implications**

Aug 8 2017 from 8:00AM to 9:30AM in the Hanover Hall E room of the Hyatt Regency Atlanta

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**A Large-Scale Relative Importance Analysis to Assess the Performance of Job Performance Theories**
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**A Meta-Analytic Approach to Understanding the Effects of CEO Overconfidence on Firm Performance**
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Institutional Contingencies of OLI Paradigm on Foreign Equity-Based Entry Mode Performance

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Sponsor Divisions:
Business Policy and Strategy (BPS)
Organizational Behavior (OB)
Research Methods (RM)

OVERVIEW OF SYMPOSIUM

“Truth is found neither in the thesis nor the antithesis, but in an emergent synthesis which reconciles the two.” – Georg Wilhelm Friedrich Hegel

“Without a common framework to organize findings, isolated knowledge does not cumulate.” – Elinor Ostrom (2009c: 419)

Our management knowledge ecosystem is constantly struggling to bridge the gap between science and practice, although management scholars have been arguing for a synthesis of both for a long time (Banks, Pollack, Bochantin, Kirkman, Whelpley, & O’Boyle, 2016; George, 2016; Hodgkinson & Rousseau, 2009; Rousseau, 2012; Simon, 1967). This is due to two main reasons underlying the fundamental natures of science and practice. First, the
knowledge of science and of practice is advanced in two opposite structures. Best practices require comprehensive guidance for many complex real-world problems at one time as a totality. Conversely, science progresses by reducing this complexity into a series of internally coherent fragments, usually through theoretical and disciplinary approaches, that are more easily examined (Chen & Hitt, 2016; Simon, 1967). Second, science and practice diverge in their fundamental teleology. Science-based principles are supposed to be value neutral, that is, describing “what people do”. However, the goal of practice is focused on proactively enhancing some sort of performance measure, that is, “what people ought to do.”

While the worlds of “practice” and “science” fundamentally diverge in their knowledge structures and teleology, their close interdependence determines the sustainability of our entire management knowledge ecosystem (Chen & Hitt, 2016; Simon, 1967). The end goal of one is a necessary input of the other (Chen & Hitt, 2016). For instance, knowledge, driven by curiosity, is the end goal for the academy of scholars, but is a valuable input into teaching and application activities that develop human capital for the world of practice. Performance is the end goal of the world of practice, but is an increasingly important revenue source for most business schools and thus research activities (Chen & Hitt, 2016).

In this symposium, we discuss whether and how meta-analysis can be an effective approach to narrowing the science-practice gap. We especially focus on comparing and integrating dispersed theories and findings into a common framework that informs managerial performance. We have gathered three working papers, which are rooted in different disciplines (psychology/organizational behavior; finance/strategy; international business) at different levels of analysis (individual, corporate, and global levels), to illustrate our ideas.
These studies also show three different ways in which meta-analysis helps to bridge the science-practice gap: comparing relative importance of alternative theoretical constructs; contextualizing findings into moderating conditions; identifying boundary conditions of discipline-based theories.

**Presentations**

The first presentation, entitled “A large-scale relative importance analysis to assess the performance of job performance theories,” represents the efforts of using meta-analysis to compare the relative importance of alternative theoretical constructs in predicting similar performance measures. Field and List conducted a meta-analysis to evaluate the relative importance of multiple related constructs—and by extension, their respective theoretical perspectives—for predicting individual-level job performance. They suggest current studies and their results may be affected by topical areas, researcher practices, and research environments (e.g., lack of replications), all of which suggest a large-scale assessment of theories on job performance is warranted. In our presentation, they will describe the results of a large-scale relative importance analysis in which they examine theoretical perspectives aimed at predicting and influencing job performance at different levels of generality.

Specifically, they queried the metaBUS database (version 0.5.2) to create two meta-analytic correlation matrices. The first is used to examine the relative importance of seven “broad” (e.g., attitudes-job performance, person characteristic-job performance) theoretical perspectives on job performance. The second examines the relative validity of 14 “specific” (e.g., job satisfaction-job performance, conscientiousness-job performance) theoretical perspectives on the same topic. To show how the matrices were created, the presentation will
include a brief demonstration of the metaBUS interface. Overall, this study helps to reduce the redundancy of theoretical constructs and provide practitioners with clearer evidence-based practice recommendations.

The second presentation, entitled “A meta-analytic approach to understanding the effects of CEO overconfidence on firm performance: The moderating role of managerial discretion,” represents the efforts of contextualizing mixed findings and evidence into moderating conditions. Burkhard, Sirén, van Essen, and Grichnik study the impact of CEO overconfidence (overestimating, overplacement, overprecision) on firm performance. They argue that the inconclusive findings in the current literature stem primarily from the neglect of the context-specific conditions such as managerial discretion in which different firms operate. They also find that strategic choices mediate the CEO overconfidence-firm performance relationship in only selective conditions. With a final sample of over 150 published and unpublished studies, this study will provide the most comprehensive meta-analytic review of CEO overconfidence. It contributes to the literature by providing a quantitative synthesis of empirical studies on the direct relationship between CEO overconfidence and firm outcomes and by contextualizing the divergent findings in different contexts of managerial discretion.

