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RESEARCH ARTICLE

Culture and social entrepreneurship: the role of value-practice misalignment

Katrina M. Brownell · Diana M. Hechavarria · Colleen C. Robb · Jill Kickul

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Abstract Scholars tend to evaluate the effects of cultural factors on social entrepreneurial activity based on either cultural values or cultural practices. However, societal inconsistencies between values and practices have the potential to create uncertainty in expected entrepreneurial behaviors. In this paper, we operationalize *cultural dissonance* as the gap between cultural values and cultural practices and draw on role congruity theory to theorize and test how cultural dissonance influences engagement in social entrepreneurship. Using data from the Global Entrepreneurship Monitor, the Global Leadership and Organizational Behavior Effectiveness, and the World Bank datasets ($N = 23{,}828$), we show that cultural dissonance can either impede or encourage social entrepreneurial activity and that female entrepreneurs are less sensitive to these effects than male entrepreneurs.

Plain English Summary What a society values offers direction for prospective entrepreneurs. Traditionally, values and practices are measured interchangeably; i.e., individuals will act in a manner consistent with their values. However, inconsistencies between the two have important implications for prospective entrepreneurs. As a result, it is vital to understand how dissonance between values and practices might impact the decision to start a new venture. We find support for our perspective that values and practices do not always align and that this dissonance impacts entrepreneurial decision making, effects which are stronger for men than for women.

Keywords Social entrepreneurship · Culture · Role congruity theory · Global Entrepreneurship Monitor

JEL Classification L26 · L31

K. M. Brownell (✉)
Pamplin College of Business, Virginia Polytechnic Institute, Blacksburg, USA
e-mail: drkatie@vt.edu

D. M. Hechavarria
Rawls College of Business, Texas Tech University, Lubbock, USA
e-mail: diana.hechavarria@ttu.edu

C. C. Robb
Daveler &, Kauanui School of Entrepreneurship, Florida Gulf Coast University, Fort Myers, USA
e-mail: crobb@fgcu.edu

J. Kickul
EGADE Business School, Tecnológico de Monterey, San Pedro Garza García, Mexico
e-mail: jillkickul@gmail.com

1 Introduction

A nation's culture, defined as the shared values, norms, and practices of a society (House et al., 2004), shapes the legitimacy of entrepreneurial activity (Chua et al., 2015; Stephan & Uhlaner, 2010), and

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what is valued in a specific country impacts the type and number of new ventures that emerge (Liñán et al., 2016; Stephan, 2022; Stephan & Pathak, 2016). In empirical research, culture is conceptualized either as values, which reflect shared ideals of a culture ("how it should be"), or practices, which reflect shared beliefs of how individuals routinely behave in a culture ("how it is;" Hofstede, 2010; House et al., 2004). With a few notable exceptions (e.g., Autio et al., 2013; Hechavarria & Brieger, 2022; Stephan et al., 2015; Thai & Turkina, 2014), entrepreneurship scholars tend to operationalize culture through values (e.g., Bullough et al., 2017; Calza et al., 2020; Canestrino et al., 2020; Jaén et al., 2017; Lee & Kelly, 2019; Morales et al., 2019; Stephan & Pathak, 2016). This perspective is built upon the assumption that the relationship between values and practices is self-reinforcing, such that individuals will act in a manner consistent with their values (Hofstede, 2001; Patterson, 2014).

However, research has revealed a negative relationship between values and practices (Brewer & Venaik, 2010; Maseland & Van Hoorn, 2009; Taras et al., 2010), which suggests that each is likely to relate differently to distinct behaviors due to theoretical and empirical inequivalence (Javidan et al., 2006). Societal inconsistencies between values and practices have critical implications for entrepreneurs, as any dissonance between the two can create uncertainty concerning expected behaviors. An entrepreneur may consider engaging in social entrepreneurial activity in a society that purports to value altruism and generosity. But if in practice, individuals prioritize self-interests and financial success, this misalignment has the potential to make social venture creation less attractive due to distorted perceptions of values-guided behaviors.

The primary purpose of this paper is to operationalize the misalignment between cultural values and practices, which we define as *cultural dissonance*, and explore the value of this conceptualization by examining how cultural dissonance influences engagement in social entrepreneurial activity. Our theorizing draws on role congruity theory, which explains that prevailing norms and expectations exist concerning how individuals should behave, but individuals often find incongruities between these expectations and their identities (Biddle, 1986; Eagly & Wood, 2012). For instance, some scholars show a negative relationship between uncertainty avoidance values and social entrepreneurship (Canestrino et al., 2020), but others demonstrate a positive relationship between uncertainty avoidance practices and social entrepreneurship (Hechavarría and Brieger, 2022). Moreover, entrepreneurship is a gendered activity (Ahl & Marlow, 2012; Gupta et al., 2009; Jennings & Brush, 2013), and research has established that cultural factors have an important influence on women's entrepreneurship (Gimenez-Jimenez et al., 2022; Hechavarría and Brieger, 2022). We propose that cultural dissonance will influence prospective male and female social entrepreneurs differently based on congruence or incongruence with overarching cultural factors. Using multilevel logistic regression, we test our hypotheses in a pooled sample of entrepreneurs ($N = 23{,}828$).

This research offers two important contributions to the literature. First, we find support for societal misalignment between cultural values and practices, i.e., cultural dissonance, which contributes to recent research calling for an exploration of how cultural factors influence entrepreneurship (Bullough et al., 2022). By showing that cultural dissonance influences social entrepreneurial activity, we inform conversations concerning how cultural attributes shape social entrepreneurship (e.g., Canestrino et al., 2020; Gupta et al., 2022 Hechavarría and Brieger, 2022; Kedmenec & Strašek, 2017; Saebi et al., 2019) and the effects of role (in)congruity (e.g., Anglin et al., 2022a; Cowden et al., 2021; Martiarena, 2022; Yang et al., 2020). Second, we reveal that female entrepreneurs are less sensitive to cultural dissonance than males, thus extending recent discussions on the influence of gender in entrepreneurship (e.g., Alsos & Ljunggren, 2017; Bullough et al., 2017; Hechavarría and Brieger, 2022; Jennings & Brush, 2013; Malmström et al., 2017; Malmström et al., 2020; Yang & del Carmen Triana, 2019). We propose entrepreneurial activity is driven, at least in part, by whether an entrepreneur views his or her self-concept as congruent or incongruent with higher-order dimensions of culture and gender roles.

2 Theoretical background

2.1 Culture and social entrepreneurship

Culture operates as a generative scheme invoked by entrepreneurs as a tool to inform their actions (Bruni

et al., 2004; Davidsson, 1995; Lauring et al., 2018; Patterson, 2014; Swidler, 2008) and sets boundaries for entrepreneurial activity (Liu & Almor, 2016; Muralidharan & Pathak, 2017). A favorable national culture can create an advantageous institutional environment which makes entrepreneurship socially valued and recognized (Davidsson, 1995; Mueller & Thomas, 2001). While economic entrepreneurship is focused on the exploitation of opportunities for personal or stakeholder wealth through financial pursuits, social entrepreneurship centers around engaging in altruistic, ecological, or communal opportunities through social provisioning, and focuses on activities motivated by societal needs (Austin et al., 2006; Zahra et al., 2009). Both cultural values and cultural practices have been established as important to entrepreneurial intentions and action (e.g., Canestrino et al., 2020; Jaén et al., 2017; Kedmenec and Strašek, 2017; Puumalainen et al., 2015; Short et al., 2009; Stephan et al., 2015).

Cultural values refer to the enduring beliefs, attitudes, and principles that guide behavior within a particular culture (Hofstede, 1980). These values can influence a society's attitude towards social entrepreneurs, as well as the likelihood of individuals within that society engaging in social entrepreneurship. For example, collectivist cultures, which value interdependence and community harmony, are more likely to support social entrepreneurship, but individualistic cultures, which prioritize individual achievement and autonomy, may be less supportive of social entrepreneurship. Cultural values can not only shape how business is conducted within new ventures but also reveal how and why venture creation is motivated as a predecessor to action (Hayton et al., 2002). Not all societies foster entrepreneurial action with equal effectiveness (Bruton et al., 2010; De Clercq et al., 2013), but through cultural values, can either encourage or discourage entrepreneurial activity (Hayton et al., 2002).

Cultural practices refer to the shared behaviors and customs that are specific to a particular culture (Patterson, 2014; Therborn, 2002). Cultures with a strong tradition of philanthropy, voluntary service, a history of social activism, and community organizing are more conducive to the development of social entrepreneurship (Bacq et al., 2013). Scholars argue that cultural practices guide behaviors through a "dominant logic of action" which reflects a repertoire of habits, skills, and styles (Swindler, 1986). Thus, cultural practices are argued to be a better measurement of culture than values, because individuals are likely to conform to societal norms by repeating typical behaviors (Powell et al., 2012; Stephan et al., 2015). This approach has been used to explain women's entrepreneurship (Bullough et al., 2017; Hechavarría and Brieger, 2022), as well as cross-cultural differences in economic and social entrepreneurship (Autio et al., 2013; Stephan & Uhlaner, 2010; Thai & Turkina, 2014).

