Assessing Antecedents of Socially Responsible Supplier Selection in Three Global Supply Chain Contexts

Stanley E. Griffis†
Supply Chain Management Department, Broad College of Business, Michigan State University, East Lansing, MI, 48824, e-mail: griffis@bus.msu.edu

Chad W. Autry
Department of Marketing and Supply Chain Management, College of Business, University of Tennessee, Knoxville, TN, 37996, e-mail: autry@utk.edu

LaDonna M. Thornton
Department of Management, University of Nebraska, Lincoln, NE, 68588, e-mail: lthornton2@unl.edu

Anis ben Brik
Eneref Institute, 475 North Street, Doylsetown, PA 18901, e-mail: anis.brik@eneref.org

ABSTRACT

A number of highly publicized, controversial lapses in social responsibility within global supply chains have forced managers and scholars to reexamine long-held perspectives on supplier selection. Extending Carter and Jennings’ department-level study of purchasing social responsibility, our research assesses the role of supply managers’ ethical intentions and three key antecedents that drive socially responsible supplier selection. Comparing evidence from firms operating in China, the United States, and the United Arab Emirates, we identify three key drivers of supply managers’ ethical intentions and examine both their direct and indirect impacts on socially responsible supplier selection. We find differential support for the predictor relationships on supply manager ethical intentions across national contexts and mediated versus nonmediated models. These observations bear important implications for firms conducting global supply management.

[Submitted: October 5, 2012. Revised: March 16, 2013. Accepted: June 4, 2013.]

Subject Areas: Corporate Social Responsibility (CSR), Supply Management, Ethical Intentions, Purchasing, Supplier Selection, Global, Supply Chain, and Socially Responsible.
INTRODUCTION

Modern firms often look to gain advantage over rivals through supply management. Within supply management, supplier selection is a key decision area. Historically, supplier selection research has focused on identifying the suppliers that are likely to maximize economic outcomes for the firm (e.g., Hakansson and Wootz, 1975; Spekman, 1988; Ellram, 1990; Weber, Current, & Benton, 1991; Akinc, 1993; Choi and Hartley, 1996). However, numerous highly publicized lapses in social responsibility (SR) have forced a reexamination of supplier selection criteria, to include noneconomic, qualitative rationale. Furthermore, despite SR’s importance for supply managers, scholarly understanding of SR within the supply management context has lagged behind its practice.

To address these two issues, Carter and Jennings (2004) introduced the notion of purchasing social responsibility (PSR), an organizational-level business characteristic indicating a firm’s “purchasing activities . . . meet the ethical and discretionary responsibilities expected by society” (p. 151). Their (2004) assessment of the supply management functions of 1,000 U.S.-based consumer products manufacturers concluded with a call for additional research at: multiple levels of engagement (i.e., the firm; the supply management functional area; and supply management employees), across industries; and across international contexts (Carter and Jennings, 2004, p. 170–171). Yet surprisingly, only very limited follow-up research has further addressed SR in the supply chain context, to augment practice and theory development.

Although the (2004) study assesses the SR “orientation” of a firm’s supply management function via the PSR variable, it operationalized PSR very broadly: (i) as a firm-level orientation and (ii) subsuming the entire breadth of an organization’s purchasing-related activities. Specifically, Carter and Jennings (2004) operationalized PSR as a multidimensional orientation held by the supply management functional unit that reflects a general focus on SR principles across all related tasks. However, this view does not consider that supply management employees within the unit have significant autonomy and might not execute specified purchasing tasks consistent with the PSR position held by the unit or the firm.

To address this gap, we identify a new activity-specific dependent variable identified as socially responsible supplier selection (SRSS). We formally define SRSS as a firm’s capabilities for and/or orientation toward selection of suppliers that embrace CSR principles when conducting normal operations. SRSS, a narrower concept than PSR, reflects how supply managers within a purchasing unit invoke SR principles and standards when selecting suppliers. Given that most organizational buyers act somewhat autonomously when making all but the most strategic purchases (Kraljic 1983), their discretion in behaving in socially responsible ways—or not—potentially impacts both the brand value and financial position of their employing firms.

Furthermore, our research also considers the increasing importance of autonomous supply manager behavior as supply chains continue to globalize. The importance of global sourcing as a supply management strategy has long been observed: a decade ago, Kotabe and Murray (2004) noted: “[companies] that have a limited scope of global sourcing are at a disadvantage over those that exploit it to the fullest extent in the globally competitive marketplace . . .” (p. 9). Both
managers (Orpen, 1987) and customers (Maignan, 2001) are shown to differ across national settings as to corporate social responsibility levels and expectations, and so the consideration of SRSS from a multinational perspective is salient for supply management practice.

Toward this goal, we examine our theoretical model using data from three national samples known to vary significantly in their disposition toward SR: China, the United Arab Emirates, and the United States. Our findings suggest varied predictors of SRSS by nation, and therefore should be important for supply chain executives and human resource professionals to consider as they recruit and retain supply managers in the studied world regions and others that are culturally similar.

BACKGROUND LITERATURE

Historically, supplier selection research has focused on how different supplier characteristics, evaluation frameworks, and selection metrics can be leveraged to gain economic rents (Hakansson and Wootz, 1975; Spekman, 1988; Ellram, 1990; Weber et al., 1991; Dominguez and Zinn, 1994). However, the more contemporary research has increasingly assessed qualitative selection factors, such as supplier fit with customers’ business strategies, postselection buyer–supplier relationship issues, and (of particular interest here) social responsibility issues impacting the selection process. The emergent focus on qualitative issues informs but does not entirely supplant the traditionally used economic-based selection criteria (e.g., Kannan and Tan, 2002; Wisner, 2003; Defee, Esper, & Mollenkopf, 2009).

Our study specifically focuses on the social and ethical perspectives on business that have come to complement economic criteria as key predictors of success. As supply chains globalize, managers within the same supply chain may hold different views of SR that can potentially lead to conflict. This sort of potential misalignment is especially important for researchers and managers to consider, given that adherence to ethical and SR standards have been identified as salient factors for supply management success (Ringov and Zollo, 2007). For example, when hiring global supply managers to select and build partnerships with strategic suppliers, firms such as Associated British Foods now train managers on local ethical/SR expectations of partners in the host nation before assigning them to expatriate positions (Awramenko, 2010). Based on cultural differences theories published in recent years, we expect to find meaningful variation in SRSS and its antecedent relationships across the United States, United Arab Emirates, and China based on the different perspectives held by each nation’s population (and ergo, workforce).

Furthermore, although existing business ethics research causally links employees’ ethical intentions with their SR behaviors regardless of national context (cf., McWilliams, Siegel, & Wright, 2006; Matten and Moon, 2008; Lindgreen, Swaen, & Campbell, 2009), specific examinations of how ethical intentions impact purchasing agents’ supplier selection decisions are absent. This research gap is uniquely problematic given supply managers’ significant autonomy and low organizational visibility within boundary-spanning roles that render them susceptible to ethical dilemma exposure by virtue of job design.
Hypotheses

**Antecedents of supply manager ethical intentions**

The business ethics literature suggests three prominent antecedents of a supply manager’s ethical intentions that have not been examined within a single study: the employees’ ethical orientation, top management’s ethical behaviors, and external pressures to behave ethically. No single theoretical framework addresses these factors together, so we support the first three hypotheses with diverse literatures.

