Abstract
This study suggests that it is critical for executives to develop transnational social capital (TSC), or professional relationships and ties that span national borders. We first provide a conceptual framework and careful operationalization of TSC that differentiates between bonding and bridging forms of social capital. We then examine the effect of three key determinants—opportunity, investment, and ability—on the TSC of executives. Using detailed survey data on 227 executives, our analysis suggests that international experience, investment in communicating with cross-border ties, and cosmopolitan ability have direct effects on overall TSC. We further demonstrate that international experience and cosmopolitan ability affect both bridging and bonding, but that investment in cross-border communication only affects bridging social capital. The study proposes that social capital is becoming more and more transnational as connections, interactions, and transactions increasingly span national borders, which has implications for international business and human resource management (HRM). Given our findings, it would make sense for global organizations to pay more attention to these, if they would like their members to develop this resource. We point out benefits to organizations and individuals.
**Key words:** transnational social capital; cosmopolitan; global career; communication; professional relationships; international human resource management
Introduction

Social capital is generally concerned with resources inside structures and processes of social exchange and leads to organizational advantages through the creation of new intellectual capital (Naphiet & Ghoshal, 1998). Transnational social capital (TSC) is recognized as a significant sign of goodwill for executives (Kwon & Adler, 2014; Reiche, Harzing, & Kraimer, 2009; Zhang et al., 2010), as work experiences that transcend national boundaries are important for employees and their development and thus necessary for carrying out critical business activities (Stroh, Black, Mendenhall, & Gregersen, 2005). TSC provides access to information and proprietary knowledge, advice, help, support, and referral trust by a third party that can contribute to the global success of a firm (Yli-Renko, Autio, & Tontti, 2002; Mäkelä & Maula, 2008). TSC also helps to solidify relationships that may enhance coordination, collaboration and knowledge sharing within a firm’s global network, thereby fostering its ability to function as a collective whole across complex multicultural settings (Kostova & Roth, 2003; Griffith & Harvey, 2004; Mäkelä, 2007; Reiche, Harzing, & Kraimer, 2009). Essentially, social capital is considered increasingly important to international HRM, in particular because of its association with creation and sharing of knowledge, innovation, and career and talent management (Aklamanu, Degbey, & Tarba, 2016; Bornay-Barrachina, López-Cabrales, & Valle-Cabrera, 2017; Lazarova & Taylor, 2009; Liu, 2013; Mäkelä & Brewster, 2009; Moeller, Maley, Harvey, & Kiessling, 2016; Taylor, 2007).

Despite the growing prevalence of cross-border social relations and the significance of these ties to both individuals and organizations, there is surprisingly little research on the formation of TSC (Mäkelä & Suutari, 2009). Empirical studies have
either relied on interviews with fairly small and homogeneous samples (e.g. Dickmann & Doherty, 2008; Jokinen, 2010) or used international experience as a proxy for TSC (e.g. McDougall, Oviatt, & Shrader, 2003). However, international experience does not routinely translate into TSC because there are difficulties associated with creating and maintaining social relations across national and cultural boundaries (Taylor, 2007). Consequently, our understanding of why levels of TSC vary across individuals, even when they have relatively similar levels of international experience, is rather limited. In fact, much research on social capital has focused on the micro-macro processes (e.g. Lin, 2000) and HQ versus sub-units (e.g. Kostova & Roth, 2003). In contrast, we are primarily interested in the micro-micro level, within a macro context. The context of global work environment is rich and different with cultural and geographical diversity, mixed with the complexity of functions and businesses, thus providing an ideal setting for the study of social capital (Hinds, Liu, & Lyon, 2011).

Following Adler and Kwon (2002; see also Kwon & Adler, 2014), our framework identifies three distinct (and collectively exhaustive) sets of factors: opportunity, investment, and ability. All three dimensions are seen as critical variables affecting the development of social capital in consumer behavior, knowledge management, organizational studies (e.g. Kim, Pathak, & Werner, 2015), and organizational psychology research (rooted in Maier, 1955). Opportunity deals with the classic structural dimension of social capital in the form of the structural configuration of network ties as objective and physical connections and also cognitive ties and networks constituted in the minds of individuals, including variation in their own perception of social ties and own roles. We also note that previous research has differentiated between
having and using social capital (potential and mobilized ties) (Kwon & Adler, 2014) and
the increasing role of physical space (propinquity effect) (Reagans, 2011). Ability deals
with the characteristics of agents to create social relationships and those they know with
the same ability, including social skills and high self-monitoring, often leading to
boundary spanning roles (Kwon & Adler, 2014). Investment deals with time and effort
put into social relations and transnational communities and argues that it increases TSC.
This happens because investment of time and effort leads to increased commitment,
involvement and “personal relevance” (Petty & Cacioppo, 1986). Personal relevance is an
essential characteristic of involvement, insofar as when a matter is of high personal
relevance to a person, then he or she invests in issue-relevant argumentation and
communication (Petty, Cacioppo, & Goldman, 1981).

Our aim is to study the formation and accumulation of TSC in the context of the
global environment. We study overall TSC, but also its two components: bridging and
bonding forms of social capital that constitute it multiplicatively. We answer a number of
specific questions pertinent to the formation of social capital, important to multinational
corporations (MNCs) and international human resource management (IHRM) for being
effective in the complexity of a dynamic globalized environment. First, is the
development of TSC mostly a function of opportunity, in the form of global exposure and
international experience? As many prior studies would suggest, executives need to be
given the possibility to exchange and interact with people and institutions on the ground
to develop their networks of professionally relevant relations and contacts across borders
(Berthoin Antal, 2000; Suutari & Mäkelä, 2007; Jokinen, Brewster, & Suutari, 2008). At
the same time, forming and maintaining relationships across national and cultural
boundaries and over time are costly activities, and the number of people with whom any particular person can maintain relations is limited.