To date, research exploring the link between specific cultural dimensions and social entrepreneurial activity offers mixed results. A recent paper builds on the literature exploring female entrepreneurship (Urbano Pulido et al., 2014) to reveal that female entrepreneurs are more likely to engage in social entrepreneurship when the practices of power distance, humane orientation, and in-group collectivism are low, and the practices of future orientation and uncertainty avoidance are high (Hechavarría and Brieger, 2022). Differently, power distance, individualism, and uncertainty avoidance are all negatively related to traditional (commercial) entrepreneurship and power distance is negatively related to social entrepreneurship (Puumalainen et al., 2015). Other scholars use values to explore the contextual drivers of different types of entrepreneurial activity (e.g., Kedmenec & Strašek, 2017), but after finding only partial support for certain dimensions, scholars concluded that culture was not a sufficient justification for national differences in social entrepreneurship rates (Canestrino et al., 2020). Interestingly, however, other studies have revealed that specific dimensions interact with demographic categories (i.e., age, education) to predict social entrepreneurial activity (Lee & Kelly, 2019; Urbano Pulido et al., 2014). A summary of research testing the relationship between cultural factors and social entrepreneurship is presented in Table 1.

2.2 Cultural dissonance

Culture is a construct that is often represented using an "onion" metaphor, wherein cultural values are at the core, with practices making up the outer layer (Hofstede, 2001). The GLOBE study contains separate measures and offers a unique opportunity for scholars to explore differences between these cultural

Table 1 Cultural factors and social entrepreneurship

Author(s)	Date	Cultural factors	Objective of study	Study scope	Findings
Urbano Pulido, Ferri Jiménez, and Noguera i Noguera	2014	Post-materialism, altruism, membership of a social organization	Analyze socio-cultural factors that influence the likelihood of female social entrepreneurship using institutional economics	WVS (1999–2004). 40 countries	Altruistic attitudes and being a member of a social organization are relevant socio-cultural factors for female social entrepreneurship
Hechavarría	2015	Authority, well-being	The cultural determinants of macro-level social and commercial entrepreneurship	2009 GEM, WVS. 53 countries	Traditional societal values positively impact commercial entrepreneurship prevalence rates, but negatively impact social entrepreneurship rates Self-expression societal values positively impact social entrepreneurship prevalence rates
Puumalainen, Syrjä, Sjögrén, and Barraket	2015	Power distance, individualism, in-group collectivism, uncertainty avoidance	Explores the roles of culture, socioeconomic development, and governance institutions on the prevalence of social entrepreneurship	2009 GEM; 2013 The Hofstede Centre	Power distance, individualism, and uncertainty avoidance are all negatively related to traditional (commercial) entrepreneurship and power distance is negatively related to social entrepreneurship
Stephan, Uhlaner, and Stride	2015	Humane orientation, assertiveness	Develop the institutional configuration perspective to understand which national contexts facilitate social entrepreneurship	2009 GEM, WVS GLOBE, Heritage, World Bank	Significant main effect for post-materialism and SSC practices on social entrepreneurship, positive relationship between SSC and SE. Overall, joint institutional configurations of formal and informal institutions offer more explanatory power than examinations of their individual effects
Hoogendoorn	2016	Rule of law, survival versus self-Expression	Which factors are associated with a country's share of social start-ups; explores the contextual drivers of different types of entrepreneurship	2009 GEM. 49 countries	Share of social start-ups in all start-ups seems to benefit from favorable institutional circumstances. A society's level of self-expression values benefits start-up diversity in favor of a higher share of social start-ups

Table 1 (continued)

Author(s)	Date	Cultural factors	Objective of study	Study scope	Findings
Kedmenec and Strašek	2017	Power distance, individualism, uncertainty avoidance, masculinity, long-term orientation, indulgence	Whether certain national cultural dimensions facilitate or hamper social entrepreneurship	2009 GEM. 40 countries	A negative association between national power distance level and SEA. Individualism and uncertainty avoidance had no direct linear association with SEA. In factor-driven economies, lower levels of masculinity support the development of social entrepreneurship. In innovation-driven economies, social entrepreneurial ventures emerge more often in those cultures characterized by short term orientation and indulgence
Lee and Kelly	2019	Culturally endorsed implicit leadership theories (CLTs), humane-oriented CLT, self-protective CLT, economic freedom	Contribute to the understanding of favorable cultural contexts that influence individuals to pursue social entrepreneurship	2009 GEM. 27 countries	Country context of low self-protective cultural leadership ideal had a positive impact on SEA
Canestrinoa, Ćwiklickib, Magliocccac, and Pawełekd	2020	Power distance, uncertainty avoidance, in-group collectivism, institutional collectivism, gender egalitarianism, performance orientation, future orientation, humane orientation, assertiveness	How do GLOBE values affect SEA	2015 GEM, GLOBE	Positive correlation between gender egalitarianism and SEA Negative correlation between uncertainty avoidance and SEA confirmed for all countries. The link between future orientation, in-group collectivism, and SEA partially verified

Table 1 (continued)

Author(s)	Date	Cultural factors	Objective of study	Study scope	Findings
Lee, Simmons, Amezcua, Lee, and Lumpkin	2020	Uncertainty avoidance, power distance, future orientation, humane orientation, performance orientation, assertiveness, in-group collectivism	How do national culture and societal attitudes influence individual level decisions to allocate entrepreneurial talent into revenue generating and not-for-profit social enterprises	2009 GEM. 16 countries	Stigma of business failure is positively associated with the probability of SEA. In both performance-based cultures and socially supportive cultures, the positive effects of the stigma of business failure on SEA are decreased. Informal institutions significantly influence the revenue generating-strategy of social entrepreneurship but have no significant correlation to the nonprofit-strategy of social entrepreneurship
Hechavarría and Brieger	2022	Gender egalitarianism, uncertainty avoidance, power distance, future orientation, humane orientation, performance orientation, assertiveness, institutional collectivism, in-group collectivism	Which cultural practices are most relevant for female entrepreneurs' practice of social entrepreneurship	2009 and 2015 GEM, GLOBE, WB. 33 countries	Female entrepreneurs are more likely to engage in social entrepreneurship when cultural practices of power distance, humane orientation, and in-group collectivism are low, and cultural practices of future orientation and uncertainty avoidance are high
Makeel, Ashraf, Ariyesti, and Ali	2022	Uncertainty avoidance, power distance, future orientation, humane orientation, performance orientation, assertiveness, in-group collectivism	Explore the effect of SSC and PBC on SE performance	Vincentian Scale	PBC and SSC enhance SE growth and performance, SEO partially mediates the PBC and SE performance relationship along with TMT involvement as a moderator

SEA social entrepreneurial activity, *GEM* Global Entrepreneurship Monitor, *GLOBE* Global Leadership and Organizational Behavior Effectiveness, *WB* World Bank, *WVS* World Values Survey

facets. Cultural consonance reflects the degree of coherence an individual experiences within a specific culture (Dressler et al., 2018; François Dengah et al., 2022). A central assumption of cultural consonance revolves around how individuals understand patterns of agreement between norms and behaviors within that culture (Romney et al., 1986).

But evidence suggests that cultural values and practices are negatively correlated, and each relates differently to distinct behaviors (House et al., 2004; Javidan et al., 2006). Though some scholars have argued that differences between values and practices might lie in measurement concerns (e.g., Maseland & Van Hoorn, 2009), others suggest that substantial cultural shifts or different motivational factors could drive inconsistencies (Cohen, 2001; Taras et al., 2010). For example, in organizations, values such as, "employees should not steal from the company," may deviate substantially from practices, i.e., "employees do steal from the company," with disparate behaviors (i.e., stealing vs. not stealing; Lea, 1999). Accordingly, we introduce the concept of *cultural dissonance*. Low cultural dissonance reflects consistency between values and practices; behaviors are equally desirable and practiced. High cultural dissonance reflects inconsistency between values and practices; behaviors are not equally desirable and practiced. We expect that cultural dissonance will play a role in explaining the choice to engage in social entrepreneurial activity. Further, it is recommended to consider each dimension separately in order to fully understand plausible explanations for dissonance (Brewer & Venaik, 2010), which we do in greater detail, below.

A socially supportive culture (SSC) reflects a positive societal climate in which individuals support each other, are generous and caring, have high levels of social capital, and are characterized by a high positive loading of humane orientation and a low positive loading of assertiveness (Stephan & Uhlaner, 2010). *Humane orientation* is the "degree to which a collective encourages and rewards individuals for being fair, altruistic, friendly, generous, caring, and kind to others" (House et al., 2004: 30). *Assertiveness* is the "degree to which individuals are assertive, confrontational, and aggressive" (House et al., 2004: 30). SSC cultural dissonance manifests when inconsistences viewed at the societal level create ambiguity around behavioral legitimacy, related directly to the importance of cooperation, friendliness, supportiveness, cooperation, social capital, and social relationships.

