

# HOW BUYERS' ATTITUDES TOWARD SUPPLIER DIVERSITY AFFECT THEIR EXPENDITURES WITH ETHNIC MINORITY BUSINESSES

IAN BLOUNT 

The George Washington Carver Food Research Institute  
ian@gwcfri.org

MINGXIANG LI

Florida Atlantic University

Using data collected from 277 buyers employed at large purchasing organizations (LPOs) in the U.S. and U.K., this study investigates factors that might influence their willingness to procure goods and services from ethnic minority businesses (EMBs). The social capital literature is used to develop hypotheses concerning the cognitive, structural, and relational dimensions that may play roles in decisions to buy from minority firms. Subsequently, modern discrimination theory is employed to provide inductive insights into how buyers' attitudes toward supplier diversity mediate the effects of social capital on their procurement activities with EMBs. The results of multiple regression analysis suggest that in both the U.S. and U.K., positive social capital as perceived by the buyers has a direct, significant relationship with their expenditures with EMBs. The results also reveal that in both countries, buyers' attitudes toward supplier diversity mediate the relationship. Interestingly, although the U.S. originated the concept of supplier diversity, our research uncovers that U.K. LPO buyers have greater expenditures with their EMBs. Based on these findings, this research illustrates how strategic corporate social responsibility initiatives set forth by LPOs may be impacted by their buyers' social relationships with EMBs and their attitudes toward supplier diversity.

*Keywords:* corporate social responsibility; supplier diversity; ethnic minority business; social capital; modern discrimination theory

## INTRODUCTION

It has been over a decade since four influential articles on supplier diversity by Ram and Smallbone (2003), Shah and Ram (2006), Worthington, Ram, Boyal, and Shah (2008), and Worthington (2009) appeared in the literature. These articles focused on why large purchasing organizations (LPOs) around the world (firms with over 1,000 employees—see U.S. Bureau of Labor Statistics.gov [United States Bureau of Labor Statistics, 2020]) have found value in supplier diversity and are making significant strides to implement the ethos of diversity throughout their buying decision frameworks. The aforementioned articles all posit that supplier diversity is implemented at LPOs in an effort to address both economic and social issues, thus positively impacting their bottom line and

their reputation as forward-thinking corporate citizens. To date, supplier diversity is driven by strategic corporate social responsibility (CSR) initiatives and typically functions under the auspices of supply chain management departments at most LPOs (Carter, 2004; Carter & Jennings, 2004; Ram, Smallbone, & Linneker, 2002).

The United States Small Business Administration defines a minority business enterprise (MBE) as one owned by individuals who are socially disadvantaged (i.e., have been subjected to racial or ethnic prejudice or cultural bias because of their identity as members of a group) and economically disadvantaged (i.e., socially disadvantaged individuals who have not been able to compete due to diminished opportunities to obtain capital). This definition pertains to businesses

owned by Black Americans, Hispanic Americans, Native Americans, and Asian Pacific Americans, which includes Subcontinent Asian Americans (see SBA.gov). Twenty-five years later, Europe follows the U.S. lead and begins creating similar designations to identify and assist diverse firms through supplier diversity programs. In Europe, diverse firms are referred to as ethnic minority businesses (EMBs). EMBs include the following ethnicities: Asian (including the subcontinent of India and Central Asian countries), African, African Caribbean, Mixed Ethnicities (White with one of the other ethnicities), and Arab (Minority Supplier Development United Kingdom, 2020; see MSDUK.org). For consistency throughout the paper, the term EMB will be used because it relates more to ethnicity and is utilized in all areas of the world outside the U.S. where supplier diversity occurs.

From an economic perspective, supplier diversity is the apparatus by which LPOs can obtain valuable product and process insights from EMBs, which can help them obtain a sustainable competitive edge over their competitors that utilize more homogenous, typically White-owned suppliers that may not necessarily be in tune with what minority consumers desire (Adobor & McMullen, 2007, 2014; Slater, Weigand, & Zwirlein, 2008). The literature also states that EMBs can be more flexible and provide lower minimum-order quantities in a cost-effective manner and quicker turnaround times as compared to larger firms, which improves supply chain efficiency while also reducing risk for LPO buyers (Min, 2009). A recent study in the U.K. also found that minority firms have significant innovation to offer potential LPO customers (Nathan, 2015). LPOs' taking advantage of EMBs' innovation and insight is critically important, as ethnic minorities will become the majority population in the U.S. by 2044 and, by default, LPOs' largest customer base (Colby & Ortman, 2017). As noted by Ram and Smallbone (2003) and Worthington et al. (2008), a similar demographic shift is also taking place in Europe. More specifically, the United Nations states by 2050, Whites from most countries in Europe will no longer be the majority. Outside of low birth rates, which have led to the decline in Caucasian populations in Europe, they also attribute the demographic shift to ethnically diverse populations seeking a better life through immigration and those forced to become refugees fleeing from war-torn areas of the world to Europe (United Nations, 2020; see UN.org).

From a societal perspective, supplier diversity involves ethics, transparency, equity and inclusiveness, all tenets LPOs want associated with their overarching corporate social responsibility initiatives (Jaija, Asif, Montabon, & Chatha, 2018; Ram & Smallbone, 2003). Another societal benefit LPOs create when they

procure from EMBs is that EMBs tend to hire other minorities, which may reduce minority unemployment and potentially create new customers to purchase goods and services from LPOs that are actively engaging in supplier diversity (Bates, 1988; Fairlie & Robb, 2008, 2009, 2010). However, at present, no articles have empirically investigated whether LPOs are actually implementing their supplier diversity initiatives successfully by converting their strategic CSR rhetoric into measurable procurement actions.

To illustrate how these scholars garnered their perspectives (beyond the limited case study interviews conducted), one need only visit CSR pages on LPO websites where the importance of supplier diversity is placed front and center (Schoenborn, Morsing, & Crane, 2020; Tate, Ellram, & Kirchoff, 2010). However, if there is truly an abundance of goodwill among LPOs to grow and develop their EMBs, then the question of why there is such a significant difference in gross receipts between EMBs and comparable White-owned firms must be addressed, especially since supplier diversity has been a staple in the U.S. since 1972 and at the fore since 1999 in Europe (Carter, Auskalis, & Ketchum, 1999; Ram et al., 2002). In fact, gross receipts of EMBs in the U.S. average \$171,000 in comparison with \$650,000 for their White-owned counterparts, and the gap between the two continues to widen (MBDA.gov). Similar results are found in the EU with EMBs averaging about 30% of the revenue of their nondiverse counterparts (Ram & Jones, 2008). This growing disparity seems contrary to what should be occurring if LPOs are creating meaningful procurement opportunities for their minority vendors through their supplier diversity programs, which in most cases include supplier development components to help them become as competitive as possible with their nondiverse counterparts.

In recent years, many LPOs (and academicians) have expanded their definition of what it means to be a diverse business; in this research scheme, we focus only on those that are categorized by ethnicity as they have the most history and data, and more specifically, they still trail nonminority firms significantly by revenue and number of employees. We believe that before transitioning to investigations of the efficacy of supplier diversity for more recently designated diverse groups (i.e., gender, sexual orientation, military veterans, and people with disabilities), we must first conduct a thorough assessment of the ethnic groups for which these programs were initially created to determine whether they have been effective.

The literature provides many reasons for why buyers procure products or services from a particular supplier over another, beyond the fundamental need of obtaining a quality product or service at a competitive price. The most salient themes are relational in nature (Kwon

& Suh, 2005). Although relational themes have been exhaustively studied in the supply chain management (SCM) literature as it relates to White-owned firms (Nyaga, Whipple, & Lynch, 2010; Peck & Jüttner, 2000; Prajogo & Olhager, 2012), there is a paucity of research on EMBs, especially those that have moved beyond the start-up phase (Blount, Smith, & Hill, 2013). Most prior research has focused on the deficiencies of nascent EMBs such as their lack of scale (Shelton, 2005), focus on commodity-type products (Bates, 2001; Lowrey, 2007; Robb, 2002), founders' lack of education (Kollinger & Minniti, 2006), and firm and founder lack of capital (Coleman, 2004; Rasheed, 2004; Rhodes & Butler, 2004). Little attention has been paid to how EMBs fare after they have successfully navigated beyond these issues to become vetted and approved suppliers to LPOs (Shelton, 2010; Sonfield, 2016).