Second, how do such experiential drivers exert their influence? Building and maintaining social relations across borders requires a sustained *investment* of time and effort, and thus investment in the form of cross-border communication. Because interpersonal skills include communication (Thomas & Osland, 2004), we investigate whether executives who communicate frequently with colleagues and clients working overseas are more likely to develop a higher level of TSC.

Third, how is cross-cultural *ability*, specifically cosmopolitan ability, related to TSC? Opportunity and investment notwithstanding, creating and maintaining social relations across national and cultural boundaries is fraught with difficulties (Bird & Osland, 2004). Therefore, it is often necessary to have abilities that extend beyond one’s local milieu and transcend cultural differences (Kedia & Mukherji, 1999; Boyacigiller, Beechler, Taylor, & Levy, 2004). Thus we argue that cosmopolitan ability positively affects the formation of TSC. Additionally, we reason that the relationships we describe above can either have a direct effect or that investment and/or ability act as mediators between opportunity and the formation of TSC.

This paper is structured as follows: We draw on research on social capital and international management literature to define, theorize, and operationalize TSC. We then present the conceptual model tested in this study and develop a set of hypotheses to answer the research questions posed above. These hypotheses are then tested using data collected from a survey of 227 executives. Finally, we present our findings and discuss
their implications for theory and practice. Figure 1 presents the hypothesized model tested in this study.

**The Concept of Transnational Social Capital**

Social capital constitutes a broad field of research that spans multiple domains and levels of analysis (Bourdieu, 1986; Leana & Van Buren, 1999; Lin, 2000) and is considered both a private and public good (Kostova & Roth, 2003). Broadly conceptualized, social capital represents the resources available to social actors through their membership in social networks and links with other social actors (Portes, 1998). As a private good, social capital is embedded in the social network of a focal actor and is available to the actor because of her or his social ties to others within the network (Burt, 1992). As a public good, social capital is a collective resource that arises from patterns of interactions within highly dense networks characterized by norms of reciprocity and social trust (Coleman, 1990; Putnam, 1995, 2000). These norms, in turn, foster information sharing and collaborative action within the network for mutual benefit. As such, social capital could potentially be available to individuals who may not have directly created it, by virtue of their group membership.

We define transnational social capital as the actual and potential resources embedded within, available through and derived from a network of professional relationships and ties that span national borders (Nahapiet & Ghoshal, 1998). This definition is consistent with the “private good” approach that views social capital as a resource acquired by the individual and used to his or her benefit (Burt, 1992). In the professional domain, TSC represents the resources that an individual derives from transnational networks of professional relations and contacts, including formal networks.
based on employment, professional interests or engagement in various communities of practice with an international or global reach, as well as friendships that span national societies with co-workers, classmates and colleagues (Levy, Peiperl, & Bouquet, 2013). Thus TSC differs from “domestic” social capital and is an integral part of transnational professional relations that are used to gain access to a wide range of tangible and intangible resources.

Sub-constructs of Transnational Social Capital

Drawing on social capital theory, we consider TSC as a higher-order multidimensional construct because different types of professional relations engender distinct forms of social capital (Adler & Kwon, 2002; Putnam, 2000). Specifically, we distinguish between bridging and bonding forms of TSC, as the most important dimensions according to which social capital may vary, originally proposed by Paxton (1999) and Putnam (2000). According to Patulny and Svendsen (2007), this distinction captures the dynamics of both societal openness and closeness within and across networks. The two dimensions also feature prominently in more recent research on the topic, such as Geys and Murdoch (2010), Han, Han, and Brass (2014) and Levy, Peiperl, and Bouquet (2013).

Bridging social capital refers to the potential and actual resources nested in a cross-border low-density network of acquaintances, aka “weak ties,” developed by individuals through their employment contacts and professional interests or interactions with organizations that are global in scope. Weak ties are typically diverse and extensive, and thus serve as a bridge between otherwise disconnected networks. Accordingly,
bridging social capital is embedded within expansive and outward-oriented networks and tends to promote more inclusive social identities (Coleman, 1990; Putnam, 2000). Further, weak ties often facilitate generalized reciprocity between members, defined as a “a continuing relationship of exchange that is at any given time unrequited or imbalanced, but that involves mutual expectations that a benefit granted now should be repaid in the future” (Putnam, 1993: 172). Weak ties also give access to new information from different parts of the network (Burt, 1992), and open doors to career-and business-related resources, information, and support (Granovetter, 1973; Lin, 1999; Chua, Ingram, & Morris, 2008; see also Peiperl & Jonsen, 2007).

In contrast, bonding social capital is an integral part of a cross-border network of “strong ties” or friendships with other professionals, co-workers, former classmates, and colleagues. Strong ties are characterized by trust, intimacy, and reciprocity built over time and have an affective component (Granovetter, 1973; Krackhardt, 1994). These professional ties can provide a reliable access to valuable resources, e.g. emotional and social support, help, and high-quality or proprietary information (Bian, 1997; Granovetter, 1973). Further, bonding social capital tends to be exclusive rather than inclusive and is typically available only to those with whom strong ties are maintained. Accordingly, bonding social capital undergirds specific reciprocity between close ties or between members of an exclusive network or group. This contrasts with generalized reciprocity that is characteristic of more inclusive networks.