The third presentation, entitled “Institutional contingencies of OLI paradigm on foreign equity-based entry mode performance: A meta-analysis,” represents the efforts of using meta-analysis to identify the boundary conditions of discipline-based theories. Li, Chen, and Banks seek to partially answer why “what people do” and “what people should do” often diverge in foreign equity-based entry mode. Theoretically, they challenge the implicit assumptions of human behaviors and rationalities underlying the three strands of Dunning’s
ownership-location-internalization (OLI) or eclectic paradigm of entry mode strategies. They suggest that these assumptions are realistic only in certain competitive and open market systems. They further discuss how national institutions and cultures in both home and host countries shape (“socially structure”) a multinational enterprise (MNE)’s rationalities and thus their strategic goal setting when they are conducting foreign entry mode choice. These institutional heterogeneities across countries would moderate both the OLI-entry mode relationships and the entry mode-performance relationship. Empirically, they test their hypotheses in a meta-analysis based on 94 publications. The results suggest that scholars should be careful when applying international business theories into different institutional contexts.

PROPOSED FORMAT OF THE SYMPOSIUM

Part I: Victor Chen will introduce the background of the symposium and the presentations (10 minutes)

Part II: Paper presentations and group discussion (60 minutes)

- A Large-Scale Relative Importance Analysis to Assess the Performance of Job Performance Theories, presented by James Field (12 minutes).
- Q&A on the first paper (8 minutes)
- A Meta-Analytic Approach to Understanding the Effects of CEO Overconfidence on Firm Performance: The Moderating Role of Managerial Discretion, presented by Marc van Essen (12 minutes).
- Q&A on the second paper (8 minutes)
• Institutional Contingencies of OLI Paradigm on Foreign Equity-Based Entry Mode Performance: A Meta-Analysis, co-presented by Yuanyuan Li, Victor Chen, and George Banks (12 minutes).

• Q&A on the third paper (8 minutes)

Part III: Group discussion and closing statements (20 minutes)

• How do we use meta-analysis as a general method to integrate theories into performance-predicting frameworks?

• Any other questions raised by the authors and/or the audience.

RELEVANCE TO DIVISIONS

One goal of this symposium is to discuss whether and how meta-analysis can be an effective knowledge interface between dispersed theories and practical demand for a unifying framework on performance prediction. In this perspective, it is highly relevant to the All-Academy Theme (ATT), “At the Interface.” It illustrates three presentations that narrow the science-practice gap in three different ways, which would fit within the theme of Strategizing Activities and Practices (SAP). Additionally, our three presentations cover multiple broad subdivisions of the management field, with the first paper in human resources (HR) and organizational behavior (OB), the second in business policy and strategy (BPS) and organizational and management theory (OMT), and the third in international management (IM).

Lastly, all three papers have adopted meta-analytic procedures as a common research method. Authors and audience will compare the methods used in three papers, which are conducted at different levels of analysis, and seek to improve our understanding in meta-
analysis as a general methodology in closing the divergence between the fragmenting nature of the science and the comprehensive demand of the practice. In this way, our symposium is relevant to the theme of research methods (RM).

**PAPER SUMMARIES**

**Paper One: A Large-Scale Relative Importance Analysis to Assess the Performance of Job Performance Theories**

James G. Field, Sheila K. List

Individual-level job performance is one of the most important phenomena for management scholars and practitioners alike (Murphy, 2008). Its importance is partly due to its long history in the organizational sciences (Taylor, 1914), efficacy as a mechanism for measuring the impact of other phenomena and interventions (Judge, Thoresen, Bono, & Patton, 2001), and connection to employment outcomes like pay (Jenkins Jr, Mitra, Gupta, & Shaw, 1998). Indeed, the attention given by scholars to theory and empirical research on how to best predict and increase job performance has resulted in a large nomological network of related constructs. Although the validity of many of these related constructs – and by extension, their respective theoretical perspectives – has been assessed *individually* using meta-analytic procedures, little is known regarding their relative importance for predicting job performance. Such an assessment may help to prune superfluous theory and lead to a less dense theoretical landscape (Leavitt, Mitchell, & Peterson, 2010), as well as help practitioners to better predict and influence the job performance of their employees.

Our current understanding of constructs and theory generally rests on the assumption that our cumulative scientific knowledge is robust and trustworthy (Kepes, Bennett, &
McDaniel, 2014). Unfortunately, the trustworthiness of some of our literature areas, from strategic management to human resource management (HRM) and industrial and organizational psychology, has recently been questioned (e.g., Banks, Kepes, & McDaniel, 2015; Bettis, 2012; Kepes & McDaniel, 2013). There are several reasons why our cumulative knowledge and theory on job performance, and its nomological network, may not necessarily be trustworthy.