A performance-based culture (PBC) reflects a societal climate in which individual accomplishments and financial performance are rewarded and systematic, future-oriented planning is viewed as necessary to achieve success (Stephan & Uhlaner, 2010). PBCs are characterized by a high positive loading of future orientation, uncertainty avoidance, and performance orientation, and a high negative loading of in-group collectivism and power distance. *Future orientation* is the "extent to which individuals engage in future-oriented behaviors, such as delaying gratification, planning, and investing in the future" (House et al., 2004: 30). *Uncertainty avoidance* is the "extent to which a society, organization, or group relies on social norms, rules, and procedures to alleviate unpredictability of future events" (House et al., 2004: 30). *Performance orientation* is the "degree to which a collective encourages and rewards group members for performance improvement and excellence" (House et al., 2004: 30). *In-group collectivism* is "the degree to which individuals express pride, loyalty, and cohesiveness in their organizations or families" (House et al., 2004: 30). *Power distance* is the "degree to which members of a collective expect power to be distributed equally" (House et al., 2004: 30). PBC cultural dissonance manifests when inconsistences viewed at the societal level create ambiguity around planning ahead, an objective view of rules and regulations, performance-based appraisal systems, the importance of personal relationships, and unequal distributions of power.

2.3 Role congruity theory

Role congruity theory is grounded in social role theory, which submits that prevailing norms, expectations, and stereotypes (i.e., social roles) exist concerning how groups of individuals should behave (Biddle, 1979, 1986; Eagly & Wood, 2012). Social roles are socially shared behavioral expectations that attach to an individual's position as it relates to a particular social setting or social category (Biddle, 1979). Conforming to behavioral expectations drives evaluations by others, in that acting in accordance with prescribed roles results in favorable evaluations but acting incongruent with

these roles can elicit social sanctions (Bolino & Turnley, 2003; Eagly & Karau, 2002).

One of the key predictions of role congruity theory is that individuals who experience role incongruity are less likely to engage in activities associated with their incongruent role (Eagly & Karau, 2002). This implies that individuals whose personal characteristics or roles are incongruent with societal expectations of entrepreneurs may be less likely to engage in entrepreneurial activity. The role of the economic entrepreneur tends to be associated with the characteristics of masculinity, aggressive risk-taking, and overconfidence (Anglin et al., 2018; Balachandra et al., 2019; Estrin et al., 2013; Jonason & Fletcher, 2018), factors which are often attributed to male-based stereotypes. Entrepreneurs that perceive congruity with these characteristics are likely to engage in entrepreneurial action in cultures that reflect these factors. However, social entrepreneurs are more often associated with compassion, empathy, agreeableness, and concern for others (Nga & Shamuganathan, 2010; Pan et al., 2019; Saebi et al., 2019), factors which are often attributed to female-based stereotypes. Social entrepreneurs that perceive congruity with these characteristics are likely to engage in social entrepreneurial action in cultures that reflect these factors (Stephan et al., 2015; Westlund & Adam, 2010). Divergence between cultural values and cultural practices could act as a facilitator to action as social entrepreneurs function as agents of change, allowing or encouraging realignment of cultural values and practices via entrepreneurial activities. For instance, launching a new venture with a social mission in a culture with a high level of SSC cultural dissonance might encourage practices reflecting humane orientation, thus decreasing the level of dissonance between values and practices. However, cultural dissonance also has the potential to impede social action if interpreted by social entrepreneurs in such a way that they conclude they are illegitimate actors and choose instead to engage in other activities.

3 Hypothesis development

3.1 Socially supportive cultures

Scholars consistently show positive effects of socially supportive cultures on entrepreneurship, explained by decreased risk factors in the venture creation process (Gimenez-Jimenez et al., 2022) and by allowing access to critical resources which are essential for venture survival (Stephan & Uhlaner, 2010). Socially supportive cultures are specifically noted to stimulate social entrepreneurship, as the culture reflects those who value trust, cooperation, and caring behavior (Stephan et al., 2015; Westlund & Adam, 2010). SSC cultural dissonance occurs when inconsistences viewed at the societal level create ambiguity around expected behaviors related to humane orientation and assertiveness. For instance, prospective social entrepreneurs might interpret societal values to indicate that individuals will encourage and reward altruism, social action, and motives addressing social problems, reflecting the expected high positive loading of humane orientation, but discourage assertive pursuit of self-interests and financial rewards, reflecting the expected high negative loading of assertiveness. However, if practiced behaviors do not reflect these values, there is an increased risk of failure for new social ventures because these circumstances are likely to reflect a lower demand for social entrepreneurial activity. We therefore predict that as SSC cultural dissonance increases, engagement in social entrepreneurial activity will decrease.

> **Hypothesis (H1)**. There is a negative relationship between SSC cultural dissonance and engagement in social entrepreneurial activity.

3.2 Performance-based cultures

Scholars consistently show positive effects of performance-based cultures on economic entrepreneurship, explained through high achievement orientation and an inclination for systematic planning (Brinckmann et al., 2010; Delmar & Shane, 2003; Rauch et al., 2000). Performance-based cultures are specifically noted to stimulate economic entrepreneurship, as this culture reflects those who value financial achievement and systematic business planning, and rewards individuals that engage in similar cultural practices, such as capitalizing on innovation or taking initiative (Laskovaia et al., 2017). Economic entrepreneurship is perceived as socially desirable in performance-based cultures due to norms that encourage and reward individual efforts and accomplishments (Thai

& Turkina, 2014). PBC cultural dissonance occurs when inconsistencies viewed at the societal level create ambiguity around expected behaviors related to future orientation, uncertainty avoidance, performance orientation, in-group collectivism, and power distance. That is, prospective entrepreneurs might interpret societal values to indicate that individuals will encourage and reward economics pursuits, systematic future planning, and financial rewards, reflecting the expected high positive loading of future orientation, uncertainty avoidance, and performance orientation, but discourage strong social relationships, power equality, and seeking to solve societal problems, reflecting the expected high negative loading of in-group collectivism and power distance. However, if practiced behaviors do not reflect these values, we predict that prospective social entrepreneurs will be more likely to engage in social entrepreneurial activity because these circumstances are likely to reflect a higher demand for social entrepreneurship through behaviors that are inconsistent with cultural factors, thus encouraging social action (Whatley et al., 1999). We therefore predict that as PBC cultural dissonance increases, engagement in social entrepreneurial activity will also increase.

Hypothesis (H2). There is a positive relationship between PBC cultural dissonance and engagement in social entrepreneurial activity.

3.3 Gender role congruity theory

Gender role congruity theory addresses the specific importance of gender roles in behavioral differences (Eagly et al., 2000) in explaining that society sets expectations about which behaviors or characteristics are considered masculine or feminine (Eagly et al., 2000; Fiske, 2000). For example, males are often expected to be masculine and display behaviors that reflect assertiveness and strength, but women are often expected to be feminine and display behaviors that reflect compassion and empathy (Vogel et al., 2003). Gender role congruity theory builds on these stereotypes by comparing beliefs about how men and women should behave with understandings of how men and women do behave, resulting in favorable perceptions when these norms are in alignment (Eagly & Karau, 2002). These stereotypes are often so deeply embedded that they are endorsed by both men and women, which leads to gender bias operating as an unconscious cognitive heuristic in decision making (Heilman, 2001; Rudman & Phelan, 2008).

Gender norms can be viewed as essential aspects of culture (Feldmann et al., 2022). Entrepreneurship is a gendered activity (Ahl & Marlow, 2012; Gupta et al., 2009), generally stereotyped as a male-dominated profession (Jennings & Brush, 2013). However, social entrepreneurs tend to be associated with empathy, compassion, and interest in the well-being of others (Pan et al., 2019; Saebi et al., 2019), characteristics which consistently conform to prevailing female stereotypes. Female entrepreneurs are more likely to pursue social missions, in alignment with perceptions of feminine attributes and social entrepreneurship (Calic & Mosakowski, 2016; Meyskens et al., 2011). We would therefore expect men to be viewed more favorably when pursuing economic entrepreneurship and women to be viewed more favorably when pursuing social entrepreneurship, as each role shares behavioral norms with gender roles typically assigned to men and women (Lee & Huang, 2018).