Nevertheless, bridging and bonding social capital are complementary because the strength of relationships associated with bonding provides access to different complementary resources and because of the wide range of relationships associated with
bridging (e.g. Patel & Terjesen, 2011; Simon & Tellier, 2011). Synergistic effects between bonding and bridging can also exist because one form of social capital can increase the returns of the other (Tiwana, 2008), the presence of strong ties in particular can enhance the returns on bridging social capital. Thus the resources associated with strong ties can be beneficial once activated (Galunic, Ertug, & Gargiulo, 2012; Patel & Terjesen, 2011). We should note, however, that the synergistic effects between bridging and bonding can also be negative because investments in “strong ties,” for example, can detract from investments in “weak ties” and vice versa. For this reason, we conceptualize TSC as the complementary combination of bridging and bonding and we examine them both separately and simultaneously (Adler & Kwon, 2002; Patulny & Svendsen, 2007). Specifically, we follow the approach used by Gibson and Vermeulen (2003, p. 222) by multiplying the scores of bridging and bonding because “the different elements cannot substitute for one another, and thus they relate to each other in a multiplicative rather than an additive way.”

**Hypothesis Development**

To summarize the discussion to this point, we have identified a theoretical framework consisting of *opportunity, investment,* and *ability,* upon which we develop testable measures. We then defined TSC as an interplay of two distinct dimensions — bridging and bonding —, which assess the attributes of professional connections that exist among social actors – both within and outside the firm. We also note that our interest lies in understanding the development of TSC. According to the hypothesized model (see Figure 1), international experience of executives (i.e., international relocations) provides an
opportunity and has a direct positive link to TSC. Investment in social relations (i.e. cross-border communications) as well as ability (i.e., cosmopolitan ability) are also directly and positively linked to TSC, and partially mediate the relationship between the international experience of executives and the creation of TSC.

**Opportunity: International Relocations as a Determinant of Transnational Social Capital**

Relations between individuals are developed through interactions, interpersonal exchanges and shared experiences. Thus, forming social capital across national and cultural boundaries requires first and foremost an opportunity to come into contact and interact with others across borders. These interactions can be virtual or face-to-face, through both formal and informal cross-border networks of relations. However, previous research suggests that social interactions characterized by spatial and temporal proximity – being in the same place at the same time – foster relationships that are easier to maintain and more likely to last (Brass, 2012; Borgatti & Cross, 2003). In the international context, such interactions can occur during a variety of cross-border experiences, such as international relocations, short-term assignments, commuter assignments, and business travel (Millar & Salt, 2008; Bozkurt & Mohr, 2011; Welch & Worm, 2006; Collings, & Scullion, 2012). Here we focus on international relocations and hypothesize that more frequent international relocations should result in an increased level of TSC.

Of all cross-border experiences, international relocations probably provide the most significant opportunities to expand local and global social networks (Dickmann &
Doherty, 2008). These social networks can be based on formal employment relations, informal friendships and community associations. Furthermore, they can be both internal and external to the firm, spanning organizational and national boundaries (Berthoin Antal, 2000; Suutari & Mäkelä, 2007; Jokinen et al., 2008). Previous research has found that global managers who are sent on international assignments develop and accumulate ties and “knowing-whom” career knowledge that increased their TSC (e.g., Berthoin Antal, 2000; Dickmann & Harris, 2005; Mäkelä, 2007; Dickmann & Doherty, 2008; Mäkelä & Suutari, 2009; Jokinen, 2010; Bozkurt & Mohr, 2011). Therefore:

Hypothesis 1 There is a direct positive relationship between the number of international relocations of executives and their transnational social capital.

Ability: Cosmopolitan Ability as Determinant of Transnational Social Capital

While international experience facilitates TSC by providing opportunities, the cultural complexity of social relations across national and cultural boundaries presents significant challenges. In fact, culture influences the most fundamental elements of social capital; that is, the way social relations are formed and maintained (Taylor, 2007). Taylor (2007) further argues that the cultural background of individuals affects their ability to form social relations with others who come from a cultural background different than their own. Thus, cultural differences between the individual and the people she or he encounters may present a barrier to the creation of TSC.

Individuals, however, vary in their ability to overcome cultural barriers and interact across cultures. To be effective in a cross-cultural setting, it is often necessary to have a mindset and skills that extend beyond one’s local milieu and transcend cultural
differences (Kedia & Mukherji, 1999; Boyacigiller, et. al., 2004). Bird and his colleagues (Bird & Osland, 2004; Bird, Mendenhall, Stevens & Oddou, 2010) identified a set of global competencies that would promote intercultural communication and, by implication, the development of social relations across borders. Here we focus on one core competency – cosmopolitan ability – that may affect the formation of TSC.

Cosmopolitanism represents a complex and multilayered concept (see Levy, Peiperl, & Jonsen, 2016, for a comprehensive review); at the individual level, it is considered to be a building block of global competencies at the ability and orientations level (Bird & Osland, 2004), and together with cognitive complexity forms a “global mindset” (Levy, Beechler, Taylor, & Boyacigiller, 2007). Cosmopolitan ability (cosmopolitanism) represents an orientation toward the outside world, whether represented by diverse cultural traditions, divergent values and beliefs, international affairs, or global political issues (Lee, 2015; Levy, Lee, Jonsen, & Peiperl, 2019). Here we use ability in a broad sense, as a proxy for “cognitive ability” in terms of the sets of heuristics and mindsets that managers leverage in their attempt to create and maintain social relations as they cope with increasing cognitive complexity, following Levy et al. (2007) and Lane et al. (2009).