First, we suggest that a topical area effect exists. Specifically, the vast amount of theory on job performance suggests that the literature has failed to adhere to Occam’s Razor, which suggests that “entities should not be multiplied beyond necessity” (William Occam, ca. 1290-1349). Moreover, many key theoretical perspectives posit competing job performance outcomes. For instance, fit-related theories (e.g., person-organization fit, person-job fit) suggest that when individuals are compatible with their work environment, their performance will be positively impacted (Lauver & Kristof-Brown, 2001). In contrast, theory on hindrance stressors (e.g., role conflict, role ambiguity) generally hypothesizes negative relations with job performance (Wallace, Edwards, Arnold, Frazier, & Finch, 2009). Despite such predictive incongruences, which will be discussed in more detail during our presentation, the relative validity of competing mechanisms is rarely, if ever, examined. Furthermore, evidence suggests that bivariate relations involving job performance require larger sample sizes to achieve .80 power for a context-specific median effect size and tend to produce smaller effect sizes than many other bivariate relation types (Bosco, Aguinis, Singh, Field, & Pierce, 2015). Given that both sample size and expected effect size are key determinants of statistical power, Bosco et al.’s (2015) results may suggest that extant tests of job performance theory are likely
to be underpowered and prone to Type II errors.

In addition to this topical area effect, we suggest that a researcher effect could also bring into question the validity of certain conceptualizations of job performance. In particular, the prevalence of questionable research practices (QRPs) raises concerns regarding the generalizability of certain theoretical perspectives. As an example, the practice of hypothesizing after the results are known (HARKing) (Bosco, Aguinis, Field, Pierce, & Dalton, 2016) and p-hacking (Simonsohn, Nelson, & Simmons, 2014) may sustain hollow theories by offering synthetic support for nonsignificant findings. Importantly, these relatively common practices (Banks et al., 2016; Bedeian, Taylor & Miller, 2010) “[convert] type I errors into non-replicable theory, and [hide] null results from future generations of researchers” (Rupp, 2011, p. 486).

Research environment effects – or concerns regarding the lack of replication studies in our published literature (Kepes & McDaniel, 2013; Nosek, Spies, & Motyl, 2012) – may represent another reason why a large-scale assessment of theories on job performance is warranted. Although direct replications are referred to as the “scientific gold standard” (Jasny, Chin, Chong & Vignieri, 2011, p. 1225), it is estimated that only around 1% of articles published in management journals between 1900 and today are conceptual or direct replications (Makel, Plucker & Hegarty, 2012). Without systematic efforts to replicate theoretical predictions, it is possible that the literature on job performance will advance a plethora of pseudotheories, “the scientific equivalent of fool’s gold … [and] the complete opposite of what other fields require for a theory” (Cucina & McDaniel, 2016, p. 1117). This may have damaging downstream effects for both science and practice. With regard to science,
the inclusion and development of relatively unimportant theories complicates the theoretical landscape unnecessarily (Leavitt et al., 2010), making it difficult to separate signal from noise and to build a trustworthy cumulative scientific knowledge. For practitioners, an overabundance of inconsequential theory – particularly complicated theory (e.g., moderated-mediation, multilevel) – inhibits their ability to assess the generalizability of scientific findings and, thus, constrains the potential of evidence-based practice recommendations.

Given the importance of job performance research and the concerns regarding the validity of theories in this important literature, the goal of our study is to answer the following research question: How well does theory on job performance perform? An important aspect of this question pertains to whether or not certain theoretical perspectives “deserve” to maintain their preeminence as correlates of job performance (Dalal, Baysinger, Brummel, & LeBreton, 2012). By directly pitting several noteworthy theoretical perspectives on job performance against each other and comparing their predictive power, we may be able “to pair down [sic] theory by eliminating weak, biased, and marginal theoretical candidates” (Leavitt et al., 2010, p. 644). Together, this may help to inform future generations of theory on job performance and to provide practitioners with a better understanding of what predicts job performance, which may help narrow the science-practice gap.

In our presentation, we will describe the results of a large-scale relative importance analysis in which we examine theoretical perspectives aimed at predicting and influencing job performance at different levels of generality. Specifically, we queried the metaBUS database (version 0.5.2) (see Bosco et al., 2015; Bosco, Uggerslev, & Steel, 2017) to create two meta-analytic correlation matrices. The first is used to examine the relative importance of seven
“broad” (e.g., attitudes-job performance, person characteristic-job performance) theoretical perspectives on job performance. The second examines the relative validity of 14 “specific” (e.g., job satisfaction-job performance, conscientiousness-job performance) theoretical perspectives on the same topic. To show how the matrices were created, our presentation will include a brief demonstration of the metaBUS interface.