To address the sparse literature available on this topic, this research seeks to understand what role LPO buyers' social relations with EMBs play in their procurement decisions. Even more importantly, it seeks to determine whether LPO buyers' attitudes toward supplier diversity undergird their procurement behavior and, as a result, the LPOs' ability to achieve their CSR objectives. To contextualize these questions and ground them in the literature, this study utilizes the cognitive, structural, and relational dimensions of social capital theory to examine social capital's impact on LPOs' buyer expenditures with EMBs. The social capital framework is then complemented with modern discrimination theory (MDT) to examine whether LPO buyers' sentiments about the relevance and value of supplier diversity are a key underlying variable that mediates the relationship between social capital and expenditures with EMBs. The importance of addressing the scarcity of research investigating how LPO buyers and EMBs interact was uncovered by Yawar and Seuring (2017). Their research found that less than 15% of the research conducted in the CSR literature studies minority businesses.

The rest of the paper proceeds as follows: First, social capital and modern discrimination frameworks are discussed to develop hypotheses. Next, a description of the data and methods used for testing the hypotheses is covered. Finally, the paper concludes with the findings, theoretical and managerial implications, and potential limitations of the study along with recommendations for future research.

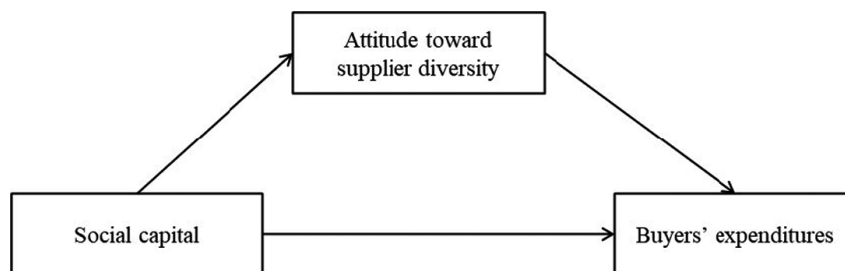
## THEORETICAL FRAMEWORKS AND HYPOTHESIS DEVELOPMENT

### Social Capital

A major reason for the revenue gap between EMBs and comparable White-owned firms is EMBs' inability to gain access to LPO buyers, which is one of the main drivers for the creation of supplier diversity initiatives (Bates, 2001; Giunipero, 1981; Worthington, 2009). Because of these barriers, the benefits of social capital, as postulated in the entrepreneurship and small- to mid-sized enterprise (SME) literatures (Grichnik, Brinckmann, Singh, & Manigart, 2014; Stam, Arzlanian, & Elfrig, 2014), may not necessarily extend to all members of the business community (Shelton & Minniti, 2018). One of the novel aspects of this study is that it investigates how LPO buyers view their social relations with EMBs from the U.S. and U.K. To date, there are few empirical studies that have focused on the perceptions of the EMB-LPO buyer-supplier relationship (BSR) across two countries (Worthington et al., 2008).

Social capital is embedded in relationships that facilitate collaboration and cooperation to achieve mutual benefits (Carpenter, Li, & Jiang, 2012; Inkpen & Tsang, 2005). This study focuses on the social capital that is in the BSR from the perspective of LPO buyers. Although the SCM literature recognizes the importance of social capital, there is no consensus as to what dimensions of social capital encourage LPO buyers to procure goods and services from suppliers

**FIGURE 1**  
Conceptual Model



(Lawson, Tyler, & Cousins, 2008; Roden & Lawson, 2014; Whipple et al., 2015). In this study, the cognitive, structural, and relational dimensions of social capital are analyzed to assess their impact on LPO buyers' procurement with EMBs. We argue that buyers' perception of social capital will have a direct and positive relationship with their expenditures with EMBs. Additionally, we hypothesize that buyers' attitudes toward supplier diversity will mediate the relationship. Figure 1 presents the conceptual model of our paper.

**Cognitive Dimension.** This paper posits that the cognitive dimension of social capital will play a pivotal role in LPO buyers' procurement activities with minority firms. The *cognitive dimension of social capital* was explicitly defined by Nahapiet and Ghoshal (1998) as the shared norms, values, and narratives between individuals or organizations. Tsai and Ghoshal (1998, p. 467) noted that shared values "embod[y] the collective goals and aspirations of the members of an organization." The authors discuss how organizations who share values will be more likely to become partners that share or exchange their resources. Cohen and Prusak (2001) go further to discuss how shared values bind members of human networks and communities, make cooperation possible, and benefit organizations.

The premise of goal congruence and mission alignment between EMBs and LPO buyers to enhance the level of cognitive social capital perceived by the LPO buyers is also critical to the BSR. Additionally, the interpretations of goal congruence through a shared culture and effort toward a mutually beneficial relationship can also improve the likelihood of EMBs being perceived in an advantageous light in the BSR (Inkpen & Tsang, 2005; Tsai & Ghoshal, 1998). To that end, it is posited that a shared vision along with mission congruence as perceived by the LPO buyers will increase commitment and influence their decision to procure goods and/or services from EMBs (Gillespie & Mann, 2004; Krause, Handfield, & Tyler, 2007). Following this logic, we propose the following hypothesis.

**Hypothesis 1:** LPO buyers that perceive their EMBs are displaying cognitive social capital will be more likely to have expenditures with those EMBs.

**Structural Dimension.** Much of the social capital research locates the source of social capital in the formal structure of the ties that make up the social network (Adler & Kwon, 2002). According to Granovetter (1973, p. 1361), "the strength of ties within a network defines the strength and quality of relations." Minority firms' inability to access necessary social

structures brings us to our next hypothesis. The lack of ethnic minorities situated in executive positions due to discrimination within LPOs places EMBs at a distinct disadvantage (Diversity Jobs.com). People often use their race and their culture to obtain information and access (McDonald, 2011; McPherson, Smith-Lovin, & Cook, 2001). The lack of relationships with primarily White procurement professionals can potentially lead to a lack of information exchange between EMBs and LPO buyers, potentially diminishing trust (see Diversity Jobs.com). As a result, EMBs often do not have the opportunity to submit proposals for potential contracts (Krause, Ragatz, & Hughley, 1999). This lack of structural relations may impair EMBs' opportunities to gain the confidence of LPO buyers, which may bias those buyers in properly assessing EMBs' true capabilities. Ultimately, these biases may negatively influence their procurement decisions (Krause, Handfield, & Tyler, 2007).

To address these issues, CSR strategists work to implement supplier diversity trainings of their procurement personnel to create open lines of communication and to generate a sentiment of reciprocity with their EMBs. In this paper, the *structural dimension of social capital* is interpreted as the social interactions between EMBs and their LPO buyers (Carey, Lawson, & Krause, 2011; Tsai & Ghoshal, 1998). Prior research by Lawson, Tyler, and Cousins (2008) concluded that information sharing during these interactions positively improves operational performance for the buying firm. The structural dimension also aligns with previous research by Cousins and Lawson (2007), who found that creating a regular pattern of interaction between buyers and suppliers using formal and informal methods can create a sentiment of closeness, build trust, and improve their likelihood of having expenditures with EMBs. Based on the above, the following hypothesis is posited:

**Hypothesis 2:** LPO buyers that perceive their EMBs are displaying structural social capital will be more likely to have expenditures with those EMBs.

**Relational Dimension.** The *relational dimension of social capital* is thought to be the trust, norms, and obligations of a relationship (Nahapiet & Ghoshal, 1998). Many minority businesses do not have personal contacts embedded within large corporations, making it extremely difficult for them to prove themselves trustworthy. Oftentimes, relationships are formed on golf courses, at dinners or cocktail parties. Minority businesses traditionally do not get the same opportunities to interact with large buying organizations in social settings due to discriminatory

practices (Bates, 2001; McDonald, 2011). Not being invited to such social interactions denies minority businesses the opportunity for LPO buyers to get to know them on a more intimate level (Jacqueline et al., 2007). Conversely, vendors with frequent opportunities to attend such social interactions are more likely to be perceived as trustworthy by LPO buyers.