However, cosmopolitanism goes beyond simply an external orientation and entails a “cultural disposition involving an intellectual and aesthetic stance of ‘openness’ toward peoples, places and experiences from different cultures, especially those from different ‘nations’” (Szerszynski & Urry, 2002: 468). It also involves a genuine willingness to engage with the other and to learn and explore alternative systems of meaning and practice held by others (Hannerz, 1996). A cosmopolitan ability also
contributes to the knowledge of other cultures and supports effective intercultural communication.

Cosmopolitans acquire an understanding of the cultural practices of people, but they are also sensitive to the fact that people are not a mere reflection of their cultural origins. They engage with the other as an individual whose cultural origins are meaningful in profound ways, but do not necessarily define her or him as a person. Because of their intrinsic interest, cultural sensitivities, and sensibilities, cosmopolitans are likely to create and accumulate more TSC. As suggested above, and consistent with our theoretical lenses, we expect a direct effect between cosmopolitan ability and TSC. Therefore:

**Hypothesis 2**  
Cosmopolitan ability of executives is positively related to their transnational social capital.

**Investment: Cross-border Communication as Determinant of Transnational Social Capital**

In a global environment, communicating effectively across cultural boundaries can be challenging even when people speak the same languages (Piekkari & Zander, 2005). Communicating with people who are embedded in different cultural and national contexts is important to establish interpersonal relationships in a global context (Osland, 2013a) and the association between communication and relationship-building seems undisputed (e.g., Griffith, 2003). Despite its importance to IHRM, intercultural communication has received only limited attention in the mainstream HRM and IB literature (see Szkudlarek, Nardon, Osland, & Zander, 2017) outside that of expatriation
(e.g. Kupka, Everett, & Cathro, 2008), mergers and acquisitions (e.g., Angwin, Mellahi, Gomes, & Peter, 2016) and headquarters/subsidiary communications (e.g., Haq, Drogendijk, & Holm, 2017), especially at the individual level.

Building social capital requires an ongoing investment in creating and maintaining social relations (Burt, 1992; Adler & Kwon, 2002). In fact, Lin (1999: 30) suggests that social capital can be viewed as an “…investment in social relations with expected returns,” which therefore requires an ongoing dedication of time and effort. This may particularly be the case in social relations that span cultural and national boundaries because an investment in relations tends to be more fruitful if these are part of a cohesive web of social relations, localized in terms of here and now, and embedded in a broader institutional context. In contrast, cross-border social relations are often embedded in a “weak” institutional context, or decontextualized altogether, either because the initial context within which they were created has ceased to exist due to geographic mobility, or was transient to begin with.

Thus, building and maintaining social relations across borders requires a sustained investment of time and effort, which could partially mitigate the absence or loss of shared and immediate context. Here we focus on investment in the form of frequent communication with contacts. We argue that executives who communicate frequently with colleagues and clients working ‘overseas’ are more likely to develop a higher level of TSC. Frequency is a communication variable used systematically in communications research (e.g., Becerra & Gupta, 2003; Jonsen, Maznevski, & Davidson, 2012; Lau & Murnighan, 2005; Vora & Markóczy, 2012), mainly because increased frequency suggests a higher knowledge of the other person’s expertise (Lewis, 2004). Moreover, it
helps to build up psychological safety and encourages asking questions when in doubt.

As suggested above, and consistent with our theoretical lenses, we expect a direct effect of cross-border communication on TSC. Therefore, we posit:

**Hypothesis 3**

Cross-border communication of executives is positively related to their transnational social capital.

**The Mediating Role of Cosmopolitan Ability and Cross-border Communication**

The next two hypotheses concern the potential mediation effects of ability and investment of the direct relationship hypothesized between opportunity and TSC. The first mediation is constructed to establish the possibility that cosmopolitan ability partially mediates the influence of international relocations on TSC. While having the opportunity to interact with people from other cultures enables managers to accumulate TSC, it may be that this is because international relocation serves to develop an open mindset (Bird & Stevens, 2013). Working across borders is likely to extend one’s interest in learning about the values and practices of people from other cultures (Osland, 2008). Thus, we suggest that individuals who that have more experience of international relocations will develop a high cosmopolitan ability and will have an intrinsic interest and willingness to initiate and create social relations with people from other cultures. For this reason, they will invest in such relations and work to maintain them, often over time and geographic distance, and if they do not, social capital will not accumulate or even exist. In order to determine whether the relationship between international relocations of executives and their TSC is partially mediated by cosmopolitan ability, we examine the following:
Hypothesis 4 The relationship between international relocations and transnational social capital is partially mediated by the cosmopolitan ability of executives.

Next, we consider the mediating influence of cross-border communication. We expect that executives who partake in international relocations will invest more in communication as it is a crucial practice in developing and maintaining social relationships across borders. Cross-border communication is also widely considered a key aspect of global leadership roles and of global competency (e.g., see Barner-Rasmussen et al., 2014; Matveev & Nelson, 2004; Osland, 2013b; Thomas & Osland, 2004). In turn, greater willingness and ability to communicate and ‘keep in touch’ will result in an accumulation of social capital. However, social relationships built during international relocations can be casual and transient (Larsen & Urry, 2016; Wittel, 2001) rather than long-lasting relationships based on shared cultural, historical, and personal experiences. Therefore, maintaining such relationships often requires an ongoing effort, especially once parties have moved on and no longer share an institutional context or geographic proximity (Larsen & Urry, 2016). Thus we suggest that the effect of international relocations on TSC will be partially mediated by cross-border communication. Therefore:

Hypothesis 5 The relationship between international relocations and transnational social capital is partially mediated by cross-border communication of executives.
Methods

Procedure

The data used in our analyses come from a web-based survey distributed to executives who attended programs at a private, globally top-ranked business school in Europe. Respondents were solicited through an e-mail message and asked to participate in a research project on careers. A reminder message was mailed three weeks after the initial solicitation. The survey took approximately 15 to 30 minutes to complete. All respondents were assured of confidentiality of survey responses. The survey was administered in English, since English is the common language used by the respondents.