We focus first on employees’ ethical orientation. Orientations encompass the sets of beliefs, morals, and values among employees, which are collectively embraced by a firm’s employees in aggregate (Nahm, Vonderembse, & Koufteros, 2004). Employee ethics are demonstrably influenced by the orientations held by coworkers within their work organizations (Douglas, Davidson, & Schwartz, 2001), which in turn drive the attitudes, beliefs, and behaviors they experience while working (Hatch, 1993; Nahm et al. 2004). Extrapolating to the supply management domain, consistent with Weber (1993), we propose that employees’ ethical orientation is a precursor to supply manager ethical intentions. We formally define employees’ ethical orientation as the employees’ shared understanding of ethical standards by which an action is determined as right or wrong. Employee ethics, morals and beliefs are shown to be psychologically ingrained but quasi-static (Denison, 1996); the ethically oriented employee acts with consideration of morals and beliefs, and thereby ethics influences subsequent behavioral intentions, actions, and behaviors (Trevino, 1986; Schein, 2004). Drawing on socialization theory, orientations are taught and reinforced by coworkers to promote consistent behavioral norms (van Maanen and Schein, 1979). A purchasing organization’s ethical orientation should therefore positively influence supply managers’ ethical intentions (SMEI). We hypothesize that:

**H1: Employees’ ethical orientation is positively associated with SMEI**

Schein (1999) notes that top management is charged with creating and perpetuating organizational expectations in the form of workplace norms and regulations, and are expected to lead employees by example. Thus, top management’s ethical behaviors should be distinct from the employees’ ethical orientation (to verify that these factors are conceptually different in the supply management context, we conduct discriminant validity checks before data analysis, as described in the methodology section). Top manager ethicality has long been espoused as a primary determinant of employee ethical behavior (Carlson and Perrewe, 1995), as the ethical behaviors undertaken by leaders serve to define acceptable behavior, actions, and intentions (Bavaria, 1991; Carlson and Perrewe, 1995), and top management ethicality should increase the employees’ propensity to abide by such norms (Trevino, 1986). Institutional and leader–member exchange theories support that top managers’ positive organizational images strongly influence the actions of their formal and informal subordinates (Wayne, Shore, & Liden, 1997).

Supply management provides a unique context for assessment of the top management ethical behaviors (TMEBs)—subordinate ethical intentions relationship. In modern supply chain organizations, top management must closely monitor supply managers to ensure that decisions are aligned with the overarching
firm interests due to agency issues (Slone, Mentzer, & Dittman, 2007). Supply managers might deviate from ethical behavior for two reasons: their unilateral spending decisions may conflict with other firm objectives (e.g., personal gain outweighs cost minimization, quality, or long-term relationships), and their decision-making autonomy may likewise invite unscrupulous behavior linked to self interests. We assess this hypothesis:

**H2**: Top management ethical behaviors are positively associated with SMEI.

We are also concerned with the impact of external pressures exerted by supply chain partners on the ethicality of supply manager decision making. Suppliers and customers shape organizations’ ethical orientations, affecting decision making in many contexts (Berman et al., 1999, p. 491). As Robertson, Lamin, and Livanis (2010) note, “it is not just an individual’s personal characteristics and [internal environment] that influence evaluation and decision making, but also their [external] stakeholders” (p. 170).

Stakeholder theory offers additional possibilities for assessing external supply chain partner influences on supply manager behavioral intentions. Customers are increasingly a concern as environmental, safety, and product origin issues influence their purchase decisions (Brown and Dacin, 1997; Handelman and Arnold, 1999). Research has long indicated that some customers are willing to pay more for environmentally, ecologically, and socially sound products (Laroche, Bergeron, & Barbaro-Forleo, 2001).

In addition, special interest groups are more attuned to the societal impact of firms worldwide (Roberts, 2003; Carroll and Buchholtz, 2008). They scrutinize and publicly denounce perceived unethical sourcing (Roberts, 2003). In addition, suppliers have become more influential in pressuring customer firms to be more ethical as activist groups have become increasingly influential, and socially responsible and ethical behavior has become institutionalized in business settings (Campbell, 2007). Thus,

**H3**: External pressure for ethical behavior is positively associated with SMEI.

**SRSS and the ethical intentions mediator**

Our first three hypotheses are largely consistent with previous research (i.e., Handelman and Arnold, 1999; Carter and Jennings, 2004). However, in this study we extend the previous work by exploring the direct relationships between the three antecedents and SRSS, and further, whether these relationships are mediated by SMEI. That is, supply manager behavioral intentions may be very strictly governed by the three external forces we describe, and in such cases, the significant resources expended on ethical training could be wasted. Alternatively, supply manager ethical intentions may mediate the relationships, thus supporting augmented ethical training in one or more of our global supply contexts of interest. We assess these possibilities comparatively.

Specifically, in H1–H3, the three antecedents were proposed to directly influence SMEI. However, do these forces also directly impact SRSS or is the effect mediated by the supply manager’s ethical intentions? We might expect supply manager ethical intentions to partially explain the level of SRSS held by the
Antecedents of SRSS in Three Global Supply Chain Contexts

Given that ethical orientations are already linked to socially responsible behavior in information technology settings (Vitell et al., 2003), we speculate that in purchasing organizations where employee ethical behavior is present and evidenced in top management behaviors, SRSS will associate positively. Similarly, we expect that the potential risks associated with CSR failures may motivate firms to reconsider external impacts on supplier selection from supply chain partners. Furthermore, firm employees may desire to avoid the public backlash and scrutiny created by CSR failures through contemplating how supplier selection decisions may affect stakeholders.

Stakeholder theory (Freeman, 1984), although traditionally viewed as a macro-level theory, has seen recent developments that suggest individual employees are also sensitive to external pressures, and so the theory has recently been operationalized at the micro-level of analysis (i.e., Prottas, 2008; Pless, Maak, and Waldman, 2012). Although early theorization focused only on shareholders as having impact on internal behaviors, modern applications of stakeholder theory allow for multiple external constituents such as suppliers and customers, thus fostering predictions related to supply chain partners. We argue that publicity surrounding CSR-related failures causes firms to revisit which and whether suppliers or customers should be appeased (i.e., Friedman and Miles, 2004), and what types of supply manager decisions should resolve conflicts between firm and partner objectives (Mitchell, Agle, & Wood, 1997; Blattberg, 2004).

Under this view, SRSS should be an expected outcome for firms under pressure from their suppliers or customers to consider CSR implications when making sourcing decisions. However, as evidenced in other settings where employees’ ethical orientations act in concert with firm’s ethical guidelines and efforts to inform their actions (Douglas et al., 2001), it is possible that external influences alone will not fully explain how ethically employees execute their duties. The supply manager’s own ethical intentions may also help explain firm-level SRSS decisions. Accordingly, we propose competing mediation hypotheses, such that both employee intentions and the drivers of the same intentions are both plausible predictors of SRSS:

\[ H4a: \text{ SMEI mediate the relationships between the focal antecedents and SRSS.} \]
\[ H4b: \text{ The focal antecedents impact SRSS positively and directly, without mediation by SMEI.} \]

National Context Moderator

China, the United Arab Emirates, and the United States were selected as research contexts based on the diversity of their national orientations toward CSR-related issues and because these nations also provide a culturally heterogeneous sample frame based on the Kogut and Singh (1988) index of cultural distance. Via these
samples we can assess the robustness and generalizability of our SRSS-related findings.