Trust is considered to be a precursor to the development of a relationship (Anderson & Jack, 2002; Lewicki & Brinsfield, 2009; Witt, 2004), and previous literature has suggested that trusting relationships evolve from social interactions (Gulati, 1995). Also, research suggests that trust develops over time, something EMBs lack. The longer the track record of interaction, the more opportunities people have to demonstrate their willingness to invest in the relationship (Blau, 1986; Lewicki, McAllister, & Bies, 1998). Since trust takes time to develop, minority firms seek ways to build trust through more expeditious means to meet their objectives. EMBs depend on supplier diversity representatives to facilitate this process of trust development by providing interaction routines that allow EMBs to demonstrate their trustworthiness to LPO buyers (Worthington, 2009; Worthington et al., 2008). Good (1988) also notes that being around another person generally will increase an individual's favorable beliefs about that person. This logic leads to the following hypothesis:

**Hypothesis 3:** LPO buyers that perceive their EMBs as displaying trust-building relational social capital will be more likely to have expenditures with those EMBs.

**Modern Discrimination Theory.** In order to understand how LPO buyers develop their perspectives on the value and importance of supplier diversity, we utilize modern discrimination theory (MDT), which is rooted in the social psychology literature (Cortina, 2008; Dovidio & Gaertner, 2000). Prior MDT research has primarily focused on subtle workplace incivility between the dominant "in-group/majority" (typically Caucasian and male) toward ethnically diverse or female co-workers comprising the "out-group/minority", as opposed to more historic discrimination frameworks that examined explicit discriminatory practices that occurred in the early 1950s and 1960s in the U.S., where primarily African Americans were striving to have equal access to opportunities of employment, education, housing, and voting (Blumrosen, 1978). As articulated by Dipboye and Halverson (2004, p. 132), "Much of today's discrimination takes a more subtle form and has slipped out of the light into the dark side of the organization."

Previous literature has found that building social relationships can alter a person's/group's attitude toward other, different persons or groups (Andrevski, Richard, Shaw, & Ferrier, 2014). Social psychologists, human resource management, and diversity scholars have suggested that in order for the "in-group/majority" to alter their internal beliefs (which may be negative due to a lack of interactions with others/minorities) and begin to find value in the opinions, perspectives, and insights of the "out-group/minority", positive social interactions between the two must occur to build trust and establish norms (Derven, 2014; Distefano & Maznevski, 2000; Kearney & Gebert, 2009). They also posit that having goal congruence to accomplish specific projects or goals can also elicit positive outcomes (Horwitz & Horwitz, 2007; Jehn & Bezrukova, 2004). For example, Richard (2000) found that by LPOs increasing ethnic diversity on their corporate boards, firm performance improved.

We now extend MDT into a supply chain context by examining how an LPO buyers' personal sentiment toward supplier diversity impacts their likelihood of procuring goods and/or services from EMBs. We feel this extension is highly appropriate and applicable because exclusionary procurement practices toward EMBs followed a similar pattern as those found in historical government agencies and LPO hiring practices; first, government legislation occurred to help address discrimination in government procurement with EMBs, and subsequently, supplier diversity initiatives were established in the private sector to do the same (Rice, 1991; Worthington, 2009).

Beyond the assumption that social capital may influence firm performance, the extant supply chain literature has not investigated how a buyer's personal beliefs in general, and more specifically, how their attitude toward supplier diversity function as a key intervening variable between LPO buyers' perception of social capital with their EMBs and their likelihood of procuring goods/services from them. The scant literature on this subject has primarily focused on how an LPO's culture can influence a buyer's procurement habits with EMBs (Santos, 2004; Whitfield & Landeros, 2006), thus leaving an opportunity for this research to fill an important void. In our research, we bring to bear the three dimensions of social capital to examine how they may influence LPO buyers' attitude toward supplier diversity (mediator). As alluded to earlier, positive interactions between LPO buyers and their EMB suppliers may influence how they view supplier diversity. We extend this logic, by also positing that LPO buyers' attitude toward supplier diversity has an impact on their likelihood to procure goods or services from EMBs, thus buttressing our position for the use of mediation techniques (Baron & Kenny, 1986).

Any potential conscious/unconscious bias toward supplier diversity could be one of the reasons why there seems to be a disconnect between LPOs' pronouncements about their commitment to supplier diversity and the actual purchases made by their buyers that help facilitate the larger CSR strategy (Schoenborn, Morsing, & Crane, 2020; Whitfield & Landeros, 2006). Moreover, LPO buyers' attitudes toward supplier diversity could also be one of the causes contributing to the revenue gap between nondiverse firms and EMBs. To that end, the following hypotheses are proposed:

**Hypothesis 4a:** LPO buyers' attitude toward supplier diversity mediates the effect of the cognitive dimension of social capital on expenditures with EMBs.

**Hypothesis 4b:** LPO buyers' attitude toward supplier diversity mediates the effect of the structural dimension of social capital on expenditures with EMBs.

**Hypothesis 4c:** LPO buyers' attitude toward supplier diversity mediates the effect of the relational dimension of social capital on expenditures with EMBs.

## METHOD

### Respondents, Research Setting, Design, and Data Collection

The unit of analysis for this study is individual buyer perceptions, attitudes, and actions (the last in terms of likelihood to purchase from EMB suppliers). The U.S. buyers are employed at LPOs that are members of the National Minority Supplier Development Council (NMSDC). The NMSDC, headquartered in New York City, is a nonprofit organization comprised of a network of 23 affiliated regional councils across the country. The NMSDC functions as a link between corporate America and EMBs and is recognized as the gold standard for supplier diversity advocacy by LPOs and EMBs (see NMSDC.org). Nationally, the organization has over 1,450 LPO members, all of which have expressed a commitment to growing their expenditures with EMBs through their supplier diversity programs (see NMSDC.org). The U.K. buyers are employed at LPOs that are affiliated with the Diverse Manufacturers Supply Chain Alliance (DMSCA), headquartered in Washington, D.C. DMSCA is a niche supply chain nonprofit that links their dues-paying LPO members with their dues-paying certified EMBs. DMSCA explicitly focuses on operational excellence

by teaching its EMB membership how to add value through lean manufacturing best practices and supply chain optimization to create innovative solutions for their LPO customers. Specifically, they provide a certification program for EMBs that aligns with APICS Supply Chain Operations Reference (SCOR)-driven model to mitigate supplier performance risk, fosters performance transparency, and drives supply chain competitive positioning and innovation discovery (see DMSCA.us).

This study followed guidance from Flynn et al. (1990) and adapted most of its scale measurements from thoroughly vetted sources from the extant literature. To properly conduct this research, the original survey instrument was initially piloted with 10 LPO buyers and three Chief Diversity Officers in the Midwest and U.K. to enhance readability and reduce issues of social desirability bias of the electronic questionnaire before being sent to the sample population (King & Bruner, 2000). In addition, three academic experts in supply chain management also provided insight. Specifically, their thorough knowledge of the supply chain literature was utilized to help make the appropriate judgments as to which questions needed to be further refined and/or eliminated (Wieland et al., 2017). After receiving feedback from the subject matter experts, the survey was updated to be more cogent for the survey recipients.

The data for this study were collected via Internet survey. Four hundred and four LPOs located in the U.S. Midwest were sent the survey instrument in 2018, while 123 LPOs received the survey in the U.K. in 2020. There was a single respondent for each firm: the buyer who handles the purchasing of goods and/or services from EMBs. According to Melnyk, Page, Wu, and Burns (2012), Internet surveys obtain similar response rates as mail surveys with more complete data. Incorporating recommendations to improve response rates by Dillman, Smyth, and Christian (2009), one author coordinated with Chief Diversity Officers at each LPO and asked that an introductory email be sent from the respective companies' Director or V.P. of Procurement or Supply Chain to the buyer who handles the purchasing of goods and/or services from EMBs. The email instructed buyers to be honest with their answers and that their responses would be used to help the company become a better and more transparent organization. It further stated that all responses will remain anonymous because their replies will be facilitated by an unaffiliated third party to provide respondents anonymity and indemnification. Lastly, it stated that participation was optional but encouraged. These steps were taken to ameliorate feelings of coercion, which may lead to the falsification of true sentiments by the LPO buyers (Podsakoff et al., 2003). Three days later, the official survey was

submitted to all LPO buyers. Subsequently, two email reminders were sent 2 weeks apart after the original survey was sent. Originally, 184 responses were received from the U.S., and 103 from the U.K., for a total of 287. However, missing data on some of the surveys reduced the number of total usable responses to 277, resulting in a 53% response rate. The survey was composed of Likert-scaled questions ranging from 1 = strongly disagree to 5 = strongly agree. The survey also included responses that were captured in an ordinal manner.