Consistency with gender roles tends to elicit a positive response from observers, while inconsistency can bring social sanctioning (e.g., Eagly & Karau, 2002; Gupta et al., 2018). The female gender role is stereotypically associated with demonstrating care for others, empathy, and offering social support (Eagly & Karau, 2002; Rosette & Tost, 2010). For example, in times of stress, women are more likely to draw on socially supportive networks to provide support to other (Taylor et al., 2000). Gender-based differences in motivations and outcomes exist within both socially supportive and performance-based cultures. François Dengah and colleagues (2022) found that men were more motivated by their networks than women. SSC cultural dissonance creates ambiguity around expected behaviors related to (high) humane orientation and (low) assertiveness, factors that align with traditional female roles. Because female prospective social entrepreneurs are more likely to self-select into social entrepreneurial activity to maintain gender role congruency between social entrepreneurship and their own internalized understanding of gender, we predict that they will be less affected by SSC cultural dissonance. However, we expect that male prospective social entrepreneurs will perceive gender

role incongruency with the role of the social entrepreneur *and* SSC cultural factors, making them less likely to engage in social entrepreneurial activity.

> **Hypothesis (H3)**. The negative effects of SSC cultural dissonance on social entrepreneurial activity will be more pronounced for male entrepreneurs than female entrepreneurs.

The male gender role is stereotypically associated with agentic, high-status, and self-oriented behaviors (Anglin et al., 2018; Jonason & Fletcher, 2018). For example, men are viewed as driven by economic and achievement motivations (Ljunggren & Kolvereid, 1996). The role of the economic entrepreneur aligns well with this role, as men tend to be viewed more favorably when new venture planning highlights economic performance, due to the perceived congruity between the gender role and the role of the economic entrepreneur (Anglin et al., 2022a; Malmström et al., 2020). PBC cultural dissonance creates ambiguity around expected behaviors related to (high) future orientation, uncertainty avoidance, and performance orientation, and (low) in-group collectivism and power distance, factors that align with traditional male gender roles. Because male prospective social entrepreneurs will likely be motivated to self-select into traditional entrepreneurial activity to maintain gender role congruency between economic entrepreneurship and their own internalized understanding of gender, we predict that they will be more affected by PBC cultural dissonance. However, we expect that female prospective social entrepreneurs will experience a lesser reaction to PBC cultural dissonance due to perceived gender role congruity with the role of the social entrepreneur.

> **Hypothesis (H4)**. The positive effects of PBC cultural dissonance on social entrepreneurial activity will be more pronounced for male entrepreneurs than female entrepreneurs.

4 Methodology

4.1 Sample

To generate the dataset, we combined individual-level data on social entrepreneurial activity (SEA) from entrepreneurs in the 2015 Global Entrepreneurship Monitor (GEM) survey with country-level data from the Global Leadership and Organizational Behavior Effectiveness (GLOBE; House et al., 2004) and World Bank (WB). The GEM research program constitutes the single largest and most recognized program to systematically research the prevalence, determinants, and consequences of entrepreneurial activity on an international level (Bergmann & Stephan, 2013). Consistent with research utilizing the GEM, the sample is weighted according to the adult labor force (ages 18–64) for the respective countries provided by GEM. Detailed descriptions of the methods and sampling frame used to generate the GEM database are reported in Reynolds et al. (2005) and the GEM manual (Bosma et al., 2012). All data were combined into one dataset containing the list of countries, their classification as geographical areas, the stage of economic development, and data for each cultural dimension. We selected 1-year time-lagged country-level variables from the WB dataset to reduce the potential for endogeneity between cultural dissonance and the dependent variable, social entrepreneurial activity. Once the data were cleaned and screened for incomplete responses, we identified and removed outliers and careless responses using a LongString index[1] (Meade & Craig, 2012). The final sample contained 23,828 entrepreneurs from 33 countries.

4.2 Measures

Consistent with research that utilizes GEM to investigate social entrepreneurial activity (e.g., Bosma et al., 2012; Gras et al., 2014; Hechavarría, 2016; Hechavarría and Ingram, 2019; Hechavarria & Brieger, 2022; Muralidharan & Pathak, 2017), we aggregated the social entrepreneurship questions to represent our dependent variable, engagement in *social entrepreneurial activity*. The GEM study took a broad view of social entrepreneurship, including ventures with purely social and environmental goals, as well as hybrids, which is consistent with the accepted definition of social entrepreneurship

[1] A LongString index was used to identify the number of consecutive items answered with the same response alternative (Johnson, 2005); at least six identical responses in a row were considered conspicuous and removed.

Table 2 Value-practice misalignment

Cultural dimension	Value mean	Value SD	Practice mean	Practice SD	*t*-value	*p*-value
Humane orientation	5.502	0.181	3.771	0.143	1420.298	0.000
Assertiveness	3.043	0.156	4.924	0.294	244.440	0.000
Future orientation	5.433	0.349	3.096	0.198	1078.727	0.000
Uncertainty avoidance	4.013	0.014	5.671	0.042	188.611	0.000
Performance orientation	5.988	0.232	3.068	0.306	1979.38	0.000
In-group collectivism	4.913	0.047	3.101	0.405	396.731	0.000
Power distance	2.578	0.032	5.289	0.315	2458.277	0.000

(Dees, 1998, 2018; Mair & Marti, 2006). Respondents were asked a corresponding set of questions about starting and owner-managing "any kind of activity, organization or initiative that has a particularly social, environmental or community objective" to be identified as social entrepreneurs (see, Mair & Marti, 2006; Zahra et al., 2009). Following well-established protocols (e.g., Estrin et al., 2013; Stephan et al., 2015), we created one primary indicator to measure the dependent variable, coded = 1 if the individual met the criteria for a nascent or operating social entrepreneur, or = 0 if not.

The GLOBE study assesses cultural dimensions encompassing both values and practices. There are measures for values and practices in each of the following dimensions: power distance, uncertainty avoidance, in-group collectivism, assertiveness, performance orientation, future orientation, and humane orientation (House et al., 2004). We used Stephan and Uhlaner's (2010) approach to operationalize culture in two higher-order dimensions. SSC consists of an average of two dimensions — humane orientation and assertiveness (reverse scored). PBC consists of an average of five dimensions — future orientation, uncertainty avoidance, performance orientation, in-group collectivism (reverse scored), and power distance (reverse scored).

We measured *cultural dissonance* for each higher-order dimension on the response bias corrected scores of the GLOBE values and practices (House et al., 2004). For each country, cultural dissonance was calculated as the difference between the value and the practice score on the respective GLOBE dimension. In creating our measure, we used the absolute rather than the squared value of the difference to avoid distortion of regression results, as squaring scores can inappropriately emphasize outliers (Cohen et al., 2013). Gap scores are commonly used in business research (Homburg et al., 2009). Consistent with this approach, we conducted an additional robustness check. To address the possibility of low reliabilities, which may occur when component scores have low reliabilities and are positively correlated (Edwards, 2001), we tested the correlations and differences in means between the GLOBE values and practices in our sample. We found statistically significant negative correlations between values and practices on all seven cultural dimensions and between the two second-order dimensions as calculated for socially supportive and performance-based cultures; therefore, there is little concern for low reliability in our data. Using *t*-tests, we found evidence for significant differences between values and practices at the level of each cultural dimension. These results are presented in Table 2, and means comparisons are presented in Fig. 1. Finally, *gender* was captured from the GEM survey data, where women = 1 and men = 0.

At the individual level, we included several control variables often identified as factors influencing entrepreneurial activity: *age*, *education*, and *employment status,* and personal characteristics found to influence the propensity of an individual to engage in entrepreneurship: *start-up skills*, *fear of failure*, *knowing a current entrepreneur*, and *opportunity identification* (Brieger & Clercq, 2019; Estrin et al., 2013; Nga & Shamuganathan, 2010). At the national level and consistent with cultural research in entrepreneurship (Stephan, 2022), we controlled for national wealth, measured as gross domestic product (*GDP per capita*) and *GDP growth*, as both relate negatively to national entrepreneurship rates (e.g., Minniti et al., 2006; Wennekers et al., 2005). Finally, we controlled for *unemployment rate*, *country population size*, and