The nations included in our study are posited to differ in their antecedent—ethic

al intentions relationships due to their differential approaches on the power
distance and collectivism aspects of Hofstede’s (1984) national cultural dimen-
sions, which are cited as those dimensions most closely associated with economic
organizational dynamics (Hofstede and Hofstede, 2005; Kirkman et al., 2009).
Power distance refers to the extent to which individuals within a national context
are accepting of variations in individuals’ relative power, and are therefore recep-
tive to the status, authority, and/or leadership of others (Hofstede, 1984; Patel,
Harrison, & McKinnon, 2002). Alternatively, collectivism refers to the extent to
which occupants of a cultural context relate to others within their society/social
group based on cognitive and emotional attachments (Husted and Allen, 2008).
Of the countries under examination, China and the United Arab Emirates each
have been established as having extremely high power distance (score = 80, per
Hofstede and Hofstede 2005), thus implying that formalized or hierarchically
governed business structures are commonplace, whereas the United States (40)
has a relatively low power distance reflective of more egalitarian governance. In
addition, the United States is extremely individualistic (score = 91), reflecting
lower levels within-workgroup homogeneity or integration, whereas China (20)
is considered an extremely collectivistic society, and the United Arab Emirates is
relatively collectivistic to neutral (38).

We can theorize magnitudinal differences in the relationships between the
three focal antecedents and supply manager ethical intentions based on the power
distance and collectivism characteristics of the national cultures under review.
Employees from high power distance cultures are known to be more deferential
to formal authority, are more receptive to organizational hierarchy, and tend not to
question organizational norms (Atwater et al. 2002; Kirkman et al., 2009). As a
result, we might expect the supply managers from the Chinese and U.A.E. samples
to exhibit greater ethical intentions based on based on TMEBs.

Similarly, there already exists limited evidence that employees working in
firms in highly collectivist contexts are less likely to make ethically questionable
or risky behavioral choices than are those in individualist contexts, due to the
greater value placed on the common good of everyone within the firm and its
interconnected social system (Trevino, 1986; Husted and Allen, 2008). However,
evidence also exists that in some highly individualized cultural contexts, firms and
their members are more likely to view internal and external stakeholders as “ex-
tensions” of the individual due to the presence of strong fiduciary ties between the
individual and the stakeholder, whether perceived or actual (Williams and Zinkin,
2008). These theoretical premises combine to form a “u-shaped” collectivism per-
spective for supply managers. Managers acting based on a neutral position on the
collectivism continuum would be expected to yield less susceptibility to external
pressure for ethical behavior or employees’ ethical orientation than those at either
extreme. On this basis, we hypothesize that external pressure to behave ethically
and the employees’ ethical orientation will more strongly impact supply manager
ethical intentions for the Chinese and U.S. samples than for the U.A.E. sample.
**H5a:** The relationship between TMEBs and SMEI will be stronger for the Chinese and U.A.E. samples than for the U.S. sample.

**H5b:** The relationship between employees’ ethical orientation and SMEI will be stronger for the Chinese and U.S. samples than for the U.A.E. sample.

**H5c:** The relationship between external pressure for ethical behavior and SMEI will be stronger for the Chinese and U.S. samples than for the U.A.E. sample.

**RESEARCH DESIGN**

**Data Collection Procedures and Sample Frames**

Given the lack of secondary data available to assess SRSS phenomena, primary data collection was necessary. A questionnaire was designed in electronic and paper formats following Dillman (2008), with items adapted from studies involving similar constructs of interest. Item texts and measurement properties for each measurement scale appear in the Appendix. Because a multinational sample including both Chinese and English speaking participants was required, the survey was constructed in both languages with measurement invariance established across the samples. Chinese respondents received surveys written in that language, whereas English versions captured managerial responses in both the United States and the United Arab Emirates. However, as Zhao et al. (2006) note, some professional words and concepts in English do not have a direct Chinese equivalent. Thus, to develop the Chinese language survey, Singh’s (1995) back-translation process was used with professional translators hired to maximize equivalence. All English items were translated to Chinese by one professional translator and then translated back to English by another. Misaligned meanings and syntax were corrected following translation and the process was repeated. After two iterations no differences remained.

Given the study objectives, samples of supply managers representing the three countries of interest were targeted for hypothesis testing. The participants in each national setting were restricted to job titles indicating direct involvement in goods and services procurement. Respondents were first contacted via e-mail, and if necessary, next by phone. Variations in response mode were based upon national norms and Internet availability. Specifically, given Internet ubiquity in the United States and United Arab Emirates, respondents there were offered an opportunity to respond either online (via Zoomerang) or in paper/FAX format. Based on concerns that uneven Internet access might present nonresponse bias concerns for the Chinese sample, the survey was distributed through the postal service in paper format, and by e-mail. Past research has demonstrated that responses by paper and electronic/Internet surveys within a single study generate equivalent data quality (Griffis et al., 2003).

The China Business Directory was utilized to identify potential Chinese respondents who could be classified as manufacturers, service providers, or retailers. Within these classes, 800 potential respondents were randomly sampled. To obtain participation, we contacted the organization’s top-listed executive. To encourage replies, the researchers contacted respondents three times via e-mail or with
reminder cards through regular mail. We received 88 responses through e-mail and 18 through regular mail (13.0% response rate). Although a low rate by conventional standards, Chinese managers are notoriously difficult to sample. This rate does provide sufficient statistical power to test the hypotheses.

For the United Arab Emirates, we sourced respondents from the Dubai Chamber of Commerce and Industry (DCCI) membership database. Initially, 800 e-mail contacts were made to gain participation. Based on each respondent’s preference, questionnaires were then e-mailed or faxed. We followed-up with duplicate cover letters and questionnaires to non-respondents three weeks following the initial communication, with the process repeated for up to three times following three subsequent 3-week periods. The final response set included 210 responses (26.25% response rate).

The sample for the United States was selected using Zoomerang’s ZoomPanel. ZoomPanel consists of potential research participants who are rewarded for their participation in research studies. The participants work in a variety of industries and hold positions ranging from laborers to top executives. Despite initial concerns about the use of rewarded panels, their utility and quality has been demonstrated in the past in business research (Deutskens et al., 2004) and in supply/operations management specifically (Autry et al., 2010). Panel members are prequalified for appropriate job position, industry, and experience related to the research question; all unqualified responses are removed. From a sample frame of 1000 supply managers working in the United States, 165 valid responses were obtained (16.5% response rate).

Measurement

Measures for the constructs of interest were adapted from Carter and Jennings’ (2004) survey, but with some meaningful differences applied as needed to meet the current research goals. For the items in the questionnaire, the respondent was asked to serve as a key respondent for the purchasing unit as a whole. Before deploying the survey, all items were subjected to two rounds of pretesting with a large panel of supply chain managers. The completed survey was also assessed for content validity by four academic researchers having expertise in SR or supply management. The feedback was used to improve the questionnaire pre-usage.

Endogenous Variable: SRSS

The items used to measure SRSS were based conceptually on a subset of the items used to tap Carter and Jennings’ (2004) PSR that were specifically linked to the supplier selection task, resulting in a formative, first-order measure (Diamantopoulos and Winklhofer, 2001). Respondents were asked to indicate agreement or disagreement with eight statements describing how they select suppliers with CSR principles in mind. A 7-point Likert scale was used to measure each statement with 1 = strongly disagree and 7 = to strongly agree.