**Measures and Validation.** When conducting surveys, common method bias is thought to occur frequently; therefore, we utilized guidance from Guide and Ketokivi (2015) and obtained survey data from buyers employed at LPOs in two different countries and that are also members of two different nonprofit agencies that facilitate business relationships between EMBs and LPOs. Furthermore, we followed direction from Podsakoff et al. (2003) and Tan and Wiser (2003) and incorporated several procedural suggestions to mitigate against common method bias. First, the survey respondents were asked questions in a random order to prevent them from perceiving patterns. Second, at the midpoint of the survey, a short mandatory break occurred to reduce respondent fatigue. Third, during this break, a short paragraph about how their responses were appreciated and impactful for their LPO was inserted. Lastly, since this paper focuses on supplier diversity, a topic some might consider predisposed to social desirability issues from respondents, anonymity was clearly articulated in the original email from their LPO buyers' supervisors (Dalal & Hakel, 2016; Furr, 2011).

With assistance from the Chief Diversity Officers at the various LPOs, we were able to carefully identify the key informant for each LPO. This research focuses on the key individual responsible for determining whether EMBs receive purchase orders—the LPO buyer (Flynn, Pagell, & Fugate, 2018). Also, the key informant in this study is knowledgeable about both the macro-expectations of supplier diversity through corporate trainings and marketing material, and the micro-level procurement decisions that impact the LPOs' overall diversity expenditures (Montabon, Daugherty, & Chen, 2018). Furthermore, they have a dual function. First, they act as an agent of their respective firms and can therefore provide insight as to what their corporations expect from their EMBs' suppliers to provide them with procurement opportunities. Second, they have their own personal perceptions about the value of supplier diversity and are best suited to respond as to how their sentiments about the concept may affect their procurement behavior with EMBs (Krause, Luzzini, & Lawson, 2018).

In this research schema, perceptual measures are utilized given the challenge of obtaining sensitive performance data in empirical surveys. However, perceptual measures of performance have been shown to correspond closely to objective performance data (Venkatraman & Ramanujam, 1986). LPO buyers' expenditures with EMBs are utilized as the metric for the dependent variable. LPO buyers' expenditure measures were original but were based on previous work by Santos (2004), whose research examined the cognitions of corporate purchasing personnel in the hotel-casino entertainment industry. She provides a systematic approach for analyzing the underlying assumptions, expectations, and knowledge buyers have regarding supplier diversity. She finds that understanding buyers' cognitive structure is essential for effective procurement and supplier diversity management. The dependent variable consists of three Likert-scale questions that directly asked buyers about whether they will buy products from EMBs.

The LPO buyers' perceptions of social capital in the BSR were utilized as independent variables. The overarching framework to utilize social capital was derived from Tsai and Ghoshal (1998). However, in this research, we referenced work by Whipple et al. (2015), which utilized the following works related to social capital for their supply chain questionnaire. Based on their research, we were able to narrow the social capital questions down to three on our questionnaire to increase the likelihood of obtaining the most robust results (Wieland et al., 2017). First, cognitive social capital typically examines whether there is a shared vision between two parties. We used the measure developed by Leana and Pil (2006) to capture shared norms and vision between two social actors. Second, structural dimension of social capital refers to the social interactions between EMBs and their LPO buyers. We used Ellinger, Daugherty, and Keller's (2000) measures that capture the degree of social interactions between social actors. Relational capital examines trust, norms, and obligations of a relationship. We utilized work by Doney and Cannon (1997) and Moberg and Speh (2003) to capture the degree of trust and obligations.

The LPO buyers' attitude toward supplier diversity is utilized as a mediator variable. The questions to measure this variable were original to a supply chain context; however, they are an extension of previous work by Buttner, Lowe, and Billings-Harris (2006), who examined U.S. colleges' and universities' business school leadership attitude toward diversity and its impact on the hiring, training, and retaining of diverse professors.

Table 1 reports the factor loadings, congeneric reliability (or  $\rho_c$ , Cho, 2016), and validity of the variables of interest. All factor loadings were above .60, and

TABLE 1

## Survey Items, Factor Loadings, and Reliability (N = 277)

Variable Items	Factor Loading	$\rho_c$	AVE
<b>Buyers' Expenditures</b> (buyer responding from a personal perspective) – Santos (2004)		0.92	0.62
I purchase products and/or services from newly integrated EMBs that have met our vendor approval qualifications	0.72		
I purchase products and/or services from our incumbent EMBs	0.75		
I am committed to purchasing products and/or services from our EMBs	0.88		
<b>Cognitive Dimension</b> (buyer responding as an agent of the LPO) – Leana and Pil (2006)		0.94	0.67
My firm's EMBs ambitions and visions are aligned with ours	0.92		
My firm's EMBs pursue the same collective goal and mission as us	0.66		
There is a commonality of purpose in the relationship between our firm and our EMBs	0.86		
<b>Structural Dimension</b> (buyer responding as an agent of the LPO) – Ellinger, Daugherty and Keller (2000)		0.83	0.51
My firm's EMBs work with us in real time to solve issues	0.78		
My firm's EMBs share ideas, information and/or responses in a timely and consistent manner	0.62		
My firm's EMBs work with us to develop a mutual understanding of responsibilities	0.72		
<b>Relational Dimension</b> (buyer responding as an agent of the LPO) – Doney and Cannon (1997) and Moberg and Speh (2003)		0.81	0.55
My firm trusts our EMBs have the requisite abilities to meet our procurement needs	0.72		
My firm's EMBs consider our welfare as it does its own	0.68		
My firm's EMBs are genuinely concerned that we succeed	0.82		
<b>Buyer Attitude Toward Supplier Diversity</b> (buyer responding from a personal perspective) – Buttner, Lowe, and Billings-Harris (2006)		0.91	0.66
I believe in the concept and tenets of supplier diversity	0.82		
I see the value supplier diversity brings to my procurement responsibilities	0.85		
I am committed to the practice of supplier diversity	0.76		

All constructs were measured on 5-point Likert scales;  $\rho_c$  = congeneric reliability; AVE = Average Variance Extracted

average variances extracted (AVE) were also found to be at satisfactory levels ( $>0.50$ ) (Bagozzi & Yi, 1988; Hair et al., 1998), which provide evidence of convergent validity. The constructs also showed good discriminant validity. Average item-level correlations *within* each construct are substantially larger than item-level correlations *between* constructs ( $diff = 0.274$ ,  $p = 0.000$ ). The heterotrait–monotrait (HTMT) ratio, the average of the heterotrait–heteromethod correlations relative to the average of the monotrait–heteromethod correlations, is 0.513, well below the suggested value of 0.85, which provides additional evidence for convergent and discriminant validity (Henseler et al., 2015). The content validity of each construct scale was assessed during the development of the survey instrument with guidance from three

academic subject matter experts who served as judges to determine which questions would remain, be refined, or be eliminated (Wieland et al., 2017). We believe leveraging their supply chain knowledge greatly enhanced the appropriateness of our survey instrument.

To provide more accurate estimates of the hypothesized variables, controls for other factors that previous research has found to be important in explaining the impact of social relations on buyer expenditures were incorporated (Bernierth & Aguinis, 2016; Eckerd & Hill, 2012; Park & Krishnan, 2005). Since gender may affect the perception of social capital and attitude toward supplier diversity, we control for the participants' *gender* (1 for male and 2 for female). Second, firm size may affect buyers'



expenditures and perceived value of supplier diversity. Hence, we controlled *firm size* (1 = firm size smaller than 10,000; 5 = firm size with more than 100,000 employees). Buyer experience is important and may affect buyer expenditures with EMBs. As such, we controlled for *years in buying position*. To increase external validity of our results, we collected data from the U.S. and U.K. We used *U.S.* (1 = firms operating in U.S., 0 = firms operating in U.K.) to control for country fixed effects. Length of time of the BSR between LPO buyers and MBEs can affect social capital and perceived value of supplier diversity. Therefore, we controlled for *BSR length*. Finally, supplier diversity education training obtained by buyers outside of what is offered inside LPOs is also a confounding variable that may affect their attitude toward supplier diversity. Therefore, we controlled for *outside supplier diversity training*. Frequencies for nominal and ordinal demographic variables are presented in Table 2.