Sample

The sample consisted of 227 executives from 48 countries of origin, including France (12.4%), Italy (7.6%), and the Netherlands (7.6%). The sample was considerably “international” in experience: 75.9 percent of respondents had lived in a foreign country for at least three months and 96.9 percent had worked (at some point) in an MNC. The demographic breakdown of the respondents was as follows: average age was 42 years ($SD = 6$); 79.2 percent were men; 88 percent were married. Approximately 44 percent had a Bachelor’s degree as their highest degree attained, 48 percent had a Master’s degree, and 8.7 percent had a Doctoral degree.

Empirical research (MacCallum et al., 1999) suggests that an adequate sample size for factor analysis depends on the data characteristics (i.e., communalities) rather than on the sample size per se. Based on the factor communalities and conventional guidelines (e.g., Comrey & Lee, 1992; Bryant & Yarnold, 1995; Gorsuch, 1983;
Nunnally, 1978), the sample size used in the analyses appears adequate to test the confirmatory factor analysis (CFA) and structural equation models (SEM).

**Measures**

Our measure of *transnational social capital* assesses perceived access to resources associated with bridging and bonding social capital that are embedded in cross-border networks of professional relations and ties. *Bridging transnational social capital* (α = .86) was measured with five items that capture critical facets of this dimension: extensity of professional cross-border network, access to information, and generalized reciprocity between members (Coleman, 1990; Putnam, 2000). *Bonding transnational social capital* (α = .85) was measured with six 7-point Likert scale items that capture critical facets of this dimension: emotional and psychological support, trust, and access to limited or valuable resources. To create the TSC variable used in our models, we followed a three-step process. First, we calculated the mean bridging and bonding scores for each scale because they both had high validity. Second, after checking that the two measures were highly correlation (r = .71) we multiplied the bridging and bonding scores to create a multiplicative term representing overall TSC, with higher scores indicating more TSC. Although such a multiplicative interaction does not rule out the possibility of independent effects, it is consistent with the notion that both sources of TSC are necessary conditions (see also Brass & Burkhardt, 1993). In any case, both sources are assessed together but also independently. A complete list of items used to measure TSC is presented in the Appendix.
International relocations was measured by the number of countries (up to eight) in which executives had lived for three or more months. Cross-border communication was measured with survey indicators from the media richness literature (Daft & Lengel, 1986). We created a weighted formative index that reflects the degree of communication investment in cross-border ties based on the procedure used by Bouquet et al. (2009). First, we asked respondents to think about four colleagues and clients working abroad with whom they have communicated most often. Then, respondents were asked to indicate how often (i.e., frequency of communication) and using which method (i.e., method of communication) they communicated with each colleague/client. Frequency of communication was measured with a six-point scale: “several times daily” (weight of 6); “daily” (weight of 5); “weekly” (weight of 4); “monthly” (weight of 3); “yearly” (weight of 2); “less than yearly” (weight of 1). Method of communication was measured using the following: “e-mail, letters and memos” (weight of 1); “telephone & texting” (weight of 2); “videoconferencing” (weight of 3); “face-to-face meetings” (weight of 4). Second, we computed communication investment score per colleague/client by multiplying frequency of communication by method of communication and then summing these up. Third, we created an overall index for cross-border communication variable as the sum of four individual scores. This was replicated for the four clients or colleagues working abroad identified, providing distinct measures of investment in cross-border communication (α = .84).

Cosmopolitan ability was measured using a scale specifically developed for this study (α = .81). The scale consists of seven 7-point Likert scale items that measure “cultural cosmopolitanism” manifested as a positive orientation toward people from other
cultures and their values, practices, and traditions, and an interest in learning from them. A complete list of cosmopolitan ability items is presented in the Appendix.

We controlled for the following individual-level demographics that had the potential to affect social capital (Lin & Huang, 2005): Gender, age, education, tenure (in the last or current organization), number of work years in MNCs and foreign language skills (measured using a single self-rating question, with respondents asked to indicate how many languages they spoke well).

Preliminary Analyses

Prior to conducting statistical analyses, all observed and latent variables were assessed for normality. Of the exogenous and endogenous variables used in the model, only the transformed international relocations variable presented a concern based on the Shapiro-Wilk test ($p = .001$) and normality plots. All other variables had a non-significant Shapiro-Wilk test. For all analyses conducted in this study, missing data were treated using mean imputation, which should provide unbiased estimates given that data were missing completely at random (MCAR) based on Little’s MCAR test, $\chi^2 (245) = 248.062$, $p = 0.433$.

Model Estimation

The measurement (CFA) and structural (SEM) models were estimated in AMOS version 25 using maximum likelihood estimation. All cross-loadings were fixed at zero and the residual variances were assumed to be uncorrelated across measures. For both the CFA and SEM, model fit was evaluated based on the robust $\chi^2$, Tucker-Lewis Index
(TLI), Comparative Fit Index (CFI), Root Mean Square Residual (RMSEA) and Standardized Root Mean Square Residual (SRMR) using approximate model fit criteria based on Hu and Bentler (1999). For model comparison purposes, the Satorra-Bentler (2001) scaled difference test was used to assess the change in $\chi^2 (\Delta \chi^2)$.