Exogenous Variables

All exogenous variables were measured with a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree.
Employees’ ethical orientation (EEO) refers to the underlying orientation of the firm’s employees toward ethical behavior. Three items adapted from Salam (2009) and Carter and Jennings (2004) were used as measures. Adjustments were made to Carter and Jennings’ (2004) similar scale because examination of their survey stems revealed their measures to be focused on employee values as antecedents to departmental SR, which differed from the current purpose; rather, we are interested here in the enduring current employee orientation related to ongoing ethical behavior. TMEB refers to the actions and examples supporting ethical behavior represented by the organization’s leaders. The three items used to measure top management ethical behavior were also based closely on those used by Salam (2009) and Carter and Jennings (2004).

External pressure to behave ethically (EPBE) is the extent to which suppliers or customers subject the organizations under observation to ethicality expectations. The three items used to measure this construct were adapted from Carter and Jennings (2004) and Carter and Carter (1998). SMEI refer to the supply manager’s (lack of) propensity to breach ethical norms in the supply chain relationship context. These items were adapted from Carter and Jennings (2004) and Carter (2000). Respondents were asked to indicate agreement or disagreement with statements related to how they behave when selecting suppliers.

Control Variables

Three control variables representing industry sector, organization size, and firm ownership structure were included to check for impact on the intermediate and final outcomes of interest. Industry sector and firm size are commonly understood such that they warrant no discussion. Given the global setting of the study, a brief note on ownership structure is warranted. The ownership structure (e.g., public, private, government owned, joint venture) of an organization could influence how much stakeholders effect organizational practices and whether socially responsible behaviors are rewarded or promoted by the host government. Each of the three control variables was measured on a discrete (categorical) scale depicting the range of possible states.

Sample Characteristics

As shown in Table 1, the samples from the three nations include companies headquartered in many countries, though in each national sample the majority was headquartered in the host country. In China, companies from 14 other nations were included in addition to host country firms, indicative of China’s market emergence. Across all three samples, company sizes skew somewhat to the small side in terms of sales dollars and employees (<$50M USD; <100 employees). A broad variety of industries are represented, with light manufacturing, transportation/logistics, and construction being represented most prominently. Most firms sampled were privately owned (cross-sample average: 58%), with the United Arab Emirates showing a strong majority (83%). A plurality of respondents work in middle or upper management positions, though strong minorities hold executive or lower management roles.
Table 1: Sample characteristics.

<table>
<thead>
<tr>
<th>Location headquarters</th>
<th>Country</th>
<th>%</th>
<th>Country</th>
<th>%</th>
<th>Country</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>CHN</td>
<td>52</td>
<td>U.A.E.</td>
<td>91.4</td>
<td>United States</td>
<td>93</td>
</tr>
<tr>
<td>United States</td>
<td>24</td>
<td></td>
<td>KUW</td>
<td>2.4</td>
<td>FRA</td>
<td>2</td>
</tr>
<tr>
<td>UK</td>
<td>5</td>
<td></td>
<td>UK</td>
<td>1.4</td>
<td>CAN</td>
<td>1</td>
</tr>
<tr>
<td>CAN</td>
<td>4</td>
<td></td>
<td>AUS</td>
<td>1</td>
<td>FIN</td>
<td>1</td>
</tr>
<tr>
<td>GER</td>
<td>3</td>
<td></td>
<td>GER</td>
<td>.5</td>
<td>GER</td>
<td>1</td>
</tr>
<tr>
<td>AUS</td>
<td>2</td>
<td></td>
<td>HKG</td>
<td>.5</td>
<td>KSA</td>
<td>1</td>
</tr>
<tr>
<td>UKR</td>
<td>2</td>
<td></td>
<td>IND</td>
<td>.5</td>
<td>UK</td>
<td>1</td>
</tr>
<tr>
<td>BEL</td>
<td>1</td>
<td></td>
<td>KSA</td>
<td>.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BRZ</td>
<td>1</td>
<td></td>
<td>LEB</td>
<td>.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CZE</td>
<td>1</td>
<td></td>
<td>QAT</td>
<td>.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HKG</td>
<td>1</td>
<td></td>
<td>TUR</td>
<td>.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JAP</td>
<td>1</td>
<td></td>
<td>United States</td>
<td>.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NED</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RUS</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SWE</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Last year sales</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0–$50M USD</td>
<td>49.0</td>
<td>76.4</td>
<td>48.5</td>
</tr>
<tr>
<td>$50M–$500M USD</td>
<td>22.1</td>
<td>18.7</td>
<td>21.8</td>
</tr>
<tr>
<td>Greater than $500M</td>
<td>28.9</td>
<td>4.9</td>
<td>29.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary industry</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation/logistics</td>
<td>13.9</td>
<td>5.3</td>
<td>12.2</td>
</tr>
<tr>
<td>Construction</td>
<td>11.7</td>
<td>29.2</td>
<td>7.9</td>
</tr>
<tr>
<td>Light manufacturing</td>
<td>11.7</td>
<td>13.9</td>
<td>13.4</td>
</tr>
<tr>
<td>Heavy manufacturing</td>
<td>11.7</td>
<td>4.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Retail</td>
<td>6.4</td>
<td>10.1</td>
<td>11.0</td>
</tr>
<tr>
<td>Other</td>
<td>44.6</td>
<td>36.7</td>
<td>50.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership structure</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privately held</td>
<td>42.4</td>
<td>83.0</td>
<td>54.8</td>
</tr>
<tr>
<td>Publicly held</td>
<td>23.9</td>
<td>5.0</td>
<td>23.9</td>
</tr>
<tr>
<td>Pub/Prv. joint</td>
<td>9.8</td>
<td>10.5</td>
<td>11.0</td>
</tr>
<tr>
<td>Government owned</td>
<td>23.9</td>
<td>1.5</td>
<td>10.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Respondent position</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top executive</td>
<td>15.4</td>
<td>27.6</td>
<td>11.5</td>
</tr>
<tr>
<td>Upper management</td>
<td>18.3</td>
<td>29.5</td>
<td>40.6</td>
</tr>
<tr>
<td>Middle management</td>
<td>21.2</td>
<td>19.5</td>
<td>30.9</td>
</tr>
<tr>
<td>Lower management</td>
<td>21.2</td>
<td>16.2</td>
<td>7.9</td>
</tr>
<tr>
<td>Other</td>
<td>23.9</td>
<td>5.2</td>
<td>9.1</td>
</tr>
</tbody>
</table>

DATA ANALYSIS AND RESULTS

We employed partial least squares SEM (PLS-SEM Chin, Marcolin, & Newsted, 2003; Hair, Ringle, & Sarstedt, 2011) to analyze the data, using SmartPLS 2.0 software (Ringle, Wende, and Will, 2005). Although covariance-based SEM (CB-SEM) is a commonly applied method, the objectives of this research and properties of the data gathered necessitated the use of PLS-SEM over CB-SEM, for several
Table 2: Descriptive statistics.