Table 1 reports the results of our relative importance analysis of seven “broad” theoretical perspectives on job performance. An assessment of these results indicate that theories that hypothesize relations between intentions and job performance (e.g., turnover intention-job performance; Jackofsky, 1984) present the greatest degree of predictive value for job performance. In contrast, our results indicate that theories that investigate the relations between behaviors and job performance (e.g., impression management-job performance; Wayne & Liden, 1995) have relatively low predictive value.

Table 2 displays the results of our relative importance analysis of 14 “specific” theoretical perspectives on job performance. Effect size standards put forth by Cohen (1988) suggest that $R^2$ values of 0.01, 0.09, and 0.25 constitute small, medium, and large effects, respectively. As such, our results suggest that the 14 “specific” perspectives account for a “large” amount of variance in job performance ($R^2 = .344$). An inspection of Table 4 indicates that theory linking general mental ability (GMA) to job performance (e.g., Schmidt & Hunter, 2004) may be the most important for predicting this important outcome. Following GMA were trait self-efficacy and high performance work systems. In contrast, our results suggest that both personality traits (conscientiousness and emotional stability) yielded the lowest degree of predictive value. This might be surprising given their theoretical importance in the
job performance literature (Barrick & Mount, 1991). In our presentation, we will discuss the potential importance of these results for selection procedures and their impact on policies like the Uniform Guidelines (McDaniel, Kepes, & Banks, 2011).

Overall, this study and presentation will represent an important step towards “weed[ing] the garden of organizational studies to keep our garden healthier as a whole” (Leavitt et al., 2010, p. 633) and help to provide practitioners with clearer evidence-based practice recommendations. It is important to note that the present findings are not an indictment of certain theories on job performance. Rather, the present results indicate that some branches of this literature’s “logic tree” (Platt, 1964, p. 347) may bear more fruit than others in the future.

*** Paper 1. Table 1 Here ***

*** Paper 1. Table 2 Here ***

Paper Two: A Meta-analytic approach to understanding the effects of CEO overconfidence on firm performance: The moderating role of managerial discretion

Barbara Burkhard, Charlotta Sirén, Marc van Essen, Dietmar Grichnik

CEO overconfidence is the most powerful and prevalent cognitive bias in managerial decision-making (e.g. Russo & Schoemaker, 1992). Understanding the impact of CEO overconfidence on strategic decisions and firm performance has become a seminal issue in the field of management (e.g. Cain, Moore, & Haran, 2015; Chen, Crossland, & Luo, 2015; Lee, Hwang, & Chen, 2016), finance (e.g. Gervais, Heaton, & Odean, 2011; Huang & Kisgen, 2013; Malmendier & Tate, 2005, 2008) and entrepreneurship (e.g. Artinger & Powell, 2016; Busenitz & Barney, 1997; Navis & Ozbek, 2016). Numerous empirical studies have been
conducted to assess the effects of CEO overconfidence on firm outcomes but these studies have provided mixed evidence. Consequently, researchers have recently called for studies to reconcile the positive and negative effects of CEO overconfidence by integrating context-specific factors that determine this relationship (Chen et al., 2015; Navis & Ozbek, 2016). We answer to this call by first providing evidence with meta-analytic technique on the main relationship between CEO overconfidence and firm performance. Second, we argue that the inconclusive findings on the relationship between CEO overconfidence and firm performance stems primarily from the fact that prior research has focused on the main effect, but has neglected the context-specific conditions in which different firms operate. Thus, we investigate the moderating effects of managerial discretion on the CEO overconfidence – firm outcome relationship. Finally, in this study we specify and test mediating effects of strategic choices on the CEO overconfidence – firm performance relationship. In doing so, we find that strategic choices mediate the focal relationship in manners consistent with certain narratives, but not others. We test these theory-extending ideas using advanced multivariate meta-analytic techniques.