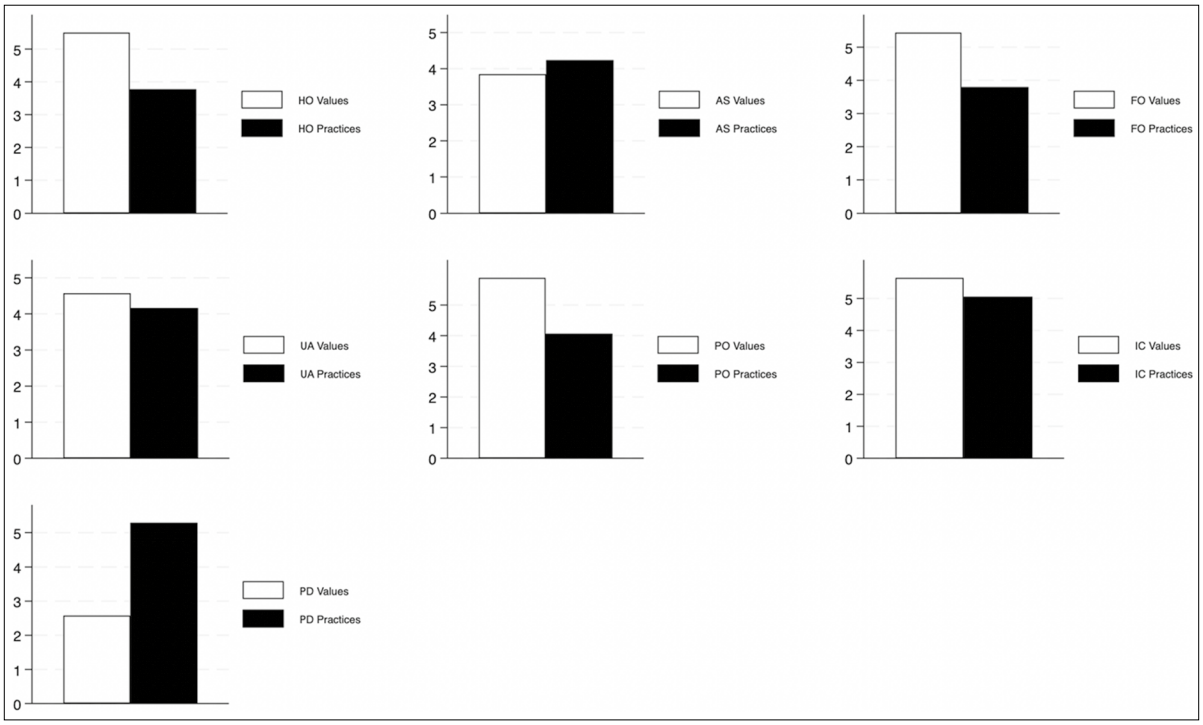


Fig. 1 Values-practice misalignment. HO, humane orientation; UA, uncertainty avoidance; PD, power distance; AS, assertiveness; PO, performance orientation; FO, future orientation; IC, in-group collectivism

population growth, as each has been linked to entrepreneurial activity (Wennekers et al., 2005). All variables and data sources are presented in Table 3.

4.3 Analysis

We tested our hypotheses by fitting a series of logistic multilevel regression models in which individuals (level 1) were nested within countries (level 2). Because the data are nested within countries (Guo & Zhao, 2000), multilevel logistic regression is the most appropriate statistical method. Multilevel modeling is preferred over conventional single-level regression analysis for several reasons. First, multilevel modeling reduces the potential for type I errors that might occur through not acknowledging the existence of higher-level (national) data. Instead, multilevel modeling provides a systematic and unbiased analysis of how variables and/or the interactions between variables measured at various levels of a hierarchical structure affect the dependent variable. Second, multilevel modeling corrects for bias that may result from clustering, i.e., non-independence of observations within the same country. Finally, multilevel modeling provides robust standard errors, confidence intervals, and significance tests. Our approach is consistent with recommendations and recent usage of multilevel analysis in entrepreneurship research (e.g., Autio et al., 2013; Estrin et al., 2013; Lepoutre et al., 2013; Stephan et al., 2015; Yang et al., 2020).

To estimate the influence of country-level cultural factors (level 2) on individual social entrepreneurial activity (coded as a binary variable), we employed mixed-effects logistic regression that assumes unobserved country-specific effects to be randomly distributed with a mean of zero, constant variance, and uncorrelated to the predictor variables. This allows the constant term to vary randomly across countries (level 2). Using STATA 16, we utilized the *melogit* command to fit our data with a mixed-effects logistic model. Following prior convention, we proceeded with a three-step estimation strategy to examine the predictors of social entrepreneurship. First, we estimated the between-group (country) variance in the dependent variables by including no predictors in our mixed-effects logistic regression model. This regression

Table 3 Variables and data sources

Variables	Items	Source
Dependent variable		
SEA	(1) Are you alone, or with others, currently trying to start any kind of social, voluntary or community service, activity, or initiative? This might include providing subsidized or free training, advice or support to individuals or organizations; profit-making activity, but where profits are used for socially orientated purposes; or self-help groups for community action. (2) Are you alone, or with others, currently trying to start any kind of social, voluntary or community service, activity, or initiative as part of your job? This might include providing subsidized or free training, advice, or support to individual or organizations; profit-making activity, but where profits are used for socially orientated purposes; or self-help groups for community action. (3) Are you, alone or with others, currently managing any such social activity, voluntary or community service, activity, or initiative?	GEM
Individual variables		
Gender	Female = 1, male = 0.	GEM
Age	Age in years.	GEM
Education	No educational background (= 0), some secondary education (= 1), secondary education (= 2), post-secondary education (= 3), or graduate experience (= 4).	GEM
Employment status	Has a full- or part-time job (= 1, 0 = otherwise).	GEM
Start-up skills	Has knowledge, skill, and experience to start a business (= 1, 0 = otherwise).	GEM
Fear of failure	Would not start a business out of fear of failure (= 1, 0 = otherwise).	GEM
Knows entrepreneur	Knows someone who started a business in the past two years (= 1, 0 = otherwise).	GEM
Sees opportunities	Perceives start-up opportunities (= 1, 0 = otherwise).	GEM
Country variables		
GDP per capita	Gross domestic product per capita (US$).	WB
GDP growth	GDP growth per capita (annual %).	WB
Unemployment	Total unemployment in % of total labor force (ILO estimate).	WB
Population	Total population includes all residents regardless of legal status or citizenship.	WB
Population growth	Population growth (annual %).	WB

SSC socially supportive culture, *PBC* performance-based culture, *SEA* social entrepreneurial activity, *GEM* Global Entrepreneurship Monitor, *GLOBE* Global Leadership and Organizational Behavior Effectiveness, *WB* World Bank

model is described as the "null model." We observed significant country-level variance (0.533), which provides strong statistical support for the choice of a multilevel model over a simple logistic regression model (Snijders & Bosker, 2011). Second, we added gender, then the cultural dissonance predictor variables to test the direct effects on social entrepreneurship engagement. Finally, we added the interaction terms. The reduction in the variance of the random intercept from the null model provides a measure of the extent to which our country-level predictors exclusively account for the proportions of the remaining variance.

To confirm the nature and significance of the interaction effects, we calculated the marginal probabilities using the *margins* command in STATA 16 to generate average marginal effects using the coefficients generated from the mixed effects *melogit* regression. To verify the appropriateness of a multilevel regression model, we examined intra-class correlations (ICC; Hox et al., 2017). When ICC shows significant national differences in an individual-level dependent variable, usage of multilevel modeling is indicated. The ICC value in our dataset was 0.139, indicating that 13.9% of the total variance resided at the country level for each social entrepreneurial activity. This is within the normal range for management research and indicates that country-level variance is significant, justifying the application of multilevel regression (Bliese, 2000; Hox et al., 2017). We tested for multicollinearity using the variance correlation estimator (VCE) and found that the highest correlation between any two variables was 0.002. This indicates

that multicollinearity is unlikely to be a concern in our data.

5 Results

5.1 Main effects

Table 4 reports descriptive statistics for all variables. Table 5 displays the effects of cultural dissonance on social entrepreneurial activity and the moderating effects of gender. Table 5, model 3, shows a negative relationship between SSC cultural dissonance and social entrepreneurial activity ($\beta = -0.514$, $p = 0.01$), supporting hypothesis 1. Table 5, model 5, shows a positive relationship between PBC cultural dissonance and social entrepreneurial activity ($\beta = 0.609$, $p = 0.01$), supporting hypothesis 2.

5.2 Moderating effects

Table 5, model 4, shows that the relationship between SSC cultural dissonance and social entrepreneurial activity was moderated by gender ($\beta = 0.349$, $p = 0.01$), supporting hypothesis 3. The baseline effect of being a female entrepreneur in this model was negative ($\beta = -0.661$, $p = 0.001$). Therefore, the relative risk ratio comparing male to female entrepreneurs (holding the other variables in the model constant) would be expected to decrease by a factor of 0.627 (odds ratio) when cultural dissonance is zero.

Table 5, model 6, shows that the relationship between PBC cultural dissonance and social entrepreneurial activity was moderated by gender ($\beta = -0.481$, $p = 0.01$), supporting hypothesis 4. The baseline effect of being a female entrepreneur in this model was positive ($\beta = 0.428$, $p = 0.003$). Therefore, the relative risk ratio comparing male to female entrepreneurs (holding the other variables in the model constant) would be expected to increase by a factor of 1.656 (odds ratio) when cultural dissonance is zero. Overall, the interaction terms indicate that the effects of gender on social entrepreneurial activity are conditioned on cultural dissonance.

5.3 Robustness checks

Using the coefficients generated in our analysis, we conducted a marginal effects analysis (Busenbark et al., 2022; Chen et al., 2022), which yields the marginal probabilities for SSC and PBC cultural dissonance and social entrepreneurial activity by gender, thus offering additional evidence in support of H3 and H4. The results are presented in Table 6.