<table>
<thead>
<tr>
<th>Construct</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employees’ ethical orientation</td>
<td>1.00</td>
<td>.53</td>
<td>.61</td>
<td>.34</td>
<td>.47</td>
</tr>
<tr>
<td>2. Stakeholder pressure for ethical behavior</td>
<td>.73***</td>
<td>1.00</td>
<td>.44</td>
<td>.26</td>
<td>.34</td>
</tr>
<tr>
<td>3. Top management support for ethical behavior</td>
<td>.78***</td>
<td>.66***</td>
<td>1.00</td>
<td>.38</td>
<td>.47</td>
</tr>
<tr>
<td>4. SMEI</td>
<td>.59***</td>
<td>.51***</td>
<td>.62***</td>
<td>1.00</td>
<td>.59</td>
</tr>
<tr>
<td>5. SRSS</td>
<td>.69***</td>
<td>.66***</td>
<td>.69***</td>
<td>.77***</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Mean: 5.19 4.71 5.20 5.33 5.09
Standard deviation: 1.40 1.43 1.47 1.48 1.37
Average variance extracted: 0.79 0.83 0.81 0.83 0.82
Composite reliability: .77 .88 .89 .92 .92

*Estimate is significant to \( p < .05 \).
**Estimate is significant to \( p < .01 \).
***Estimate is significant to \( p < .001 \).

Note: Coefficients above the diagonal represent shared variance between constructs. All construct average variance extracted (AVE) estimates exceed shared variances for related constructs, supporting discriminant validity (per Fornell and Larker, 1981).

reasons. First, the measures of SRSS used were adapted from a subsample of the Carter and Jennings (2004) PSR measures, but are not representative of that concept as a whole. Rather, only a subset of the PSR items were adapted for use in the different context of this study. As such, the new construction of SRSS must be considered developmental and the testing of the antecedents upon SRSS is made in a predictive rather than a confirmatory manner. This is a situation where Hair et al. (2011) recommend PLS-SEM over CB-SEM (p. 140). In addition, the assumption of multivariate normality necessary to the use of CB-SEM was violated in the obtained sample, in particular for the measures of EEO and SRSS, and as such CB-SEM should not be used (Diamantopoulos and Siguaw, 2000). Furthermore, SRSS was composed of a mix of items that represent a formative rather than reflective theoretical structure, that is, according to Jarvis, Mackenzie and Podsakoff “...[t]he indicators need not be interchangeable for formative measurement models but should be for reflective measurement models” (2003, p. 203). For constructs (defined by) formative measurement, and given its use within the model with (other) reflective measures, PLS-SEM is recommended (Hair et al., 2012). These analyses are described below.

Psychometric Analyses

We began by constructing a measurement model using the SmartPLS software. As seen in the Appendix, factor loadings are high (in excess of 0.74), with low standard errors. Furthermore, as seen in Table 2, average variances extracted ranged from 0.79 to 0.83, indicating high convergent validity (i.e., greater than 0.50). Composite reliabilities from 0.77 to 0.92 indicated reliable scale construction (i.e., greater than the 0.70). We assessed composite reliability as it considers actual factor loadings rather than assuming equal weight for each item, as in calculating Chronbach’s \( \alpha \).
We assessed discriminant validity by comparing average variance extracted for each individual construct to its shared variance with all other constructs, with a higher AVE than shared variance for a pairing of constructs supporting discriminant validity (Table 2). The largest shared variance value occurs for the purchasing organization’s valuation of ethical behavior/top management support pairing at 0.61. The AVEs for these constructs are 0.79 and 0.81, respectively, suggesting discriminant validity. All other shared variances were below 0.61, and all AVE values 0.79 or greater, leading us to consider discriminant validity concerns as minimal.

Bias and Invariance Assessments
Because we employed a survey methodology, the data were tested for three forms of response bias frequently associated with surveys. We performed checks for social desirability bias, common method variance, and nonresponse bias. We also assessed the measurement invariance, the equivalence of our focal constructs across sample settings, because our survey was administered in different languages.

Social desirability bias
Data quality can be affected when survey respondents reply to questions in a manner the respondent hopes will be viewed favorably by others (Thompson and Phua, 2005). Social desirability bias was a potential threat (Crowne and Marlowe, 1960). Several steps were taken to assess and mitigate this possibility. Following the advice of Crowne and Marlowe (1960), respondents were specifically instructed at the outset of the survey to respond for their company rather than offering their own values or feelings. In this way, social desirability bias was partially mitigated for SRSS by effectively allowing the respondent to “hide” among the individuals in the purchasing group. In addition, social desirability bias for all other scales employed in the study was assessed through item pretesting as well as post hoc analyses. As suggested by Steenkamp, de Jong, and Baumgartner (2010), social desirability was assessed using a multidimensional scale measuring self-perceptions of emotional, intellectual, and social qualities (ERT) as well as attributes related to responsibility and interpersonal relationships (MRT). We note that empirical research by Steenkamp et al. (2010) led them to the conclusion that the traditionally employed social desirability construct provided by Crowne and Marlowe (1964) can generate a false negative reading due to its single factor structure/unidimensionality confounding the emotional and relational rationale for responding in a socially desirable manner. Thus, we employ the Steenkamp et al. multidimensional version, while acknowledging its relative immaturity within quantitative business research contexts. Ordinary least squares (OLS) regressions were conducted related to all major study variables to determine if there was a significant relationship between the social desirability dimensions of ERT and MRT with the constructs within the model. As neither factor significantly associated with the focal concepts, social desirability bias was deemed nonproblematic.
Common method and nonresponse biases

Concerns of common method bias were addressed by employing the prescriptions of Podsakoff et al. (2003). Specifically, two steps were undertaken: (i) dependent and independent measures were separated within the surveys, and (ii) post hoc analysis was performed to verify that no correlation existed between contiguous but theoretically unrelated items. Observation of the recommended correlations suggests common method bias is nonproblematic in the current study. In addition, steps were taken to mitigate the potential impacts of nonresponse bias for each of the samples. Measures were taken to increase the overall response rates for all samples, and the research team conducted abbreviated follow-up phone surveys for the Chinese sample to assess possible differences in response patterns between nonrespondents and respondents; no significant differences were found across these two groups (Lambert and Harrington, 1990). As a second test of non-response bias, the first and late quartile waves for all samples were compared to each other for statistical equivalence according to procedures of Armstrong and Overton (1977). Evidence showed the subsamples to be equivalent, suggesting nonresponse bias did not meaningfully impact the focal relationships.

Measurement invariance

International business research undertaken across multiple countries must ensure that conceptually equivalent measurements are taken in order for comparisons across models to be trustworthy (Vandenberg and Lance, 2000). Because we collected data in Arabic, Chinese, and U.S. national contexts using English and Chinese language surveys, invariance of construct measures in this study was assessed via multigroup CFA, as per Steenkamp et al. (2010).

We first defined a configural invariance model using M-Plus modeling software with no cross-group factor constraint imposed. Configural invariance assesses whether the same pattern of factor loadings exists across samples drawn from different countries. Our results indicated that the baseline model with free factor loadings fit the data well (NFI = .93; RMSEA = .055). The normed $\chi^2$ was 2.117, below the critical value of 3.00, and thus we inferred from these statistics that configural invariance existed across the three samples.

Next, we tested the metric invariance to examine whether factor loadings are identical for each scale item between any two samples. We constrained all the factor loadings to be equal across the samples, and results showed that the metric models fit the data (minimum NFI = .90; maximum RMSEA = .079), and the changes in chi-square were not significant, thus the full metric invariance models were not significantly worse than a baseline model. Finally, we evaluated scalar invariance to determine whether cross-national differences in means of observed items are due to differences in the means of the underlying constructs by constraining all factor loadings and intercepts to be equal across groups (minimum NFI = .88; maximum RMSEA = .08). These analyses provide adequate support for invariance, though per Vandenberg and Lance (2000), we caution against extrapolating our findings to other cultural scenarios.
Table 3: PLS–SEM analysis.