Most buyers were male (67.5%). Furthermore, more than two-thirds of the companies had 1,000–10,000 employees (62.8%), 59.2% had been buyers for more than 7 years, and 10.8% had participated in supplier diversity training outside of their internal corporate programs. The mean number of years of the BSR was 6.025 with a standard deviation of 4.145. Descriptive statistics and correlations for all variables are presented in Table 3. Cook and Weisberg diagnostics for heteroskedasticity were conducted with no significant findings. Subsequently, variance inflation factor (VIF) analysis was utilized to evaluate multicollinearity. All variable results were <1.5, which indicates no significant multicollinearity issues. We also checked distribution of our predictors and the outcome variable. Overall, the skewness for our predictors and the outcome variable is smaller than 0.5, suggesting that distributions of these variables are approximately symmetric.

**Model Evaluation.** The hypothesized model depicted in this study is one of mediation, which explains why the indirect effects of an independent variable on a dependent variable occur (Baron & Kenny, 1986). This model examines whether LPO buyers' attitude toward supplier diversity mediates the effect of the three dimensions of social capital on buyer expenditures with EMBs. The three-step approach proposed by Baron and Kenny (1986) to test the hypothesized relationships is utilized. In the first step, the dependent variable buyer expenditures with EMBs is regressed on the independent variables. In the second step, the mediating variable LPO buyers' attitude toward supplier diversity is regressed on the independent variables. In the third step, the dependent variable of LPO buyer expenditures is regressed on the mediating variable, LPO buyers'

TABLE 2

Frequencies for Demographic Variables  
(N = 277)

	Frequency	Percent
Gender		
Male	187	67.5%
Female	90	32.5%
Firm Size		
1,000–10,000	174	62.8%
10,001–20,000	45	16.3%
20,001–50,000	36	13.0%
50,001–100,000	12	4.3%
More than 100,000	10	3.6%
Length of time as buyer		
1–3 years	28	10.1%
4–7 years	85	30.7%
More than 7 years	167	59.2%
Country		
U.S.	177	63.9%
U.K.	100	36.1%
Outside supplier diversity training		
Yes	30	10.8%
No	247	89.2%

attitude toward supplier diversity, and the independent variables of social capital. Partial mediation is demonstrated when Steps 1 and 2 are significant, the mediating relationship in Step 3 is significant, and the effect of the independent variables found in Step 3 is less than the effect demonstrated in Step 1 above. Full mediation occurs when the independent variables in Step 3 are no longer significant. Finally, we incorporate the use of the Sobel test, which is an often-overlooked procedure recommended to assess the strength of the mediation (Kenny, 2008; Wood, Goodman, Beckmann, & Cook, 2008).

## RESULTS

Hypothesis 1 proposes that the cognitive dimension of social capital will be positively associated with LPO buyers' expenditures. Baron and Kenny's (1986) three-step procedure was used to test this hypothesis. In Step 1, the effects of the control variables and the cognitive dimension of social capital on LPO buyers' expenditures were assessed. In Step 2, the effects of the controls and the cognitive dimension of social capital on LPO buyers' attitude toward supplier diversity were assessed. Finally, in Step 3, the effects of the controls, the cognitive dimension of social capital, and LPO buyers' attitude toward supplier diversity on LPO buyers' expenditures were assessed. As Model 1a

TABLE 3  
Summary Statistics and Correlation Table (N = 277)

Variables	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) Buyers' expenditures	2.428	0.845										
(2) Cognitive social capital	2.316	0.821	0.228									
(3) Structural social capital	2.462	0.705	0.420	0.467								
(4) Relational social capital	2.277	0.751	0.238	0.610	0.528							
(5) Attitude toward supplier diversity	2.284	0.805	0.842	0.156	0.287	0.312						
(6) Gender	1.325	0.469	0.210	0.231	0.180	0.189	0.206					
(7) Firm size	1.697	1.081	-0.103	-0.022	-0.112	-0.133	-0.156	-0.141				
(8) Years as a buyer	2.491	0.674	-0.096	-0.055	-0.126	-0.057	0.003	-0.059	0.016			
(9) U.S.	0.639	0.481	-0.256	-0.165	-0.233	0.127	0.054	-0.153	-0.190	0.213		
(10) BSR length	6.025	4.145	-0.173	-0.074	-0.098	0.056	-0.050	-0.163	0.056	0.369	0.372	
(11) Outside SD training	1.892	0.311	-0.071	-0.054	-0.024	0.077	-0.026	-0.105	-0.023	0.082	0.125	0.030

|r| > 0.125, p < 0.05.

of Table 4 shows, the ordinary least squares (OLS) results from Step 1 indicate that the total effect of the cognitive dimension of social capital on LPO buyers' expenditures is positive and statistically significant ( $b = 0.164, t = 2.701, p = 0.007$ ). Overall, this result provides support for Hypothesis 1 and satisfies Step 1 of the Baron and Kenny (1986) procedure outlined above.

Hypothesis 2 investigates the relationship between the structural dimension of social capital and LPO buyers' expenditures. The control variables and the structural dimension of social capital were assessed. The results of the respective OLS regression analysis are shown in Model 2a of Table 4. These results provide evidence that the structural dimension of social capital is positively associated with LPO buyers' expenditures ( $b = 0.424, t = 6.259, p = 0.000$ ). This result provides support for Hypothesis 2 and satisfies Step 1 of the Baron and Kenny (1986) procedure outlined above.

Hypothesis 3 proposes that the relational dimension of social capital will be positively associated with LPO buyers' expenditures. The results of this analysis are shown in Model 3a of Table 4. The results demonstrate a significant positive relationship between the relational dimension and buyers' expenditures ( $b = 0.278, t = 4.246, p = 0.000$ ). This result provides support for Hypothesis 3 and satisfies Step 1 of the Baron and Kenny (1986) procedure outlined above.

Hypothesis 4a proposes that LPO buyers' attitude toward supplier diversity will mediate the relationship between the cognitive dimension of social capital and LPO buyers' expenditures. As Model 1b of Table 5 shows, the results from Step 2 of Baron and Kenny (1986) indicate that the effect of the cognitive dimension of social capital on LPO buyers' attitude toward supplier diversity is statistically significant ( $b = 0.125, t = 2.096, p = 0.037$ ). After incorporating the cognitive dimension of social capital and LPO buyers' attitude toward supplier diversity on LPO buyers' expenditures, the coefficient for the cognitive dimension of social capital decreased, which establishes mediation (Model 1c of Table 5). The mediation test shows that the direct effect of cognitive social capital on buyer expenditures is positive but statistically insignificant ( $b = 0.049, t = 1.674, p = .095$ ). However, the total indirect effect is 0.112 ( $=0.125 \times 0.892$ ), suggesting that 68% ( $=0.112/0.164$ ) of the total effect of cognitive social capital on buyer expenditures was mediated by attitudes toward supplier diversity. This demonstrates that a large percentage of the total effect of cognitive social capital on LPO buyers' expenditures is mediated by their attitudes toward supplier diversity. The significance of the mediation effect was assessed with the Sobel test, which reveals that the mediation effect is statistically

TABLE 4  
 Regressions for Testing the Relation Between Social Capital and Buyers' Expenditures (N = 277)

DV = Buyers' expenditures	Model 1a				Model 2a				Model 3a			
	b	se	t	p	b	se	t	p	b	se	t	p
Gender	0.200	0.108	1.846	0.066	0.178	0.101	1.757	0.080	0.166	0.106	1.563	0.119
Firm size	-0.095	0.046	-2.053	0.041	-0.058	0.044	-1.320	0.188	-0.082	0.045	-1.802	0.073
Years as buyer	-0.014	0.077	-0.177	0.859	0.020	0.073	0.272	0.786	0.014	0.076	0.184	0.854
U.S.	-0.370	0.113	-3.273	0.001	-0.257	0.109	-2.359	0.019	-0.461	0.111	-4.153	0.000
BSR length	-0.011	0.013	-0.825	0.410	-0.014	0.013	-1.113	0.266	-0.014	0.013	-1.092	0.276
Outside SD training	-0.065	0.156	-0.417	0.677	-0.093	0.148	-0.627	0.531	-0.132	0.154	-0.857	0.392
(Hypothesis 1) Cognitive social capital	0.164	0.061	2.701	0.007								
(Hypothesis 2) Structural social capital					0.424	0.068	6.259	0.000	0.278	0.065	4.246	0.000
(Hypothesis 3) Relational social capital					1.624	0.413	3.931	0.000	2.310	0.399	5.788	0.000
Constant	2.407	0.413	5.827	0.000	0.227				0.170			
R <sup>2</sup>	0.138											

different from zero (test statistics = 2.078,  $p = 0.038$ ). Overall, our empirical result provides support for Hypothesis 4a.