As interpretation of interaction coefficients from logistic regression is not straightforward (Ai & Norton, 2003) and to further illustrate our findings, we provide interaction plots based on the marginal effects that show the average predicted probability of social entrepreneurial activity at different levels of cultural dissonance for male and female entrepreneurs (Figs. 2 and 3). The vertical axis denotes the probability that an individual engages in social entrepreneurial activity (i.e., $p[\mathrm{DV} = 1]$) while the horizontal axis represents cultural dissonance. The interaction plots provide further support for H3 and H4. As SSC cultural dissonance increases, social entrepreneurial activity decreases, and the effect is less pronounced for female entrepreneurs than male entrepreneurs (H3; Fig. 2). As PBC cultural dissonance increases, social entrepreneurial activity increases, and the effect is more pronounced for male entrepreneurs than female entrepreneurs (H4, Fig. 3). Collectively, as cultural dissonance increases, we find that gender becomes a stronger predictor of social entrepreneurial activity.

Finally, consistent with cultural research (e.g., Hechavarría & Ingram, 2019), we conducted one additional robustness check, in which we categorized countries according to competitiveness across stages of economic development: (1) factor-driven (extractive in nature), (2) efficiency-driven (exhibiting scale-intensity), and (3) innovation-driven (characterized by the production of new and unique goods and services using pioneering methods; Acs et al., 2008), to identify whether it was possible to detect subtle variations in effects.

We found additional support for our results, such that the relationship between SSC cultural dissonance and social entrepreneurial activity was moderated by gender in factor-driven economies ($\beta = 0.213$, $p = 0.03$), efficiency-driven economies ($\beta = 0.319$, $p < 0.01$), and innovation-driven economies ($\beta = 0.294$, $p < 0.02$). In performance-based cultures, we found that the relationship between PBC cultural dissonance and social entrepreneurial activity was moderated by gender in factor-driven economies ($\beta = -0.398$, $p = 0.001$), efficiency-driven

Table 4 Descriptive statistics

Variables	Mean	*SD*	1	2	3	4	5	6	7	8	9	10
(1) SEA	0.04	0.197	1									
(2) Gender	0.538	0.499	−0.026*	1								
(3) Age	40.467	13.374	−0.013*	0.022*	1							
(4) Education	2.011	1.004	0.084*	−0.035*	−0.099*	1						
(5) Employment status	0.589	0.492	0.067*	−0.179*	−0.008*	0.188*	1					
(6) Start-up skills	0.431	0.495	0.102*	−0.133*	−0.012*	0.088*	0.153*	1				
(7) Fear of failure	0.447	0.497	−0.039*	0.072*	0.009*	−0.013*	−0.020*	−0.145*	1			
(8) Know entrepreneur	0.331	0.471	0.104*	−0.086*	−0.121*	0.078*	0.115*	0.247*	−0.037*	1		
(9) Opportunity	0.317	0.465	0.095*	−0.047*	−0.103*	0.025*	0.077*	0.202*	−0.083*	0.220*	1	
(10) GDP per capita	25,118.01	16,433.9	−0.023*	0.007*	0.184*	0.231*	0.100*	−0.096*	0.041*	−0.128*	−0.119*	1
(11) GDP growth	-0.761	4.059	0.030*	−0.010*	−0.084*	−0.088*	0.011*	−0.034*	−0.005*	0.058*	0.104*	−0.344*
(12) Unemployment	10.59	6.456	−0.076*	−0.013*	0.069*	−0.025*	−0.118*	−0.042*	0.056*	−0.086*	−0.170*	0.081*
(13) Population	1.07E+08	2.53E+08	0.021*	−0.005*	−0.036*	−0.031*	0.020*	−0.054*	−0.031*	0.057*	−0.001	−0.239*
(14) Population growth	0.858	1.186	0.027*	−0.020*	−0.144*	−0.057*	−0.013*	0.093*	−0.057*	0.071*	0.135*	−0.137*
(15) PBC practices	2.346	0.378	0.027*	0.022*	0.077*	0.168*	0.114*	−0.047*	−0.060*	−0.020*	0.055*	0.661*
(16) SSC practice	2.255	0.324	0.067*	0.006*	−0.110*	−0.030*	0.037*	0.017*	−0.052*	0.100*	0.174*	−0.392*
(17) PBC values	3.528	0.164	−0.033*	−0.025*	−0.094*	−0.232*	−0.119*	0.059*	0.027*	0.036*	−0.014*	−0.686*
(18) SSC values	3.335	0.286	−0.024*	0.006*	0.058*	0.046*	0.022*	−0.001	0.023*	−0.101*	−0.017*	0.367*
(19) PBC cultural dissonance	1.551	0.299	−0.023*	−0.022*	−0.084*	−0.187*	−0.111*	0.055*	0.049*	0.019*	−0.037*	−0.661*
(20) SSC cultural dissonance	1.517	0.279	−0.058*	−0.005*	0.100*	0.039*	−0.014*	−0.015*	0.052*	−0.107*	−0.135*	0.410*

Variables	Mean	*SD*	11	12	13	14	15	16	17	18	19	20
(11) GDP growth	−0.761	4.059	1									
(12) Unemployment	10.59	6.456	−0.066*	1								
(13) Population	1.07E+08	2.53E+08	0.410*	−0.234*	1							
(14) Population growth	0.858	1.186	−0.222*	−0.246*	−0.039*	1						
(15) PBC practices	2.346	0.378	−0.146*	−0.308*	0.055*	0.086*	1					
(16) SSC practice	2.255	0.324	0.353*	−0.567*	0.438*	0.405*	0.108*	1				
(17) PBC values	3.528	0.164	0.174*	0.285*	0.048*	−0.006*	−0.841*	−0.018*	1			
(18) SSC values	3.335	0.286	−0.420*	0.144*	−0.652*	−0.134*	−0.017*	−0.547*	−0.105*	1		
(19) PBC cultural dissonance	1.551	0.299	0.131*	0.280*	−0.073*	−0.072*	0.987*	−0.097*	0.877*	−0.034*	1	
(20) SSC cultural dissonance	1.517	0.279	−0.395*	0.460*	−0.542*	−0.388*	−0.090*	0.938*	0	0.776*	−0.104*	1

$N = 23{,}828$; $^*p < 0.05$

SEA social entrepreneurial activity, *SSC* socially supportive culture, *PBC* performance-based culture

Table 5 Multilevel logistic regression effects on social entrepreneurial activity

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Individual-level variables							
Age	0.001	0.001	0.001	0.003	0.001	0.001	0.001
	[1.002]	[1.003]	[1.003]	[1.013]	[1.003]	[1.003]	[1.003]
Education	0.254***	0.253***	0.269***	0.268***	0.268***	0.268***	0.268***
	[1.091]	[1.299]	[1.296]	[1.295]	[1.295]	[1.295]	[1.295]
Employment status	−0.069	−0.079	−0.262***	−0.263**	−0.263**	−0.269**	−0.269**
	[0.872]	[0.818]	[0.818]	[0.817]	[0.812]	[0.812]	[0.810]
Start-up skills	0.149*	0.145*	0.195***	0.195**	0.195***	0.198***	0.198***
	[1.024]	[1.117]	[1.302]	[1.302]	[1.302]	[1.302]	[1.305]
Fear of failure	−0.008	0.005	0.049	0.049	0.049	0.051	0.051
	[0.782]	[0.921]	[1.052]	[1.052]	[1.052]	[1.052]	[1.054]
Know entrepreneur	0.143***	0.411***	0.461***	0.462***	0.461***	0.461***	0.461***
	[1.401]	[1.492]	[1.589]	[1.592]	[1.589]	[1.589]	[1.594]
Opportunity	0.333***	0.334***	0.386***	0.386***	0.387***	0.386***	0.386***
	[1.273]	[1.332]	[1.457]	[1.433]	[1.457]	[1.457]	[1.458]
Gender		0.312*	−0.617*	−0.661**	0.424**	0.428**	0.353**
		[0.570]	[0.599]	[0.627]	[1.656]	[1.656]	[1.123]
Country-level variables							
GDP per capita	−0.001	0.001	0.001	−0.21	0.001	−0.001	0.001
	[0.971]	[0.970]	[0.970]	[0.970]	[0.970]	[0.970]	[0.970]
GDP growth	−0.052*	−0.052	−0.051*	−0.052*	−0.050*	−0.050**	−0.051
	[0.971]	[0.970]	[0.970]	[0.969]	[0.970]	[0.972]	[0.969]
Unemployment	−0.045*	−0.045*	−0.045*	−0.046*	−0.451*	−0.045*	−0.043
	[0.968]	[0.970]	[0.971]	[0.971]	[0.971]	[0.972]	[0.971]
Population	−0.001**	−0.001**	−0.020*	−0.201**	−0.001**	−0.001**	0.001
	[1.284]	[1.296]	[1.296]	[1.295]	[1.296]	[1.296]	[1.001]
Population growth	−0.041	−0.042	0.009	0.009	0.026	0.025	0.016
	[1.517]	[1.037]	[1.037]	[1.035]	[0.919]	[0.972]	[1.033]
Cultural dissonance							
SSC cultural dissonance			−0.514**	−0.435**			−0.462**
			[0.603]	[0.599]			[0.657]
PBC cultural dissonance					0.609**	0.727**	0.717**
					[1.813]	[2.030]	[2.048]
Interaction effects							
Gender							
×SSC cultural dissonance				0.349**			0.494**
				[1.612]			[0.724]
×PBC cultural dissonance						−0.481**	−0.289**
						[0.720]	[1.312]
Intercept	−3.013***	−2.969***	−2.836**	−2.816**	−3.471*	−3.621*	−3.409*
	[0.051]	[1.041]	[1.592]	[1.630]	[1.510]	[1.537]	[1.541]
ICC	0.124	0.124	0.121	0.121	0.121	0.120	0.119
Country-level variance	0.533**	0.518**	0.464**	0.433**	0.430**	0.428**	0.424**
AIC	24,363.67	24,357.03	17,385.13	17,387.06	17,385.26	17,382.71	17,386.11
BIC	24,482.82	24,484.7	17,517.21	17,527.39	17,517.34	17,523.03	17,542.95
Log likelihood	−12,167.84	−12,163.51	−8676.56	−8676.53	−8676.63	−8674.35	−8674.05