Overconfidence refers to the tendency that CEOs overrate their ability or knowledge and can take three different forms (Moore & Healy, 2008). First, CEOs can be overconfident by overestimating one’s actual ability, performance, level of control, or chance of success. The second type of overconfidence is referred to as overplacement. CEOs evaluate themselves better than the median, which is often referred to as the better than average effect. The third type of overconfidence is the overprecision regarding the accuracy of one’s beliefs, or in other words, the excessive certainty that one knows the truth (Haran, Moore, &
Morewedge, 2010). Because the way how CEO overconfidence is measured can influence empirical results significantly (Moore & Healy, 2008), we concentrate in our study on all these different forms. Typically, CEO overconfidence is considered as an irrational and fallacious bias that always leads always to second best decisions (Kahneman, 2011; Tversky & Kahneman, 1973). As Plous (1993: 217) states “No problem in judgment and decision making is (...) more potentially catastrophic than overconfidence.” Prior research has shown the negative consequences of CEO overconfidence such as value destruction through unprofitable mergers and suboptimal investment behavior (e.g. Hayward & Hambrick, 1997; Malmendier & Tate, 2005, 2008), illegal activities (e.g. Mishina, Dykes, Block, & Pollock, 2010; Schrand & Zechman, 2012), errors in strategic planning (e.g. Ren & Croson, 2013), excess entry (e.g. Artinger & Powell, 2016; Camerer & Lovallo, 1999), and failure to learn from experience (e.g. Chen et al., 2015). However, at the same time, some scholars have a more positive view of biases and argue that biased decision making are effective and efficient, and can lead to accurate judgement (Goldstein & Gigerenzer, 2002; Todd & Gigerenzer, 2003, 2007). Empirical evidence has found that CEO overconfidence is particularly beneficial for firm innovation (e.g. Galasso & Simcoe, 2011; Hirshleifer, Low, & Teoh, 2012; Tang, Li, & Yang, 2015), introduction of pioneering products, (e.g. Simon & Houghton, 2003; Simon & Shrader, 2012), decision to start a venture (e.g. Hogarth & Karelaia, 2012; Robinson & Marino, 2015; Simon, Houghton, & Aquino, 2000), and corporate social responsibility (Tang, Qian, Chen, & Shen, 2015). The conflicting empirical results about the positive or negative consequences of CEO overconfidence are embedded in “the great rationality debate” (Gigerenzer, 1996; Stanovich, 2009; Tetlock & Mellers, 2002) which debates how much
irrationality attribute to human cognition. Up to now, there is no meta-analysis confirming the direction and magnitude of the relationship between CEO overconfidence and firm outcomes. Recent studies have shown that the effect of CEO overconfidence depends on contextual factors (Chen et al., 2015; Hayward, Shepherd, & Griffin, 2006; Li & Tang, 2010; Navis & Ozbek, 2016). According to upper echelons theory (Hambrick & Mason, 1984) managerial discretion, i.e. “the latitude of managerial action” (Hambrick & Finkelstein, 1987: 371) afforded to decision makers is one of the key factors determining the extent to which CEOs influence strategic decision making and firm performance (Hambrick, 2007; Hambrick & Finkelstein, 1987). The literature on managerial discretion suggests that the two main forces that determine the latitude of managerial discretion are environmental conditions and internal organizational factors (Finkelstein & Hambrick, 1990; Haleblian & Finkelstein, 1993; Hambrick, Geletkanycz, & Fredrickson, 1993). The more discretion a CEO has, the more influence the CEOs have on their firms (e.g. Crossland & Hambrick, 2007; Wangrow, Schepker, & Barker, 2015). Li & Tang (2010) found, for example, that CEO positive relationship between overconfidence and firm risk taking is stronger when CEO managerial discretion is higher. Against this background we expect that CEO overconfidence can serve as a cognitive enabler in low-discretion, but as a cognitive barrier in high-discretion organizations and environments.

This study applies meta-analysis technique to integrate previous research on the relationship between CEO overconfidence and firm performance and to test the moderating effect of managerial discretion. Specifically, we apply Hedges and Olkin-type meta-analytic technique (HOMA, Hedges & Olkin, 1985) and meta-analytic regression analysis (MARA,
Lipsey & Wilson, 2001) to test our hypothesis. To develop our database, we conducted a systematic literature search in Google Scholar as well as in the leading management, finance and entrepreneurship journals, which resulted in over 11,000 search results. Out of the 11,000 studies, we obtained a final sample of over 150 published and unpublished studies.

This study will provide the most comprehensive meta-analytical review of CEO overconfidence, strategic decisions and firm performance to date. The contribution of this study is twofold: First, this study provides a quantitative synthesis of empirical studies analyzing the direct relationship between CEO overconfidence and firm outcomes. Even though a significant number of studies have been conducted on CEO overconfidence, its effect on firm outcomes is equivocal. With our study, we address this controversy and answer the question whether CEO overconfidence is good or bad for firm outcomes. Second, we aim to explain divergent findings by introducing managerial discretion that moderate the relationship between CEO overconfidence and firm outcomes. In so doing, we intend to foster a contextual understanding of the CEO overconfidence-firm outcomes link. We aim to detect context effects and to show when CEO overconfidence show increased or reduced effectiveness.

**Paper Three: Institutional Contingencies of OLI Paradigm on Foreign Equity-Based Entry Mode Performance: A Meta-Analysis**

Yuanyuan Li, Victor Zitian Chen, George Banks

“What people do” and “what people should do” often diverge in foreign equity-based entry mode (Martin, 2013; Shaver, 2013). Between 1970 and 2013, more than a 1,000
academic papers on equity-based foreign entry mode were published in ISI Web of Knowledge-indexed journals (Surdu & Mellahi, 2016). However, only a small fraction examined the performance effects of entry mode choice. Among the notable examples are Brouthers (2002) and Brouthers, Brouthers and Werner (1999; 2003; 2015), who found a strong predictive power of transaction-cost economics (TCE)/internalization theory, ownership-location-internalization (OLI) or eclectic paradigm, and neo-institutional economics in performance effects of entry mode choice. Meanwhile, researchers consistently discover a large proportion of firms that choose suboptimal entry strategies which deviate from what the normative theories would predict (Hennart & Slangen, 2015).