<table>
<thead>
<tr>
<th>Analysis/variable</th>
<th>b</th>
<th>SE</th>
<th>$R^2$</th>
<th>b</th>
<th>SE</th>
<th>$R^2$</th>
<th>b</th>
<th>SE</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>China</td>
<td>U.A.E.</td>
<td>United States</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 1: Controls and antecedents → SRSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DV = SRSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>0.09</td>
<td>0.12</td>
<td></td>
<td>0.00</td>
<td>0.11</td>
<td></td>
<td>0.06</td>
<td>0.11</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>0.10</td>
<td>0.12</td>
<td></td>
<td>0.01</td>
<td>0.10</td>
<td></td>
<td>0.04</td>
<td>0.07</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>0.05</td>
<td>0.13</td>
<td>0.05</td>
<td>0.02</td>
<td>0.09</td>
<td>0.04</td>
<td>0.05</td>
<td>0.09</td>
<td>0.06</td>
</tr>
<tr>
<td>Step 2: Controls and antecedents → SMEI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DV = SRSS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>0.18</td>
<td>0.12</td>
<td></td>
<td>0.03</td>
<td>0.09</td>
<td></td>
<td>0.05</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>Ownership</td>
<td>0.12</td>
<td>0.12</td>
<td></td>
<td>0.08</td>
<td>0.12</td>
<td></td>
<td>0.04</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>0.00</td>
<td>0.11</td>
<td></td>
<td>0.03</td>
<td>0.11</td>
<td></td>
<td>0.05</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>EEO</td>
<td>0.15</td>
<td>0.13</td>
<td></td>
<td>0.09</td>
<td>0.09</td>
<td></td>
<td>−0.09</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>TMEB</td>
<td>0.05</td>
<td>0.10</td>
<td></td>
<td>0.11</td>
<td>0.10</td>
<td></td>
<td>0.54</td>
<td>0.09</td>
<td></td>
</tr>
<tr>
<td>EPBE</td>
<td>0.55*</td>
<td>0.13</td>
<td>0.60</td>
<td>0.21*</td>
<td>0.06</td>
<td>0.43</td>
<td>0.11</td>
<td>0.08</td>
<td>0.68</td>
</tr>
</tbody>
</table>

Continued
Table 3: Continued

<table>
<thead>
<tr>
<th>Analysis/variable</th>
<th>China</th>
<th>U.A.E.</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>$SE$</td>
<td>$R^2$</td>
</tr>
<tr>
<td><strong>DV = SMEI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>-0.02</td>
<td>0.09</td>
<td>0.11</td>
</tr>
<tr>
<td>Ownership</td>
<td>0.09</td>
<td>0.09</td>
<td>-0.02</td>
</tr>
<tr>
<td>Industry</td>
<td>0.02</td>
<td>0.06</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>DV = SMEI</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>0.01</td>
<td>0.11</td>
<td>0.10</td>
</tr>
<tr>
<td>Ownership</td>
<td>-0.06</td>
<td>0.12</td>
<td>-0.03</td>
</tr>
<tr>
<td>Industry</td>
<td>0.04</td>
<td>0.15</td>
<td>0.11</td>
</tr>
<tr>
<td>EEO</td>
<td>0.49*</td>
<td>0.10</td>
<td>0.11</td>
</tr>
<tr>
<td>TMEB</td>
<td>0.02</td>
<td>0.09</td>
<td>0.30*</td>
</tr>
<tr>
<td>EPBE</td>
<td>-0.08</td>
<td>0.08</td>
<td>0.14</td>
</tr>
<tr>
<td><strong>Steps 3: SMEI → SRSS with control and antecedents included</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>DV = SRSS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>0.15*</td>
<td>0.11</td>
<td>-0.03</td>
</tr>
<tr>
<td>Ownership</td>
<td>-0.11*</td>
<td>0.11</td>
<td>0.00</td>
</tr>
<tr>
<td>Industry</td>
<td>0.07</td>
<td>0.12</td>
<td>0.01</td>
</tr>
<tr>
<td>EEO</td>
<td>0.18*</td>
<td>0.08</td>
<td>0.10</td>
</tr>
<tr>
<td>TMEB</td>
<td>-0.36*</td>
<td>0.09</td>
<td>0.13</td>
</tr>
<tr>
<td>EPBE</td>
<td>-0.07</td>
<td>0.11</td>
<td>0.08</td>
</tr>
<tr>
<td>SMEI</td>
<td>0.64*</td>
<td>0.05</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Abbreviation: DV, dependent variable.

*p < .05.
Hypotheses Testing
To evaluate our hypotheses, we ran a series of models using SmartPLS 2.0. The results of testing appear in Table 3 and visually depicted in Figure 1. For each country setting, modeling Step One provides a baseline model containing only the control variable associations with SRSS in the upper block. Then, a direct effects model is presented, linking the controls and antecedents to SRSS. Step Two in each case is similar, but connected to the mediating variable. It contains control and direct effects models assessing the linkages with SMEI, and is therefore useful for assessing Hypotheses 1–3 in each national setting. Step Three in each national case then assesses all of the prior effects (controls, antecedents, and SMEI) on SRSS simultaneously, and is therefore useful for assessing mediation hypotheses H4a and H4b (which are competing hypotheses). Finally, by comparing the significance patterns of Model 3 across all three relevant contexts, we evaluate H5.

**Figure 1:** Theoretical model. Country listed with hypotheses represents the sample(s) where hypotheses are supported.

We first examined the significance and direction of the EEO coefficients relating to SMEI in Step Two, as a means of evaluating H1. This hypothesis was supported in the Chinese and U.S. models ($B = 0.49, p < .001$; $B = 0.39, p < .001$), but not in the U.A.E. model (model E1: $B = 0.11, p > .05$). Similarly, to test H2, we examined the significance and direction of the TMEB coefficients relating to SMEI in Step Two. This hypothesis was supported in the U.A.E. model only ($B = 0.30, p < .01$), whereas in the Chinese and U.S. models, the relation was
unsupported ($B = 0.02, p > .05; B = 0.09, p > .05$). To test H3, we examined the significance and direction of the EPBE coefficients in Step Two. This hypothesis was supported in the U.S. model ($B = 0.30, p < .01$); but not the U.A.E. or Chinese models ($B = -0.02, p > .05; B = -0.08, p > .05$).

The fourth hypothesis explores the possibility that SMEI may serve to mediate the relationships between the focal antecedents and SRSS. We used Shrout and Bolger’s (2002) approach to test mediation; the antecedents were first related to the outcome (Step One), and then to the mediator (Step Two), and then finally, the mediator to the outcome (Step Three). Via this sequence, full mediation can be claimed when the direct antecedent–outcome relationship is null in the full model while the combined indirect effect is significant (Preacher and Hayes, 2004), and partial mediation exists when both direct and indirect/combined effects are present. We used the Sobel (1982) test to determine the combined indirect effects.