We estimated internal consistency via CFA. The CFA provided a good model fit for the four-factor solution that included bridging, bonding, cross-border communication and cosmopolitan ability $\chi^2 (202) = 277.38, p < 0.01, \text{CFI} = 0.964, \text{TLI} = 0.959, \text{RMSEA} = 0.042, \text{SRMR} = .0645,$ and large standardized factor loadings (typically greater than or close to .50) across all four factors. This suggests the scales provide evidence of acceptable construct/factorial validity and internal consistency reliability.

**Common Method Variance**

All variables were operationalized through self-reports. Although self-report measures have well-known drawbacks, they are particularly useful in assessing the structure, content and quality of social relations, as well as the quality of norms (e.g., trust, reciprocity) governing such relations (Coleman, 1990). Thus, most studies of social capital make use of self-reported measures. Common method bias is an obvious limitation of such measures; however, this limitation was methodologically and statistically addressed in the present study. Methodologically, the questionnaire collected both perception and factual data and included different scale formats, which tends to reduce the risk of common method variance (CMV) (Rust & Oliver, 1994).

Statistically, we performed a number of analyses to assess the severity of common method bias. First, a Harman’s one-factor test, along with an exploratory factor analysis
(EFA) were conducted to assess the number of factors. The one-factor test shows that one factor accounts for 31% of the variance. Second, a common latent factor analysis was performed and showed that common variance stood at 20%, suggesting that common method bias is unlikely to cause concerns.

Results

Table 1 presents the means, standard deviations and zero-order correlations among all variables included in the study, along with a reliability index (Cronbach’s alpha) on the main diagonal. The correlation matrix shows that there are no significant correlations (i.e. above 0.8) between the variables with the exception, as can be expected, of transnational social capital with its two subcomponents (bridging and bonding forms). However, as these are used separately, and as the correlation between the two sub-components themselves is only 0.7, there are no concerns over potential multicollinearity.

Table 1: see appendix

Results of the SEM analyses for TSC are presented in Table 2 and for the sub-constructs — bridging and bonding — in Table 3. The results for TSC suggest that international relocations (Model 1), cosmopolitan ability (Model 2) and cross-border communication (Model 3) have a direct and positive effect on TSC (Table 2). There are positive and highly statistically significant ($p < 0.01$) relationships between TSC and international relocations ($\beta = .343$), cosmopolitan ability ($\beta = .275$) and cross-border communication ($\beta = .240$). These findings support Hypotheses 1 through 3.
Cross-border cosmopolitan ability (H4) and cross-border communication (H5) were both hypothesized to partially mediate the relationship between international relocations and TSC. The two mediations were first assessed separately (Models 4 and 5) and then the full model is presented. Results for the mediation analyses indicate that a partial mediation of international relocation by cosmopolitanism, thus supporting Hypothesis 4. The standardized coefficient for international relocations remains statistically significant but drops from $\beta = .441$ to $\beta = .343$. The results provide no support for Hypothesis 5, as the path between the number of international relocations and communication ability is not statistically significant, there is no evidence of a mediation.

Examining our control variables, the full model suggests that age has a negative relationship with TSC ($\beta = -.190, p < 0.01$), but that there was a slightly statistically significant relationship between the number of years working in MNCs and TSC ($\beta = .140, p = 0.065$). In addition, educational level ($\beta = .217, p < 0.01$) and being a woman ($\beta = .124, p = 0.081$) were both positively associated with cosmopolitanism. Figure 2 summarizes the standardized path coefficients for the hypothesized model.

The analyses described above were replicated differentiating between bridging and bonding types of social capital (see Table 3). Hypotheses 1 and 2 were still supported, suggesting that the number of international relocations and cosmopolitan
ability were positively related to both bridging and bonding. However, although there is support to Hypothesis 3, the positive relationship between cross-border communication and bridging social capital ($\beta = .306$) is stronger than for bonding social capital ($\beta = .125$). The mediation effects of cosmopolitan ability and cross-border communication were assessed next. As per Hypothesis 4, a partial mediation by cosmopolitanism of bridging and bonding social capital was observed. The standardized coefficient for international relocations remains statistically significant, but drops for both bridging (from $\beta = .439$ to $\beta = .337$) and bonding (from $\beta = .416$ to $\beta = .336$). Next, we examine whether communication ability acts as a mediator between the number of international relocations and bridging and bonding social capital. The results provide no support for a mediation by cross-border communication as per Hypothesis 5, as the path between number of international relocations and communication ability is not statistically significant.

Table 3: see appendix

Based on the tentatively proposed effect size ($R^2$) standards by Cohen (1988), a mixture of effect sizes were obtained (see Figure 2). Fortunately, we were able to predict a large percent of the variance in TSC ($R^2 = .38$), as well as separately for bridging and bonding forms of TSC ($R^2 = .38$ and .39, respectively) using the international relocations, cross-border communication, and cosmopolitan ability variables. It is clear from the structural coefficients that the international relocations and cosmopolitan ability variables were the best predictors. The $R^2$ statistics for the other endogenous variables are smaller,
which is partly expected given that fewer variables are predicting them (e.g., only international relocations predicted cross-border communication and cosmopolitan ability).