These suboptimal practices call for careful thinking about the boundary conditions of applying some of our widely used positive theories and models (i.e., “what people do”) as normative theories (i.e., “what people should do”) in making an entry mode choice. One concern resides in behavioral assumptions in these theories underlying an MNE’s strategic behaviors, which tend to oversimplify a strategy’s objective function. For instance, all of the three strands of the OLI paradigm have their origins in economics (Dunning & Lundan, 2008). Ownership-based advantages developed from competitive advantages in industrial organization (Bain, 1956); location-based advantages have their origins in the neoclassic economics of trade (Heckscher & Ohlin, 1991); TCE/internalization has its origins in microeconomic theory of the firm (Coase, 1937). Behavioral assumptions in these theories such as bounded (economic) rationality are found to be only a contingent model to predict human behavior in a particular situation – a highly competitive and open market for private goods (Alchian, 1950; Holt, 2007). Recent economic literature calls for a complete model of
human behaviors, drawing from multiple disciplines outside of economics, when predicting human and organizational behaviors (Ostrom, 2009b, 2009a). Recent research also suggests we should study different irrationalities underlying economic decisions (Chi, 2015).

In this paper, we seek to evaluate the normative value of selected major theories of entry mode, including notably TCE/internalization, OLI and neo-institutional economics in entry mode. We structure our discussion into two parts: theory and empirical evidence. In the first step, we discuss the implicit assumptions of human behaviors and rationalities (i.e., theory-prescribed performance measure) on which these theories are built and their desirable corporate objectives. The behaviors of firms (and the top management teams running them) often deviate from the economic rationality for two broad reasons. The first reason is psychological. In the absence of sufficient information and cognitive ability for a calculated choice, humans tend to rely on their evolved psychological biases (or heuristics), such as those towards emotionally attractive content and signals, imitating the models and the privileged, as well as conforming to the highly frequent examples (Buss, 2015; Mesoudi, 2011; Richerson & Boyd, 2005). The second reason is institutional. Human and organizational rationalities (economic vs. noneconomic) are complex and pluralistic, defined or “socially constructed” by a variety of social and cultural institutions and their underlying logics, not only economics or markets (Aguilera & Jackson, 2003; Mitchell, Weaver, Agle, Bailey, & Carlson, 2016; Thornton, Ocasio, & Lounsbury, 2012; Weber, 1978). It is important to incorporate these irrationalities or, more precisely, different kinds of rationalities (Weber, 1978) into the existing entry mode theories, which are primarily built on economic foundations.
Second, we review the empirical evidence that supports and counters the predictions of these theories, focusing on the entry mode-performance relationships. We critically review various performance measures adopted by entry mode researchers, which may not have fully captured the real spectrum of desirable objectives defined by the managers. When making investment decisions, managers tend to choose an entry mode based on characteristics that are expected to affect a pre-defined strategic objective, which may cause endogeneity between choice and outcome measures in entry mode research (Martin, 2013). How managers and scholars define “what people should do” may not always converge. It is important to have realistic knowledge of companies’ strategic goal setting before designing the empirical model. But very often, to have coherent logic in their research (as often required by leading journal editors), researchers tend to simplify the diversities and pluralism of strategic goals (Hult, Ketchen Jr, Griffith, Chabowski, Hamman, Dykes et al., 2008) into one that is more relevant to and coherent with their own training backgrounds rather than consider all others that are salient to the research subjects (Campbell, 2004).

Empirically, we meta-analyzed 40 publications that report measures of at least one of the three OLI strands, as well as both entry mode and post-entry performance measures. The results report that OLI effects on both M and P are moderated by the fact whether home and/or host countries are developed markets or not. Results also suggest different weights of importance of OLI in their effects on M and P, with O being the most important in both M and P. We report our preliminary results in Tables 1 and 2. We are in the process of testing more nuanced measures of OLI subcategories and moderators that characterize a country’s national institutions and cultures.
In summary, we discuss how studies in entry mode (and international business in general) should better ensure the consistency between the rationalities and objectives of real international managers, who are making entry mode decisions, and the underlying behavioral-and objective function assumptions of a chosen theory in order to understand its normative value.