Hypothesis 4b was tested in exactly the same manner as the procedure followed for Hypothesis 4a. Models 2b and 2c of Table 5 display results from the OLS regression analysis performed to test the mediating effect of LPO buyers' attitudes toward supplier diversity on the relationship between the structural dimension and LPO buyers' expenditures. As Model 2b of Table 5 shows, the results indicate that the effect of the structural dimension of social capital on LPO buyers' attitude toward supplier diversity is statistically significant ( $b = 0.324$ ,  $t = 4.747$ ,  $p = 0.000$ ). This result satisfies Step 2 of the Baron and Kenny (1986) procedure outlined above. After incorporating the mediating variable (Model 2c of Table 5), we found that the coefficient for the structural dimension decreased ( $b = 0.143$ ,  $t = 4.747$ ,  $p = 0.000$ ). The total indirect effect is 0.280 ( $=0.324 \times 0.864$ ), suggesting that 67% ( $=0.280/0.424$ ) of the total effect of cognitive social capital on buyer expenditures was mediated by attitude toward supplier diversity. The Sobel test was significant (test statistics = 4.70,  $p = 0.000$ ), which indicates the mediation effect is strategically significant. This establishes mediation and provides support for Hypothesis 4b. However, it is important to note that a significant direct relationship continued to exist between the structural dimension and LPO buyers' expenditures.

Hypothesis 4c proposes that LPO buyers' attitude toward supplier diversity will mediate the relationship between the relational dimension of social capital and LPO buyers' expenditures. To test for mediation, we followed the same procedure as outlined above. Models 3b and 3c of Table 5 summarize results from the OLS regression analysis performed to test the mediating effect of LPO buyers' attitude toward supplier diversity on the relationship between the relational dimension of social capital and LPO buyers' expenditures. As Model 3b of Table 5 shows, the results indicate that the effect of the relational dimension of social capital on attitude toward supplier diversity is statistically significant ( $b = 0.300$ ,  $t = 4.721$ ,  $p = 0.000$ ). This result satisfied Step 2 of the Baron and Kenny (1986) procedure outlined above. After incorporating the mediating variable (Model 3c of Table 5), we found that the regression coefficient for the effect of the relational dimension on LPO buyers' expenditures decreased and was no longer statistically significant. The total indirect effect is 0.268 ( $=0.300 \times 0.895$ ), suggesting that 96% ( $=0.268/0.278$ ) of the total effect of relational social capital on buyer expenditures was mediated by attitude toward supplier diversity. The Sobel test was significant ( $z = 4.630$ ,  $p = 0.000$ ), which indicates this mediation

**TABLE 5**  
**Regressions for Testing Buyers' Attitude Toward Supplier Diversity as the Mediator of the Relation Between Social Capital and Buyers' Expenditures (N = 277)**

	Model 1b				Model 2b				Model 3b			
	b	se	t	p	b	se	t	p	b	se	t	p
DV = Attitude toward supplier diversity												
Gender	0.286	0.106	2.693	0.008	0.269	0.102	2.646	0.009	0.229	0.103	2.217	0.027
Firm size	-0.081	0.045	-1.793	0.074	-0.054	0.044	-1.206	0.229	-0.067	0.044	-1.512	0.132
Years as buyer	0.025	0.076	0.326	0.745	0.051	0.074	0.689	0.491	0.058	0.074	0.789	0.431
U.S.	0.160	0.111	1.438	0.152	0.246	0.110	2.245	0.026	0.072	0.108	0.668	0.505
BSR length	-0.010	0.013	-0.746	0.457	-0.012	0.013	-0.958	0.339	-0.014	0.013	-1.096	0.274
Outside SD training	-0.042	0.154	-0.274	0.784	-0.063	0.149	-0.424	0.672	-0.111	0.149	-0.743	0.458
Cognitive social capital	0.125	0.060	2.096	0.037								
Structural social capital					0.324	0.068	4.747	0.000				
Relational social capital									0.300	0.064	4.721	0.000
Constant	1.729	0.407	4.251	0.000	1.130	0.416	2.716	0.007	1.514	0.388	3.903	0.000
R <sup>2</sup>	0.079				0.137				0.136			

	Model 1c				Model 2c				Model 3c			
	b	se	t	p	b	se	t	p	b	se	t	p
DV = Buyers' expenditures												
Gender	-0.048	0.053	-0.914	0.362	-0.049	0.051	-0.963	0.336	-0.035	0.053	-0.666	0.506
Firm size	-0.022	0.022	-0.986	0.325	-0.012	0.022	-0.543	0.587	-0.022	0.022	-0.972	0.332
Years as buyer	-0.042	0.037	-1.137	0.256	-0.030	0.036	-0.822	0.412	-0.042	0.037	-1.129	0.260
U.S.	-0.506	0.055	-9.276	0.000	-0.463	0.054	-8.508	0.000	-0.520	0.055	-9.523	0.000
BSR length	-0.001	0.006	-0.198	0.843	-0.003	0.006	-0.420	0.675	-0.001	0.006	-0.181	0.857
Outside SD training	-0.031	0.075	-0.408	0.683	-0.041	0.073	-0.560	0.576	-0.035	0.076	-0.462	0.645
Attitude toward supplier diversity	0.892	0.030	29.922	0.000	0.864	0.030	28.794	0.000	0.895	0.031	28.993	0.000
(Hypothesis 4a) Cognitive social capital	0.049	0.029	1.674	0.095								
(Hypothesis 4b) Structural social capital					0.143	0.035	4.108	0.000				
(Hypothesis 4c) Relational social capital									0.011	0.033	0.343	0.732
Constant	0.871	0.205	4.253	0.000	0.649	0.207	3.135	0.002	0.950	0.202	4.706	0.000
R <sup>2</sup>	0.802				0.812				0.800			

effect is statistically significant. The mediation analysis provides support for Hypothesis 4c. However, it is important to note that there is no significant direct relationship that continued to exist between the relational dimension of social capital and LPO buyers' expenditures, suggesting a full mediating effect of attitude toward supplier diversity.

As for control variables, we found that females are more likely to have a positive attitude toward supplier diversity, which is consistent with prior research indicating that females tend to show more support for the communal and relational aspects of the procurement process as compared to their male counterparts (Model 1b of Table 5) (Lawrence, Lonsdale, & Le Mesurier, 2018). In Model 1c of Table 5, results demonstrate that males are more likely to increase buyer expenditures, which is also consistent with literature suggesting that males are more focused on meeting specific procurement metrics in contrast to their female colleagues (Lawrence et al., 2018). Another interesting finding is that there is a significant difference between U.S. and U.K. firms regarding their LPO buyers' expenditures with EMBs. Specifically, Model 1c of Table 5 reveals that U.S. firms tend to spend much less than their U.K. counterparts ( $b = -0.506$ ,  $t = -9.276$ ,  $p = 0.000$ ). Although the U.S. initially created supplier diversity programs, our findings suggest LPO buyers' in the U.K. are more vested in the success of their EMBs.

As a robustness check, we incorporated suggestions from Rungtusanatham, Miller, and Boyer (2014) and Guide and Ketokivi (2015) and utilized the bootstrapping technique with 200 replications to validate our initial findings (Preacher & Hayes, 2004). Overall, the bootstrapping results corroborated the original findings we obtained by utilizing the Baron and Kenny (1986) method (see Appendices A & B).