Employing these procedural guidelines, we observe evidence supporting three SMEI mediation relationships, as displayed in Step Three. We consider them on a country-by-country basis. First, we observe in the Chinese context that SMEI fully mediates the EEO-SRSS relationship in the Chinese context ($EEO \rightarrow SMEI = 0.49, p < .05; SMEI \rightarrow SRSS = 0.64, p < .05$, when $EEO \rightarrow SRSS = 0.15, p > .10$, with Sobel = 2.31, $p < .05$). Second, we observe full mediation of the TMEB–SRSS relationship by SMEI for the U.A.E. sample ($TMEB \rightarrow SMEI = 0.30, p < .05; SMEI \rightarrow SRSS = 0.51, p < .05$, when $TMEB \rightarrow SRSS = 0.11, p > .10$, with Sobel = 2.13, $p < .05$). Third, we observe full mediation of the EEO–SRSS relationship by SMEI in the U.S. sample ($EEO \rightarrow SMEI = 0.39, p < .05; SMEI \rightarrow SRSS = 0.66, p < .05$, when $EEO \rightarrow SRSS = -0.09, p > .10$, with Sobel = 2.78, $p < .05$). Fourth, we observe full mediation of the EPBE–SRSS relationship by SMEI for the U.S. sample ($EPBE \rightarrow SMEI = 0.30, p < .05; SMEI \rightarrow SRSS = 0.66, p < .05$, when $EPBE \rightarrow SRSS = 0.11, p > .10$, with Sobel = 2.21, $p < .05$). In the remainder of the antecedent/nation scenarios, no mediating effect of SMEI is observed. We address the implication of the four revealed cases below.

Via the fifth hypothesis, we predicted that the three antecedents’ impacts on supply manager ethical intentions would vary by world region. For the two of the three tested instances—those for which the u-shaped collectivism effect was predicted (H5b and H5c)—we observed support. As predicted in H5b, the direct relationship between EEO and SMEI was significant for the Chinese and U.S. samples, but was insignificant for the U.A.E. sample. However, the U.S. sample was the only one to exhibit a strong EPBE–SMEI impact. Surprisingly, this direct path was nonsignificant for the Chinese sample. Furthermore, though national cultural theory provides a rational basis for expecting that TMEB would be stronger for the Chinese and U.A.E. samples than the U.S. sample, we again observe a surprising antipathy on the part of the Chinese sample to SMEI, via another nonsignificant effect. This leads to a compelling and interesting synopsis; only the EEO appears to drive SMEI for the Chinese sample, whereas TMEB and EPBE have negligible effect. Given China’s emergence as a leading manufacturing nation, these observations beg additional analysis, which we conduct in the discussion that follows.
DISCUSSION

The primary contributions of this research are threefold: (i) we apply the Carter and Jennings (2004) logic regarding the departmental notion of PSR to a narrower but important supply management domain: supplier selection; (ii) we assess supply manager ethical intentions as a mediator of three focal antecedent–SRSS relationships; and most importantly, (iii) we examine the relationships between SRSS and its predictors in three nationally diverse cultures. Our observations suggest that SRSS appears to be motivated differently across these national contexts of interest, leading to important practical and theoretical implications.

China

With regard to China, we observe two interesting effects: a direct effect linking EPBE to SRSS and an indirect effect linking EEO to SRSS via the SMEI mediator. In China, firms’ EEO correlates with SMEI, but not EPBE or TMEB. Thus, only when the purchasing organization employees are ethics-oriented are the supply manager’s ethical intentions meaningfully impacted. In our sample, the Chinese supply manager willingly enacts SRSS to gain external favor, but internalizes SRSS only when the localized employee orientation has influenced his/her perspective. Given that top management behavior and external pressure do not influence the indirect relationship on SRSS through ethical intentions, this finding implies that other forces outside the scope of our study are driving significant variance in supply manager ethical intentions.

More interesting, however, is the lack of significant national moderation effects impacting SMEI, as per H5. A possible explanation for the unexpected lack of top management and external effects that merits future consideration is Guanxi. Guanxi is a system prevalent in northeast Asia whereby business partners are selected based upon preexisting personal and business relationships. Particularly in China, conformance to Guanxi is expected if a corporation or manager wishes to succeed (Lovett, Simmons, & Kali, 1999; Dunfee and Warren, 2001). Perhaps in the case of this study, Guanxi has its locus in the purchasing department, that is, agents view the department as their central network and elevate it to higher status than other influencers. Given the lack of a significant relationship between TMEB or EPBE on SMEI in an otherwise hierarchical and collectivist society, might SMEI better be explained by their participation in a Guanxi network? For managers and firms operating outside of their home environment, this would be a key factor that merits study before interacting with Chinese supply partners.

United States

Versus China, the sampled U.S. supply managers respond differently to external pressures—we observe a direct relationship between EPBE and SRSS. This may be related to customer-oriented pressures within the U.S. market. Blocker et al. (2011) find that modern U.S.-based firms are more likely to be highly customer-oriented than those from other nations. However, the formation of SMEI for the U.S. sample appears more complex than for the Chinese sample. Although in the Chinese sample the only identified direct antecedent of SMEI was EEO, in the U.S.A. sample these SMEI is impacted by both the EEO and EPBE. In effect,
customers and suppliers impact SRSS both directly and indirectly through their influence on supply managers. This is consistent with the notions of and supply chain orientation found in prior research within Westernized economic settings (Kelley, 1992; Blocker et al., 2011).

Generally speaking, American activists and customers could be more educated on how business practices affect society and the environment. Furthermore, the low level of power distance within U.S. society creates a culture where concerned individuals or groups may challenge corporate actions deemed harmful to society. Accordingly, activists and customer groups have greater success pressuring businesses in the United States. Hence, supply management employees in the United States appear responsive to stakeholder needs and wants, as the recent theorization suggests.

**United Arab Emirates**

United Arab Emirates results differ significantly from the Chinese and U.S. cases; for the U.A.E. sample, SRSS is a fully mediated outcome of TMEB via SMEI. Unlike the Chinese and American samples, in the United Arab Emirates, EEO and EPBE do not influence SMEI or SRSS either directly or indirectly. Rather, SMEI fully mediates the relationship between TMEB and SRSS. The remaining antecedent effects display no significant direct or indirect effects.

In a nation where SR behaviors are widely accepted within business and social interactions, why are the ethical intentions of the supply manager directly related to SRSS whereas the influences of external partners and the employees' ethical orientation are less relevant? The relative institutionalization of SR practices in the United Arab Emirates might effectively raise the baseline expectations of SR behaviors (including SRSS) for all individuals in the firm, including supply managers. In contrast with the other regions studied, the mean score on the SRSS variable for the United Arab Emirates is higher and has a smaller standard deviation (5.28/1.06 for the United Arab Emirates, vs. 5.09/1.37 for the combined sample).

In the United Arab Emirates, are SR activities viewed as compulsory, even sans formal policies handed down by top management? If so, then the influences of external stakeholders, national culture, and coworkers may conflate to be perceived as a singular institutional force. This is especially possible given the emphasis the United Arab Emirates has placed in recent years upon ethics and social responsibility through government initiatives and highly publicized regulation (Vijayarghavan, 2011). In this study, U.A.E. SMEI is shaped by only one antecedent force: TMEB. This implies that top management example is the single most important differentiator of SRSS in U.A.E. businesses, though rote levels of SMEI and SRSS would generally be high, regardless.