REFERENCE


Gigerenzer, G. 1996. On narrow norms and vague heuristics: A reply to Kahneman and


**Table 1**

Relative Importance Analysis of Job Performance for “Broad” Predictors

<table>
<thead>
<tr>
<th>Variable</th>
<th>( \beta )</th>
<th>Rescaled weight</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attitudes</td>
<td>.027</td>
<td>17.62%</td>
<td>3</td>
</tr>
<tr>
<td>2. Intentions</td>
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<td>37.31%</td>
<td>1</td>
</tr>
<tr>
<td>3. Behaviors</td>
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<td>0.91%</td>
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</tr>
<tr>
<td>4. Person characteristics</td>
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<td>2.92%</td>
<td>5</td>
</tr>
<tr>
<td>5. Organizational characteristics</td>
<td>.004</td>
<td>2.76%</td>
<td>6</td>
</tr>
<tr>
<td>6. HR practices</td>
<td>.033</td>
<td>21.66%</td>
<td>2</td>
</tr>
<tr>
<td>7. Contextual characteristics</td>
<td>.026</td>
<td>16.81%</td>
<td>4</td>
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</tbody>
</table>

\( R^2 = .154 \)

*Note.* Meta-analytic procedures were performed using absolute values.
### Paper 2. Table 2
**Relative Importance Analysis of Job Performance for “Specific” Predictors**

<table>
<thead>
<tr>
<th>Variable</th>
<th>β</th>
<th>Rescaled weight</th>
<th>Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Job satisfaction</td>
<td>.035</td>
<td>10.23</td>
<td>4</td>
</tr>
<tr>
<td>2. Organizational commitment</td>
<td>.019</td>
<td>5.57</td>
<td>7</td>
</tr>
<tr>
<td>3. Conscientiousness</td>
<td>.002</td>
<td>0.60</td>
<td>13</td>
</tr>
<tr>
<td>4. Emotional stability</td>
<td>.001</td>
<td>0.26</td>
<td>14</td>
</tr>
<tr>
<td>5. Hindrance stressors</td>
<td>.005</td>
<td>1.42</td>
<td>12</td>
</tr>
<tr>
<td>6. Organizational justice</td>
<td>.006</td>
<td>1.86</td>
<td>10</td>
</tr>
<tr>
<td>7. Fit in the workplace</td>
<td>.013</td>
<td>3.72</td>
<td>8</td>
</tr>
<tr>
<td>8. Supervisor support</td>
<td>.026</td>
<td>7.52</td>
<td>5</td>
</tr>
<tr>
<td>9. Work-life balance</td>
<td>.009</td>
<td>2.62</td>
<td>9</td>
</tr>
<tr>
<td>10. Trait self-efficacy</td>
<td>.052</td>
<td>15.16</td>
<td>2</td>
</tr>
<tr>
<td>11. Trait motivation</td>
<td>.024</td>
<td>7.01</td>
<td>6</td>
</tr>
<tr>
<td>12. General mental ability</td>
<td>.104</td>
<td>30.28</td>
<td>1</td>
</tr>
<tr>
<td>13. Workplace climate</td>
<td>.006</td>
<td>1.66</td>
<td>11</td>
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<tr>
<td>14. High performance work systems</td>
<td>.042</td>
<td>12.09</td>
<td>3</td>
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</table>