Post hoc Analyses

Previous research has shown that gender can affect access to and the accumulation of social capital in domestic settings (e.g., Ibarra, 1992, 1997; McDonald, 2011). Furthermore, women, particularly in men-dominated environments, which international assignments would typically be, often face significant challenges in forming positive work relationships because they are seen to transgress gender role expectations (Heilman & Okimoto, 2007; Heilman, Wallen, Fuchs & Tamkins, 2004). To gain a fine-grained insight into the effect of gender on the development of TSC, we have therefore estimated an additional series of regression models (Table 4). The analysis indicates that being a woman increased cosmopolitan ability, although this result is only slightly statistically significant ($\beta = .123, p = .081$), but had no statistically significant effect on cross-border communication, bridging, or bonding forms of social capital. To better understand these results, we estimated two full models, one for women and another for men ($n_{women} = 47$, $n_{men} = 180$).

Table 4: see appendix

Analyses indicate that the model fits relatively well among men, but not among women. While these results are tentative due to the relatively small sample sizes, they
suggest that international relocations remain significant predictors for both groups, with the relationship being stronger for women. Further, they imply that the mediation by cosmopolitanism is only valid for men. While cosmopolitanism has a significant effect on both forms of TSC for men, this does not apply for women. Interestingly, cross-border communication has a positive effect on TSC only for men.

Discussion

The results provide broad support for our conceptual framework which suggests that the nexus of opportunity—investment—ability influences the development of TSC. Examining our direct effect hypotheses first, we find that international relocations, cross-border communication, and cosmopolitan ability are all directly associated with higher level of TSC. These findings are consistent with our argument that TSC requires first and foremost an opportunity to interact with others across borders, but is also associated with the ability to effectively interact across cultures and with ongoing investment in cross-border relations. Examining these relations at the sub-dimension level of bridging and bonding forms of social capital yields similar results. The only slightly weaker effect was of investment in cross-border communications on bonding. Given the relatively uniform size of all other relationships, this lower effect is unexpected. This result may be related to the transient nature of global networks, in which relationships are often formed ‘on the go’ and, while they may be characterised by emotional intensity, are nevertheless ephemeral and more difficult to maintain over time even with a substantial investment (Wittel, 2001). Furthermore, expectations surrounding relationships formed under
transient circumstances may lead individuals to invest fewer resources into building strong ties.

The mediation analyses provide support for a partial mediation effect of cosmopolitan ability, suggesting that while global experiences are important to the development of TSC, taking full advantage of these opportunities requires the ability to navigate a cross-cultural settings and create a rapport with colleagues across national boundaries. By contrast, the analyses do not support a mediation effect for cross-border communication, suggesting that global experiences’ effect on TSC transcends the actual level of communication undertaken (or at least, that indicated by a cross-sectional, rather than longitudinal, measure).

Finally, examining our demographic variables indicates that younger individuals have more TSC, independently of organizational tenure. This might point to an intergenerational effect on global mindsets and associated social networks. Interestingly, tenure had no effect on TSC, suggesting that it is age itself rather than age as a proxy for experience that seems to have an effect. Another strong interesting effect is that of education, which shows a positive association with cosmopolitanism, but not with TSC. It seems that education promotes a disposition of openness and tolerance of other cultures, thereby facilitating the development of a cosmopolitan disposition, but does not in itself directly relate to TSC. Finally, our analyses indicate that there may be differences in TSC between women and men, consistent with the body of evidence on social networks more generally (Ibarra, 1992; 1997). These are potentially rich avenues for further study.
Limitations

There are several limitations to this study that we should acknowledge. First, our study utilizes data largely derived from survey measures. This data source can be subject to common method bias (Podsakoff et al., 2003) and therefore, ideally, self-report social capital information should also be supplemented with data from social network sites such as the professional networking platform LinkedIn. However, because our study sought to measure access to resources associated with bridging and bonding TSC and not only the number of cross-border ties, it was necessary to rely on subjective assessments of TSC. Like many other researchers (e.g., de Janasz et al., 2013), we relied on self-reports and took several actions to minimize sources of bias (see methods section). Nevertheless, it is possible, for example, that people over-estimate expected reciprocity.

Second, social capital relationships are susceptible to variation and oscillation over time (e.g. see Burt & Merluzzi, 2016) and this study has not dealt with the important temporal nature of social capital. Third, we have chosen to focus on cosmopolitan ability as opposed to other global competencies as suggested for instance by Bird et al. (2010); the Big 5 personality traits such as openness to experience (Cavazotte, Moreno, & Hickmann, 2012); and the global mindset (Levy et al., 2007) of executives and how these may influence the development of their TSC.

Finally, although the total number of respondents was sufficient for most analyses, the overrepresentation of European participants limits the “global” generalizability of the results. Perhaps more important was the selection—first, of those who decided to attend the institution’s programs (or were asked by their companies to do
so) – these were, on the whole, professionals with significant international experience compared to the general population – and, second, those who chose to answer the survey may have had more of a global career orientation than those who did not.

**Implications for Theory**

We make several contributions to the understanding of TSC and our study has three major implications for theory. First, we provide a conceptual framework for the development of TSC, as well as rigorous operationalization of the construct. Despite the growing prevalence of global networks and the considerable theoretical and practical interest in cross-border ties, there have been limited number of rigorous efforts (e.g., Jokinen, Brewster, & Suutari, 2008; Levy, Peiperl, & Bouquet, 2013) to study TSC in a professional context. We adopted a multidimensional view of TSC and identified bridging and bonding as two distinct yet related dimensions. Whereas much of the research on social capital in MNCs suggests that those who occupy boundary-spanning positions form bridging ties across organizational units, our framework indicates that a focus on both bridging and bonding social capital formed within and across organizational boundaries provides another promising avenue to explore.