## DISCUSSION

To date, there are no empirical articles investigating whether LPO buyers' attitude toward supplier diversity affects their procurement behavior with EMBs. To address this gap in the SCM literature, we leveraged social capital and MDT as frameworks to survey LPO buyers from the U.S. and U.K. Our research uncovers that although LPOs emphasize the importance of supplier diversity, it is not necessarily being wholeheartedly accepted and implemented by their purchasing personnel, especially in the U.S., which raises concerns as to whether LPOs are creating meaningful procurement opportunities for their minority vendors through their supplier diversity programs. Furthermore, we believe our results can be extrapolated to other diverse groups seeking opportunities through supplier diversity programs. As mentioned previously,

supplier diversity has expanded its breadth to now include other types of diversity (e.g., gender, sexual orientation, disabled and veteran-headed firms), but based on our findings for EMBs, we believe they will obtain similar underwhelming results. We posit this because even after incorporating suggestions from Podsakoff et al. (2003), Furr (2011) and Dalal and Hakel (2016), given our topic of supplier diversity and utilizing a cross-sectional survey instrument with sampling frames of LPO buyers that belong to the NMSDC and DMSCA—both organizations that purport a strong commitment to supplier diversity—we believe the data might have suffered from some respondent bias and may have unintentionally skewed our results slightly toward the socially desirable direction. However, the means from Table 3 are found to be only in the middle of the scales as opposed to being toward the higher ends, which suggests that if anything, these programs would be even further from the hoped for outcome if we had sampled from a more general population of LPOs. Said differently, there is a long way to go to match rhetoric to tangible actions when it comes to supplier diversity initiatives becoming effective tools to create a diverse and equitable supplier base at LPOs. Based on our empirical assessment of the impact of social capital and LPO buyers' attitude toward supplier diversity on their expenditures with EMBs, there are significant theoretical and managerial implications to be unpacked.

## Theoretical

There has been a strongly asserted but untested assumption that LPO buyers relate to their EMBs and White-owned suppliers in a similar manner. This paper helps to validate that LPO buyers do indeed consider the tenets of social capital in their procurement decision process with EMBs in a manner similar to what the literature has found to be the case for their White-owned counterparts (Stam et al., 2014). However, our research adds to the growing discourse on social capital in a supply chain context by empirically assessing the relationship between each of the dimensions of social capital and a buyer's propensity to buy from a supplier, and specific to this context, EMBs (Johnson, Dooley, Hyatt, & Hutson, 2018; Johnson et al., 2013; Roden & Lawson, 2014; Villena, Revilla, & Choi, 2011). To the best of the authors' knowledge, this paper is the first to apply all three dimensions of social capital to the BSR between LPO buyers and EMBs. In contrast to Whipple et al. (2015), who synthesized the three dimensions into a second-order function "social capital" due to the high correlations they found among the dimensions of social capital, our research provides a richness of granularity, which enables us to clearly illustrate which dimension(s) hold more sway in the buyers' decision-

making process when it comes to procuring from EMBs.

This paper also substantially contributes to the literature by being the first to investigate how LPO buyers' attitude toward supplier diversity mediates the relationship between social capital and LPO buyers' expenditures with EMBs. Our research uncovers that the cognitive and structural dimensions of social capital are partially mediated at about the same levels by LPO buyers' attitude toward supplier diversity, while fully mediating the relationship between the relational dimension of social capital and LPO buyers' expenditures with EMBs. This result demonstrates the importance LPO buyers' attitude toward supplier diversity has on the three dimensions of social capital and LPO buyers' expenditures with EMBs, especially as it relates to the relational dimension.

Our research also introduces MDT into a supply chain context to help explain how LPO buyers may be impacted by their personal perceptions as to the value, importance, and relevance of supplier diversity. MDT argues that in areas that are subjective and/or ambiguous, like justice, equity, and attitudes, there is a potential for subtle forms of discrimination to be found in relationships, especially when there is an uneven distribution of power between parties, like what is present between LPOs and EMBs (Dovidio & Gaertner, 2000; Lashley & Pollock, 2020). This new revelation may help scholars better understand the impact of personal perspectives on implementing a particular initiative (i.e., supplier diversity) and how those incremental decisions shaped by those personal perspectives may influence the effectiveness of an LPO's ability to reach their overall corporate strategy goals (i.e., corporate social responsibility). As the U.K. and U.S. continue to see exponential growth in EMBs, we suggest that MDT be utilized by scholars as a theoretical framework to complement (or refute) our findings. As previously mentioned, only 15% of CSR research examines EMBs, while they are being established at record rates in both countries (Yawar & Seuring, 2017).

### **Managerial**

This paper illustrates how senior executives must understand how their buyers perceive the value of supplier diversity. Specifically, our results illustrate a significant difference between LPO buyers in the U.S. and U.K. in regard to their proclivity to spend with EMBs. Furthermore, this research adds value to senior executives by illustrating how buyers' attitude toward supplier diversity is a key underlying variable to understanding their buying decisions and indirectly their willingness to align with an LPO's CSR strategy. By extension, the findings in this paper can be utilized by LPOs' human resource managers to potentially

include personality assessments for procurement candidates seeking employment with their firms to see how they view supplier diversity before making hiring decisions. Although this type of assessment will have to be clearly and carefully implemented, managed, and evaluated by human resource departments, understanding the psyche of a procurement new hire toward EMBs and supplier diversity could potentially help LPOs close the revenue gaps between EMBs and their nondiverse suppliers.

This paper also lays the groundwork for firms to investigate how different strategies like incentives (such as bonuses and promotions) and consequences (e.g., demotions or terminations) can be utilized by LPOs to modify buyer behavior (Blount & Hill, 2015; Blount, Seetharaman, & Brown, 2018). Lastly, there is significant research that has demonstrated that corporate culture can have an impact on shaping individual and collective behavior in organizations (Cao, Huo, Li, & Zhao, 2015; Hult, Hurley, Giunipero, & Nichols, 2000); however, only a few scholars have looked at how an LPO's culture may impact its expenditures with EMBs (Whitfield & Landeros, 2006). This research helps extend prior scholarship by Whitfield (2003) and Santos (2004) that found buyers who function in corporations that foster supportive and inclusive environments had a higher propensity to procure from EMBs; that research should now also incorporate the personal beliefs of the buyer toward supplier diversity. Therefore, beyond creating and nurturing a culture of inclusion to encourage buyer behavior to align with the CSR aspirations of LPOs (Jaija et al., 2018; Whitfield & Landeros, 2006), LPOs may need to also hire employees that are already aligned with their views on supplier diversity.

### **LIMITATIONS AND FUTURE RESEARCH**

There are several limitations that this research faced. First, information for this research was derived from cross-sectional data. As with any cross-sectional data, these lack the dynamism of spatial and temporal richness (Mouw, 2002). Future longitudinal research would offer greater insight as to how LPO buyers' perception of their relationships with their EMBs' supplier base and their attitude toward supplier diversity may change over time and ultimately alter their procurement behavior with EMBs (Pearson, Fawcett, & Cooper, 1994). Without longitudinal data, we could not use advanced methods such as a fixed-effects model that is popular in addressing time-invariance omitted variable bias in social capital research (Li, 2013).

Second, this research was only conducted with LPO buyers located within the Midwest of the U.S. and one country in Europe, which casts doubt on its

generalizability to other settings. We believe future research with other regional LPO buyer data sets in the U.S. and other European countries aspiring to create a more inclusive buying experience for EMBs would provide important incremental gains. However, of even greater import would be investigations into countries that are overtly hostile to ethnic minorities. According to the Most Racist Countries (2020), countries such as India, Japan, South Korea and Russia suffer from high levels of racism. Based on their research, the majority populations in these countries do not feel comfortable with having neighbors of a different ethnicity and they have also seen incidents of racism occur against ethnic minorities without intervening to remedy the incident. We believe these same attitudes will extend to the BSR between LPO buyers (who would most likely belong to the dominate ethnicity) and their respective EMBs, even with most multinational LPOs trying to institute diversity throughout their supply chains. This being the case, it may be likely to uncover substantially different outcomes than those found in this manuscript, which utilized data from the U.S. and U.K., which are currently considered to be only moderately racist in their attitudes toward ethnic minorities (Most Racist Countries, 2020).