**IMPLICATIONS, LIMITATIONS, AND FUTURE RESEARCH**

The human capital and social responsibility requirements for operating global supply chains are growing, and mistakes can be costly. Our findings help inform decision makers as to how to influence the ethical intentions of supply managers in expatriate or local national positions toward SRSS. Furthermore, these results
highlight the importance of identifying, recruiting, and training supply managers to be better aligned with the social responsibility objectives of the organization. With these findings, better hiring decisions can be made to better match candidates’ ethical orientations to these (and similar) global assignments, gain cost savings associated with employee retention, while promoting more efficient, effective and socially responsible supply chain management. Supply managers themselves may also benefit financially from a more precise calibration of localized training efforts and informal communication capabilities.

Our exploratory findings offer a robust initial view of the SRSS phenomenon across settings known to differ widely on SR issues. Our findings related to the role of SMEI within the SRSS process display stark contrasts by location. Yet as with all studies, limitations prohibit extrapolating our findings too carelessly to other samples or contexts. Although we assessed the SRSS phenomenon in three national settings, underlying governmental and social movements in these nations that are not captured by our study might influence results of follow-up studies. Furthermore, the majority of our respondents in the two less-developed nations are residents of large cities. Geographical or geopolitical differences (either globally or regionally) should be considered as controls in future studies.

Furthermore, as often occurs in empirical research, as many questions arose as were answered. The influence of SMEI was evidenced in all three settings, but it played different roles in the model for each location. The explanations for these differences in ethicality and its value remain undiscovered. Future studies would benefit from a more granular exploration than the national setting: perhaps subcultural or local characteristics caused respondents to enact or not enact SRSS in the ways reported. Furthermore, given that the study treated supplier and customers as a homogenous subgroup exerting external pressure on the supply management function, future research may benefit from analysis of these groups separately, to determine their unique effects on SMEI. Via additional research efforts such as these, firms operating global supply chains would have a better basis from which to conduct supply manager hiring, training, orientation, and SRSS assessment.

REFERENCES


Appendix

MEASUREMENT ITEMS AND FACTOR LOADINGS

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees’ ethical orientation (EEO)</td>
<td>EEO1: Morals held by individual employees</td>
<td>.938</td>
</tr>
<tr>
<td>(7-point Likert scale anchored as 1 = <em>not at all valued</em>, 7 = <em>valued to a great extent</em>)</td>
<td>EEO2: Desires of individuals to do what is right</td>
<td>.918</td>
</tr>
<tr>
<td></td>
<td>EEO3: Underlying values held by employees</td>
<td>.905</td>
</tr>
<tr>
<td>Top management ethical behaviors (TMEB)</td>
<td>TMEB1: Ethical examples set by top management</td>
<td>.903</td>
</tr>
<tr>
<td>(7-point Likert scale anchored as 1 = <em>not at all valued</em>, 7 = <em>valued to a great extent</em>)</td>
<td>TMEB2: Ethical requirements set by senior managers</td>
<td>.898</td>
</tr>
<tr>
<td></td>
<td>TMEB3: Top-down ethical initiatives introduced by leaders</td>
<td>.899</td>
</tr>
<tr>
<td>External pressure for ethical behavior (EPBE)</td>
<td>EPBE1: Social programs sponsored by our customers/suppliers</td>
<td>.878</td>
</tr>
<tr>
<td>(7-point Likert scale anchored as 1 = <em>not at all valued</em>, 7 = <em>valued to a great extent</em>)</td>
<td>EPBE2: Awareness of social issues by our customers/suppliers</td>
<td>.905</td>
</tr>
<tr>
<td></td>
<td>EPBE3: Customer/supplier desires to work with socially responsible partners</td>
<td>.929</td>
</tr>
<tr>
<td>Supply managers’ ethical intentions (SMEI)</td>
<td>SMEI1: We avoid using terms in our contracts that would allow us to take unfair advantage over suppliers</td>
<td>.905</td>
</tr>
<tr>
<td>(7-point Likert Scale anchored as 1 = <em>strongly disagree</em>, 7 = <em>strongly agree</em>)</td>
<td>SMEI2: We avoid tactics that could mislead supplier salespeople</td>
<td>.885</td>
</tr>
<tr>
<td></td>
<td>SMEI3: We never lie or exaggerate when dealing with suppliers.</td>
<td>.937</td>
</tr>
<tr>
<td></td>
<td>SMEI4: We avoid blaming our suppliers for mistakes that were our own fault</td>
<td>.941</td>
</tr>
<tr>
<td>Socially responsible supplier selectiona (SRSS)</td>
<td>SRSS1: We try to choose suppliers whose processes and products are environmentally safe</td>
<td>.869</td>
</tr>
</tbody>
</table>
Construct Item Loading

(7-point Likert scale anchored as 1 = strongly disagree, 7 = strongly agree).

<table>
<thead>
<tr>
<th>Item</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRSS2: We try to choose suppliers that use recyclable or reusable packaging</td>
<td>.772</td>
</tr>
<tr>
<td>SRSS3: We try to choose suppliers who participate in green purchasing initiatives with us</td>
<td>.838</td>
</tr>
<tr>
<td>SRSS4: We try to choose suppliers that use nonhazardous materials and processes</td>
<td>.837</td>
</tr>
<tr>
<td>SRSS5: We try to choose suppliers that pay their employees a fair wage to live on</td>
<td>.868</td>
</tr>
<tr>
<td>SRSS6: We try to choose suppliers that do not use sweatshop labor</td>
<td>.741</td>
</tr>
<tr>
<td>SRSS7: We try to choose suppliers that do not use child labor</td>
<td>.816</td>
</tr>
<tr>
<td>SRSS8: We try to choose suppliers that operate a safe work environment</td>
<td>.886</td>
</tr>
</tbody>
</table>

To tap individual supply manager(s) behaviors, the following question stem was used for this question: “Please agree or disagree with the statements related to how you and/or the other individual supply managers in your purchasing organization choose the company’s suppliers.”


Chad W. Autry is the William J. Taylor Professor of Supply Chain Management at the University of Tennessee. He received his BBA and PhD in business administration from the University of Oklahoma, and an MBA from Oklahoma City University. His research focuses on the impacts of plural simultaneous forms of connectivity in the supply chain, inclusive of social relationships, business processes, and information technology linkages, as well as the reciprocal linkage between supply chain corporate performance and social responsibility. His work has appeared in various academic outlets in the supply chain management and general management fields. He is currently Editor in Chief of the Journal of Supply Chain Management.

LaDonna M. Thornton is an assistant professor of supply chain management in the College of Business at the University of Nebraska. She received her PhD in
logistics from the University of Tennessee College of Business, an MBA from Vanderbilt University, and a BSBA in operations management, transportation & logistics, and purchasing from The Ohio State University. Prior to joining academia she worked in industry as a Transportation Manager and Distribution Manager. Her research has been published in Journal of Business Logistics, Journal of Supply Chain Management and the International Journal of Physical Distribution and Logistics Management. Her current research focuses on behavioral issues as well as social and political dynamics within supply chain management.

**Anis Ben Brik** is the President of the Eneref Institute, a sustainable development research and advocacy organization focused on raising awareness of the role sustainable supply chain initiatives can play in emerging economies. He was formerly Director of Social Policy for the Prime Minister’s office of the United Arab Emirates, and Director of Policy and Planning for the UAE Federal Demographic Council. He has taught sustainable concepts at several universities worldwide. He holds business degrees from Harvard Business School and the London School of Economics.