Table 5 (continued)

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Chi-squared	454.10***	439.72**	426.19***	392.40***	402.71**	398.2***	399.9***

$N = 23{,}828$; *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$, odds ratios reported in brackets

SSC socially supportive culture, *PBC* performance-based culture

Table 6 Marginal effect analysis

Gender	Cultural dissonance	SSC	PBC
Male	Without	−0.241**	0.202**
	With	−0.473**	0.481**
Female	Without	−0.107**	0.263**
	With	−0.195**	0.429**

$N = 23{,}828$

SSC socially supportive culture, *PBC* performance-based culture, ** $p < 0.01$

economies ($\beta = -0.215$, $p = 0.001$), and innovation-driven economies ($\beta = -0.355$, $p = 0.004$).

6 Discussion

The purpose of this study was to explore how misalignment between cultural values and cultural practices, which we define as *cultural dissonance*, influences engagement in social entrepreneurial activity. Both values and practices are both presumed to be guides of behavior, such that alignment between the two provides stronger guidance for how to behave. However, cultural dissonance is likely to create significant uncertainty concerning desired and expected behaviors in societies. Our findings concerning cultural dissonance have implications for research on cultural attributes and how cultural dissonance and individual characteristics of the entrepreneur influence social entrepreneurial activity.

6.1 Cultural dissonance

One of the most interesting findings from our study is that cultural values and cultural practices are negatively correlated, which has implications for research in terms of how we conceive of and measure culture in the context of entrepreneurship. Research tends to focus on the influence of *either* cultural values or practices (e.g., Bullough et al., 2017; Canestrino et al., 2020; Kedmenec & Strašek, 2017; Puumalainen et al., 2015; Short et al., 2009). The dominant perspective in the literature is that values and practices

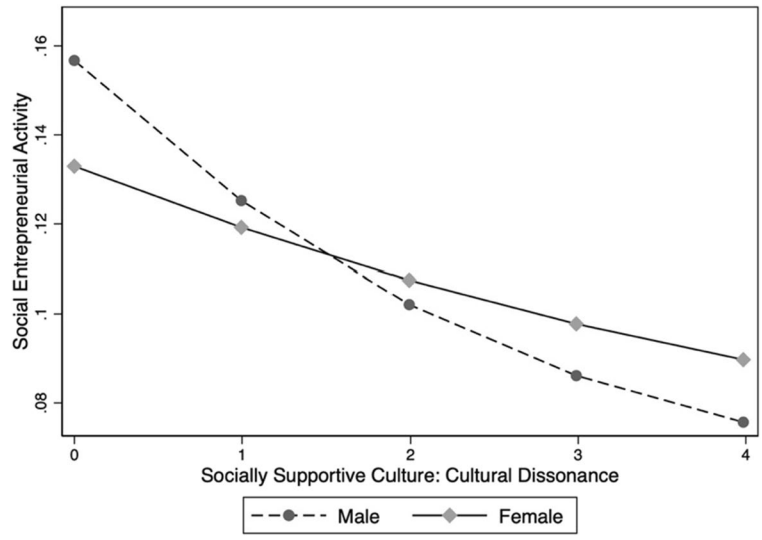


Fig. 2 Socially supportive culture: cultural dissonance interaction effects

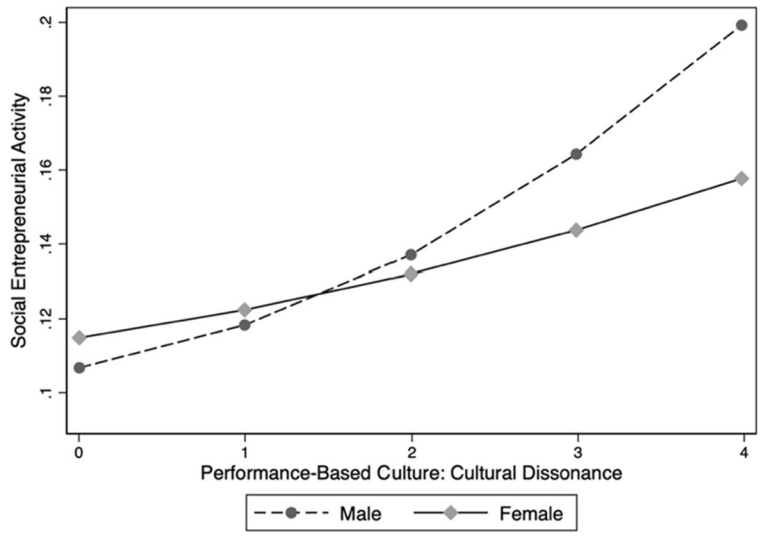


Fig. 3 Performance-based culture: cultural dissonance interaction effects

are self-reinforcing: individuals behave in a particular way because they hold particular views on "how it should be" (values; Patterson, 2014). Our findings suggest an empirical approach to values and practices as interchangeable conceptualizations of culture will likely result in error (Friedrich, 2010) by failing to account for any potential divergence between the two.

We propose that cultural dissonance is itself a distinct cultural belief, in that acknowledging inconsistencies between societal expectations and behaviors has the potential to offer insight beyond isolated examination of values or practices alone. A significant body of research has focused on investigating which cultural factors facilitate or inhibit social entrepreneurial activity (Canestrino et al., 2020; Jaén et al., 2017; Short et al., 2009; Stephan et al., 2015; Thai and Turkina, 2014). Developing a deeper understanding of how and why cultural values are espoused but not lived creates an opportunity for a more precise investigation of how specific cultural factors shape social entrepreneurial activity, but also into broader societal-level triggers, barriers, and/or explanations for innovation and entrepreneurship.

6.2 Cultural dissonance and social entrepreneurial activity

A further implication of our findings relates to how role (in)congruity with cultural factors viewed at the societal level impacts social entrepreneurial activity. Our research shows that cultural dissonance is a critical consideration for social entrepreneurs. Prior work demonstrates that social entrepreneurship is encouraged in cultures that emphasize activities around social welfare, sustainability, or solving social problems and discouraged in cultures that prioritize individualist rent-seeking and wealth accumulation (e.g., Bacq & Eddleston, 2018; Brieger and Clercq, 2019; Hechavarría, 2016; Stephan et al., 2015), and this assumption holds when cultural values and cultural practices are aligned. However, our analysis reveals that as cultural dissonance increases, social entrepreneurial activity is increasingly impacted.

As a unique conceptualization of culture, we found that the impact of cultural dissonance on social entrepreneurship engagement was based on the underlying cultural dimensions. We examined cultural dissonance within two higher-order dimensions of culture, and the results indicated that the overall effects of cultural dissonance are not necessarily entirely positive or negative, but instead, depend on the nature of the cultural dimension and the overarching context. We contend that values and practices alone are insufficient in explaining cultural effects in certain contexts. Rather, it is recommended that scholars conceptualize and operationalize culture through values, practices, and/or dissonance, based on theoretical grounding of the research question(s) of interest. In the specific context of social entrepreneurship, our research shows that cultural dissonance has a distinct and separate phenomenology that offers deeper insight into

social entrepreneurial activity than either values or practices alone.