$R^2 = .344$
## Paper 3. Table 1. Meta-analytic results

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<tr>
<th>Variables</th>
<th>$k$</th>
<th>$N$</th>
<th>$\bar{r}$</th>
<th>$SD_r$</th>
<th>$\hat{\rho}$</th>
<th>$SD_\rho$</th>
<th>CV LL</th>
<th>CV UL</th>
<th>CI LL</th>
<th>CI UL</th>
<th>% Var</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ownership-Entry Mode</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Home DM</td>
<td>172</td>
<td>144,195</td>
<td>-.032</td>
<td>.10</td>
<td>-.032</td>
<td>.10</td>
<td>-.16</td>
<td>.09</td>
<td>-.05</td>
<td>-.02</td>
<td>11%</td>
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<td>.020</td>
<td>.09</td>
<td>.020</td>
<td>.09</td>
<td>-.09</td>
<td>.12</td>
<td>.00</td>
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<td>13%</td>
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<td>Host is DM</td>
<td>9</td>
<td>8,244</td>
<td>-.007</td>
<td>.09</td>
<td>-.007</td>
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<td>-.12</td>
<td>.10</td>
<td>-.07</td>
<td>.05</td>
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<td>-.017</td>
<td>.10</td>
<td>-.14</td>
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<td>11%</td>
</tr>
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<td><strong>Location-Entry Mode</strong></td>
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<td>.007</td>
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<td>.04</td>
<td>7%</td>
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<td>.015</td>
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<tr>
<td>Home DM</td>
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<td>95,289</td>
<td>.012</td>
<td>.14</td>
<td>.012</td>
<td>.14</td>
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<td>.18</td>
<td>-.01</td>
<td>.03</td>
<td>8%</td>
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<tr>
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<td>42,993</td>
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<td>.11</td>
<td>.045</td>
<td>.11</td>
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<td>.18</td>
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<td>12%</td>
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<td>.16</td>
<td>.006</td>
<td>.16</td>
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<td>.077</td>
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<td>.06</td>
<td>.09</td>
<td>9%</td>
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<td>.087</td>
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<td>.087</td>
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<td>.20</td>
<td>.07</td>
<td>.10</td>
<td>8%</td>
</tr>
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<td>.11</td>
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<tr>
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<td>.07</td>
<td>.09</td>
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<td>-.023</td>
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<td>-.18</td>
<td>.14</td>
<td>-.05</td>
<td>.01</td>
<td>3%</td>
</tr>
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<td>162,927</td>
<td>-.023</td>
<td>.13</td>
<td>-.023</td>
<td>.13</td>
<td>-.18</td>
<td>.14</td>
<td>-.05</td>
<td>.01</td>
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<tr>
<td>Host is DM</td>
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<td>.13</td>
<td>-.02</td>
<td>.13</td>
<td>-.18</td>
<td>.14</td>
<td>-.05</td>
<td>.01</td>
<td>3%</td>
</tr>
<tr>
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<td>11</td>
<td>7,760</td>
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<td>.08</td>
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<td>.08</td>
<td>-.11</td>
<td>.06</td>
<td>-.07</td>
<td>.02</td>
<td>25%</td>
</tr>
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<td>k</td>
<td>N</td>
<td>$\bar{r}$</td>
<td>$SD_r$</td>
<td>$\hat{\rho}$</td>
<td>$SD_{\hat{\rho}}$</td>
<td>CV_{LL}</td>
<td>CV_{UL}</td>
<td>CI_{LL}</td>
<td>CI_{UL}</td>
<td>% Var</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----</td>
<td>--------</td>
<td>-----------</td>
<td>--------</td>
<td>--------------</td>
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<td>---------</td>
<td>---------</td>
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<td>---------</td>
<td>-------</td>
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<tr>
<td>Internalization – Performance</td>
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<td>280,740</td>
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<td>.18</td>
<td>-.018</td>
<td>.18</td>
<td>-.24</td>
<td>.21</td>
<td>-.04</td>
<td>.00</td>
<td>3%</td>
</tr>
<tr>
<td>Home DM</td>
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<td>239,123</td>
<td>-.026</td>
<td>.18</td>
<td>-.026</td>
<td>.18</td>
<td>-.26</td>
<td>.21</td>
<td>-.05</td>
<td>.00</td>
<td>2%</td>
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<td>.13</td>
<td>.028</td>
<td>.13</td>
<td>-.13</td>
<td>.19</td>
<td>.00</td>
<td>.06</td>
<td>12%</td>
</tr>
<tr>
<td>Host is DM</td>
<td>12</td>
<td>10,992</td>
<td>.020</td>
<td>.10</td>
<td>.020</td>
<td>.10</td>
<td>-.10</td>
<td>.14</td>
<td>-.04</td>
<td>.08</td>
<td>10%</td>
</tr>
<tr>
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<td>269,748</td>
<td>-.020</td>
<td>.18</td>
<td>-.020</td>
<td>.18</td>
<td>-.25</td>
<td>.21</td>
<td>-.04</td>
<td>.00</td>
<td>3%</td>
</tr>
<tr>
<td>Ownership-Location</td>
<td>80</td>
<td>65,392</td>
<td>-.005</td>
<td>.07</td>
<td>-.005</td>
<td>.07</td>
<td>-.08</td>
<td>.07</td>
<td>-.02</td>
<td>.01</td>
<td>3%</td>
</tr>
<tr>
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<td>142,908</td>
<td>.000</td>
<td>.11</td>
<td>.000</td>
<td>.11</td>
<td>-.13</td>
<td>.13</td>
<td>-.01</td>
<td>.01</td>
<td>15%</td>
</tr>
</tbody>
</table>

Note. $k$ = number of independent samples; $N$ = total sample size; $\bar{r}$ = sample-size-weighted mean observed correlation; $SD_r$ = sample-size-weighted observed standard deviation of correlations; $\hat{\rho}$ = mean true-score correlation (corrected for unreliability for both variables); $SD_{\hat{\rho}}$ = standard deviation of corrected correlations; CV_{LL} and CV_{UL} = lower and upper bounds, respectively, of the 80% credibility interval; CI_{LL} and CI_{UL} = lower and upper bounds, respectively, of the 95% confidence interval around the mean true-score correlation; % Var = percentage of variance attributable to statistical artifacts.
### Paper 4. Table 2. Relative-importance of Ownership-Location-Internalization (OLI)

<table>
<thead>
<tr>
<th>Entry Mode</th>
<th>Raw relative weights</th>
<th>Relative weights as a % of $R^2$</th>
<th>Raw relative weights</th>
<th>Relative weights as a % of $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>3.981407e-04</td>
<td>45.5</td>
<td>0.0059145894</td>
<td>88.9</td>
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<td>Location</td>
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<td>9.94</td>
<td>0.0003626944</td>
<td>5.44</td>
</tr>
<tr>
<td>Internalization</td>
<td>3.890485e-04</td>
<td>44.5</td>
<td>0.0003780334</td>
<td>5.68</td>
</tr>
</tbody>
</table>

$R^2$=0.001 $R^2$=0.001