The second major theoretical contribution of our study is that international experience positively affects TSC, thereby offering further support to previous studies on international assignments (e.g., Berthoin Antal, 2000; Suutari & Mäkelä, 2007; Jokinen et al., 2008). Furthermore, our results demonstrate that continuous investment in cross-border ties also seems to offer a viable means for building TSC. However, the effect of investment in cross-border communication seems to be limited to bridging social capital
and may well be gendered, as our analyses suggest that investment by men, but not by women, leads to higher TSC. We should note, however, that the findings regarding gender should be interpreted with caution because of the relatively small number of women in our sample.

Finally, this study also indicates that core global competencies of executives, specifically cosmopolitan ability, significantly influence the creation of TSC. Because transnational social relations are formed in a complex cultural context, managing these relations to form long-lasting social capital requires the “right” ability. Furthermore, this study has gone some way toward demonstrating a mediating effect of cosmopolitan ability on the relationship between international experience and TSC.

**Implications for Practice**

Processes of globalization and technological change are transforming the spatial organization of professional life, wherein an increasing number of executives form professional ties that span national borders, engage in transnational networks internal and external to their workplace, and regularly travel from country to country. These processes are no longer limited to expatriates, but rather affect a growing number of executives who form cross-border ties with organizational members in overseas business units, develop contacts with customers and suppliers in other countries, or join professional communities of practice that are geographically dispersed. These processes affect the social capital of executives that is becoming more and more transnational as connections, interactions, and transactions increasingly span national borders. This leads us to the practical implications of this research for global companies.
The ability to create social relations in a cross-cultural setting is considered a key factor in expatriate adjustment and success (Arthur & Bennett, 1995; Bhaskar-Shrinivas et al., 2005; Harrison & Shaffer, 2005) and an essential global management skill (Mendenhall et al., 2013). Given our findings, it would make sense for global organizations that wish their members to develop this ability to pay more attention to the underlying relationships identified here. For example, developmental cross-border assignments might, in the near-term, be most usefully allocated to those who would most benefit from them – professionals with the least amount of international experience, certainly, but also those most in need of more cosmopolitan abilities and language skills. Alternatively, organizations in need of immediate results from such assignments might choose to work on these competencies through direct training (coaching, language classes, etc.) before sending people abroad, in order to maximize their social capital accumulation once there.

Further, the demand for leaders and managers to branch out beyond their own geographic roots to cultivate business ties that can foster their career and facilitate a firm’s success on a global scale are growing. Thus individuals looking to maximize their own career assets should take due notice of these results. Managers and leaders who seek international opportunities, make continued investments in developing their transnational social networks, and hone their cosmopolitan abilities in combination will be best positioned to succeed, and to help their organizations succeed, in the global business arena.
References


Han, J., Han, J., & Brass, D. J. (2014). Human capital diversity in the creation of social capital for team creativity. *Journal of Organizational Behavior, 35*(1), 54-71.


Figure 1: Hypothesized Model*

*The mediation effects are indicated by dashed lines (H4 and H5)
### Table 1: Descriptive statistics, correlations and reliabilities

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n = 227. Internal reliabilities (alpha coefficients) for the constructs are given in parentheses on the diagonal.

** p < 0.01
* p < 0.05
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* Standardized Coefficients† Model 1 amounts to a multiple linear regression model since the number of international relocations is measured by a single item. Consequently no fit statistics are available. Instead, fit is assessed via the coefficient of determination – R-Square. ** p < 0.001
Figure 2: Results of the structural equation model for transnational social capital*

Standardized path coefficients for the hypothesized model.
Control variables are not shown for ease of presentation
** p < 0.01
### Table 3: Results of the structural equation analyses for bridging and bonding*

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* Standardized Coefficients
** p < 0.001
Table 4: Results of the structural equation analyses for Women and Men*

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<td>Total work years in MNCs → Cross-border Communication</td>
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Chi-square 593.933 ** 360.812 .023
CFI .609 .974
TLI .521 .968
RMSEA .142 .031
SRMR .1262 .0577
n 47 180

* Standardized coefficients
** p < 0.001
Appendix

**Transnational social capital**

Respondents were asked to indicate agreement/disagreement on a 7-point Likert scale with the following statements about their professional network and contacts:

**Bridging dimension**

1. I have an extensive network of professional contacts in other countries
2. If I organized a professional activity (e.g. project, conference and task force), I could get my professional contacts in other countries to participate
3. I make new contacts with professionals in other countries all the time
4. I spend time supporting international professional activities
5. I routinely cooperate with professionals from other countries

**Bonding dimension**

1. If I were at a career crossroads, there are several professional contacts in other countries I could talk to about it
2. My professional contacts in other countries would give me a positive letter of reference
3. Some of my professional contacts in other countries would put their reputation on the line for me
4. I trust several of my professional contacts in other countries to act in my best interests
5. Some of my professional contacts in other countries would make a significant effort to help me find a new job
(6) My professional contacts in other countries could get me access to important people or organizations

**Cosmopolitan ability**

Respondents were asked to indicate agreement/disagreement on a 7-point Likert scale with the following statements:

1. I am willing to explore the practices and beliefs of people from other cultures
2. Foreigners living in my country enrich our lives with new ideas and new cultures
3. I make an effort to understand people from other cultural traditions as individuals
4. Over the years my worldview has been shaped by practices and values from other cultures
5. New cultural settings are exciting
6. I seek to understand the point of view of people from other cultural traditions
7. I would like to have more new cultural experiences