Third, as we iterated earlier, our research focused only on ethnic firm diversity, but we believe extending our research into a BSR context predicated on other diverse groups, we will find similar results, however, when specifically examining gender—where the LPO buyer will most likely be male and the supplier firm headed by a female—we posit there will be even less likelihood of expenditures to occur. Many scholars have found that women-owned businesses' performance still lags significantly behind firms that are headed by males in the U.S., Canada, U.K., and Europe, and this gap is more pronounced in countries such as Pakistan, Mexico, Japan, Turkey, and Saudi Arabia, which tend to have more restrictive roles for women (Brush & Cooper, 2012; Kabeer, 2000; Rehman & Roomi, 2012). Many entrepreneurship scholars posit this deficit is caused by homophilic network relationships that male LPO buyers tend to have with male suppliers (Godwin, Stevens, & Brenner, 2006). Investigating this phenomenon to ascertain ways to close the gap is crucial, as women business enterprises are being established at greater and faster rates than firms headed by males (Orser, Riding, & Manley, 2006). We hope future scholars will test the generalizability of our research in different cultures and geographical locations.

Fourth, understanding whether/how supplier diversity training processes can be translated across continents and cultures also holds great promise, especially for multinational LPOs. For example, would the global French mobile phone manufacturer Alcatel train

its procurement personnel on the concept of supplier diversity in France, the same as they do for their buyers stationed in Canada? Resolving this question is highly relevant, since we found that outside supplier diversity training obtained by LPO buyers was found to be insignificant in improving their expenditures with EMBs. Therefore, LPOs would be advised to focus on the creation of meaningful internal trainings to help their LPO buyers improve their expenditures with EMBs.

Fifth, expanding our research into a dyadic study by including EMBs' perspectives on their perceptions of the quality of their social relationships with their LPO buyer(s) and how they perceive their LPO buyers value supplier diversity (or do not) could enhance the robustness of the findings, especially since the BSR between LPOs and EMBs suffers from extreme power asymmetry dynamics (Lashley & Pollock, 2020; Nyaga, Lynch, Marshall, & Ambrose, 2013; Winbush, Dollinger, Dalton, Enz, & Daily, 1996). Tangentially, we suggest future research to determine whether this power asymmetry may also be exacerbating the stress levels of EMBs and disincentivizing them to continue participating in procurement processes they deem discriminatory, thereby stagnating their growth and potentially contributing to EMBs' mortality rates (Loury, 2003; Utsey & Ponterotto, 1996).

Although exhaustive efforts were made to mitigate these issues, their effects could not be totally disregarded. However, the findings in this study push forward the important discussion about the tactical implementation of supplier diversity within the broader strategic CSR frameworks of LPOs in a meaningful way.

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**Ian Blount** (Ph.D. The Ohio State University) is a serial entrepreneur. He is also the Director of Research & Policy at the George Washington Carver Food Research Institute. His teaching and research interests include women/minority business enterprises, supplier diversity, corporate social responsibility and business membership organizations.

**Mingxiang Li** (Ph.D. University of Wisconsin-Madison) is an Associate Professor of Management at the Florida Atlantic University. He explores how diversity affects performance, innovation, and entrepreneurship. He also studies strategic leadership and research methods.

APPENDIX A  
 BOOTSTRAPPED MEDIATION (WITHOUT CONTROL VARIABLES, BOOTSTRAPPED STANDARD  
 ERRORS IN PARENTHESES)

FIGURE A1

Bootstrapped Results for Attitude Toward Supplier Diversity as Mediator of the Relation Between Cognitive Social Capital and LPO Buyers' Expenditures (Hypothesis 4a)

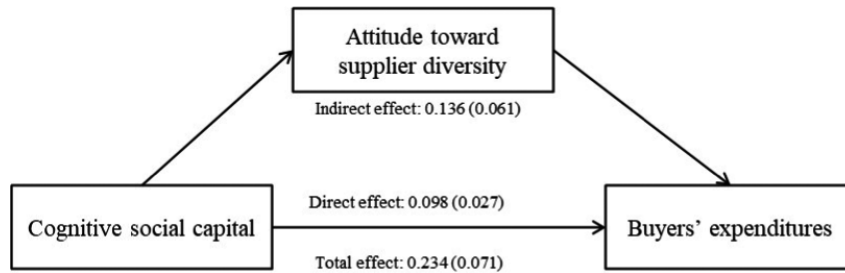


FIGURE A2

Bootstrapped Results for Attitude Toward Supplier Diversity as Mediator of the Relation Between Structural Social Capital and LPO Buyers' Expenditures (Hypothesis 4b)

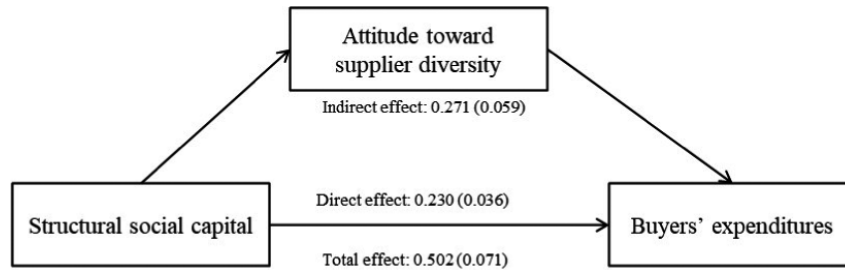
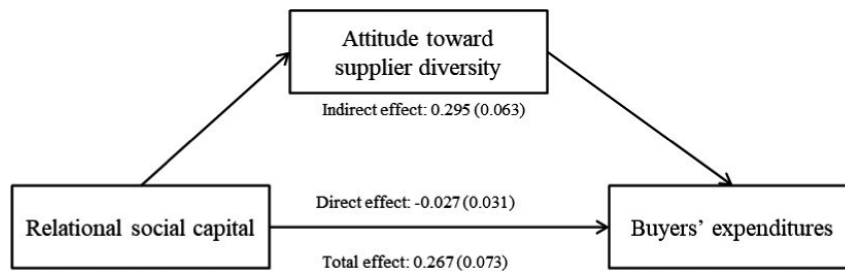


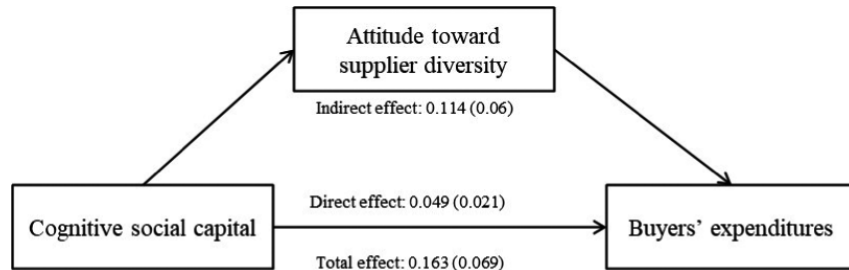
FIGURE A3

Bootstrapped Results for Attitude Toward Supplier Diversity as Mediator of the Relation Between Relational Social Capital and LPO Buyers' Expenditures (Hypothesis 4c)

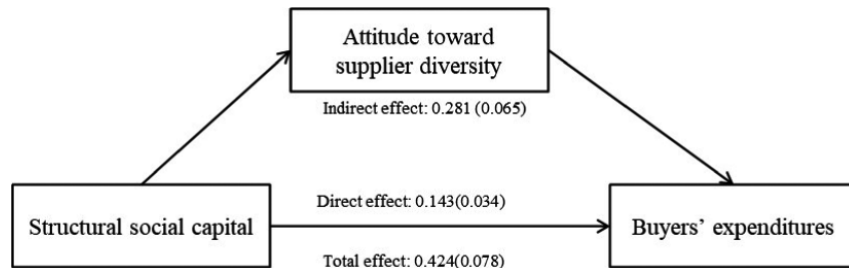


**APPENDIX B  
BOOTSTRAPPED MEDIATION (WITH CONTROL VARIABLES, BOOTSTRAPPED STANDARD  
ERRORS IN PARENTHESES)**

**FIGURE B1**  
Bootstrapped Results for Attitude Toward Supplier Diversity as Mediator of the Relation Between Cognitive Social Capital and LPO Buyers' Expenditures (Hypothesis 4a)



**FIGURE B2**  
Bootstrapped Results for Attitude Toward Supplier Diversity as Mediator of the Relation Between Structural Social Capital and LPO Buyers' Expenditures (Hypothesis 4b)



**FIGURE B3**  
Bootstrapped Results for Attitude Toward Supplier Diversity as Mediator of the Relation Between Relational Social Capital and LPO Buyers' Expenditures (Hypothesis 4c)