Further, our conceptualization of cultural dissonance is informed by theory from action-based models of cognitive dissonance, which submit that the greater the magnitude of the dissonance, the more likely it is that an individual will take action to reduce the discrepancy causing the dissonance (Festinger, 1957). Any dissonance has the potential to influence action to some degree (Smith & Semin, 2004), but more immediate, clear, and insistent action implications result from certain dissonant cognitions (Harmon-Jones et al., 2015). Role congruity theory similarly states that individuals experience cognitive and emotional discomfort when their personal characteristics or roles are incongruent with societal expectations (Eagly & Karau, 2002), and has increasingly been applied in the management literature to explain roles, tasks, and choices of individuals based on shared expectations of roles defined by social categories (e.g., del Carmen Triana et al., 2024; Klein et al., 2021) and the psychological discomfort that manifests when individuals act in discordance with these expectations. From this perspective, cultural dissonance could be creating a cognitive response in prospective entrepreneurs due to how they perceive the role of an entrepreneur as (in)congruent with cultural values, practices, and/or the (mis) alignment between the two. Consequently, this dissonance motivates action based on the discomfort experienced due to uncertainty and ambiguity created by cultural dissonance, because behavioral guides from values and practices become less clear and more uncertain as dissonance increases.

This viewpoint offers an explanation for why an individual might choose to engage in social versus economic entrepreneurial activity, thereby extending our understanding of the effects of role (in)congruity on entrepreneurial action (e.g., Anglin et al., 2022a, 2022b; Bullough et al., 2022; Calic et al., 2023; Cowden et al., 2021; Martiarena, 2022; Yang et al., 2020). Consideration of any responses to cultural dissonance offers rich opportunity for future scholars interested in how context influences action, particularly considering recent conversations surrounding contextualization of entrepreneurship (e.g., McMullen et al., 2021; Welter & Baker, 2021; Welter et al., 2019).

6.3 Moderating effects

Our findings have implications for recent conversations in entrepreneurship on the influence of gender (e.g., Alsos & Ljunggren, 2017; Bullough et al., 2017; Butticè et al., 2023; Gimenez-Jimenez et al., 2022; Gupta et al., 2022; Hechavarria & Brieger, 2022; Jennings & Brush, 2013; Malmström et al., 2017; Malmström et al., 2020; Yang & del Carmen Triana, 2019). We demonstrated that male entrepreneurs were more sensitive to cultural dissonance than female entrepreneurs, which suggests that entrepreneurial action is driven, at least in part, by whether an entrepreneur views his or her gender-based self-concept as (in)congruent with specific higher-order dimensions of culture.

An individual's self-concept consists of three principal elements: "the imagination of our appearance to the other person; the imagination of his judgment of that appearance (i.e., cognitively knowing), and some sort of self-feeling, such as pride or mortification" (Cooley, 1922: 184). The individual's notion of "the self" is entirely dependent on social responses to contextual factors, such as culture. By operationalizing cultural dissonance, our research highlights how gender manifests in socially and culturally defined prescriptions and beliefs about the behavior of men and women (Anselmi & Law, 1998). As a result, we suggest that the increased sensitivity to cultural dissonance by male social entrepreneurs is a result of psychological discomfort as created by the misalignment with the self-concept, making it more likely that these entrepreneurs will take action to reduce this discomfort. This finding informs research on stereotype threat, which suggests that individuals are hindered in situations where stereotypes suggest that the group to which they belong has weaknesses in a particular domain and helped when the association suggests strength (Gupta et al., 2014). Similarly, expectancy violation theory contends that forms of counter-stereotypical behavior can have positive effects when the unexpected characteristic carries positive connotations (e.g., cooperation) and not negative ones (e.g., dominance; Jussim et al., 1987). Our research supports these perspectives, and we argue that the increased sensitivity to cultural dissonance by male social entrepreneurs is due to perceptions that the group that they belong to (social entrepreneurs) has

weaknesses in which their behaviors are perceived as counter stereotypical.

Collectively, our results demonstrate that as cultural dissonance increases, gender becomes a stronger predictor of social entrepreneurial activity. Gender bias and stereotyping has been shown to be a significant factor in the unequal levels in entrepreneurial activity for male and female entrepreneurs cross-culturally (Kelley et al., 2012). Appearing congruent with prevailing stereotypes proves beneficial for entrepreneurship, but appearing incongruent can harm entrepreneurs (Anglin et al., 2022b; Eddleston et al., 2016; Yang et al., 2020). We interpret our findings to propose that female social entrepreneurs may benefit from their lower sensitivity to cultural dissonance, as no action is taken to reduce the discrepancy due to the perceived congruity and low threat. In this way, our research contributes towards a growing stream of research specific to female entrepreneurs and "silver lining effects" (e.g., Greenberg & Mollick, 2017; Johnson et al., 2018; Lee & Huang, 2018), as we find that female social entrepreneurs are less sensitive to these effects of than male social entrepreneurs, and therefore not necessarily at a disadvantage, as suggested by prior studies (e.g., Eddleston et al., 2016; Malmström et al., 2017).

6.4 Limitations

Our work should be considered in light of its limitations. First, some of the pooled data rely on retrospective and self-report questionnaires (GEM), which may introduce individual response bias into the results. We would encourage future scholars to consider replicating the findings using a methodological triangulation approach, which involves using a variety of inductive and deductive tools to enhance generalizability of findings. Second, as noted by other scholars (Hechavarría & Brieger, 2022), we follow precedent and adopt a mission-focused definition of social entrepreneurship (Mair & Marti, 2006). However, considerable variance might exist among social entrepreneurs based on the mission centrality of their organizations, and we echo recent calls for future research exploring how cultural factors influence different types of social ventures (e.g., B-Corps, NGOs, etc.).

Third, our research focuses on one demographic category in considering the effects of cultural dissonance on social entrepreneurship. However, greater nuance may be added due to effects ascribed to intersectionality, which suggests that simultaneous membership in different categories may result in a more complex set of consequences than consideration of any single category (Rosette et al., 2016). Individuals continually draw on a shared understanding of action rooted in cultural knowledge and social categories to justify or make sense of their actions (Swidler, 1986). Our findings suggest that other role congruity theory may be a useful lens to examine how other demographic factors and/or social categories might strengthen or weaken the effects of cultural dissonance on social entrepreneurial action. We would encourage social entrepreneurship scholars to move beyond examination of one social category and its corresponding social roles. Instead, we suggest social entrepreneurs may experience inseparable effects of gender and other categories (e.g., race, class, religion) that could strengthen or weaken the effects of cultural dissonance due to greater complexity in role congruency.

Finally, our research is based on cross-sectional data from a small number of countries (33), which is a general problem in country-level research, although our sample size is consistent with similar studies examining cultural effects (e.g., Stephan et al., 2015). The fact that we found confirmation for our hypotheses, including a robust interaction effect of gender and cultural dissonance, supports the validity of our findings. We suggest that future studies consider other strategies to capture a larger sample size, such as testing alternative nesting structures to group countries with similar cultural practice profiles together.

7 Conclusion

We believe that our research reveals important insights about how cultural values and practices shape social entrepreneurship by the development and application of a unique conceptualization of culture. By operationalizing dissonance between cultural values and cultural practices, we highlight how cultural inconsistencies encourage (or discourage) social entrepreneurial action as a result of action-based discrepancy

reduction. We demonstrate the value of a multi-theoretic lens by integrating theories of gender role congruity and action-based models of cognitive dissonance to explain how cultural inconsistencies interact with gender bias and stereotyping to predict social entrepreneurial action.

Declarations

Conflict of interest The authors declare no competing interests.

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References

Acs, Z. J., Desai, S., & Hessels, J. (2008). Entrepreneurship, economic development and institutions. *Small Business Economics, 31*(3), 219–234.

Ahl, H., & Marlow, S. (2012). Exploring the dynamics of gender, feminism and entrepreneurship: Advancing debate to escape a dead end? *Organization, 19*(5), 543–562.

Ai, C., & Norton, E. C. (2003). Interaction terms in logit and probit models. *Economics Letters, 80*(1), 123–129.

Alsos, G. A., & Ljunggren, E. (2017). The role of gender in entrepreneur–investor relationships: A signaling theory approach. *Entrepreneurship Theory and Practice, 41*(4), 567–590.

Anglin, A. H., Wolfe, M. T., Short, J. C., McKenny, A. F., & Pidduck, R. J. (2018). Narcissistic rhetoric and crowdfunding performance: A social role theory perspective. *Journal of Business Venturing, 33*(6), 780–812.

Anglin, A. H., Courtney, C., & Allison, T. H. (2022a). Venturing for others, subject to role expectations? A role Congruity theory approach to social venture crowd funding. *Entrepreneurship Theory and Practice, 46*(2), 421–448.

Anglin, A. H., Kincaid, P. A., Short, J. C., & Allen, D. G. (2022b). Role theory perspectives: Past, present, and future applications of role theories in management research. *Journal of Management, 48*(6), 1469–1502.

Anselmi, D. L., & Law, A. L. (1998). *Questions of gender: Perspectives and paradoxes*. McGraw-Hill Humanities, Social Sciences, & World Languages.

Austin, J., Stevenson, H., & Wei-Skillern, J. (2006). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship Theory and Practice, 30*(1), 1–22.

Autio, E., Pathak, S., & Wennberg, K. (2013). Consequences of cultural practices for entrepreneurial behaviors. *Journal of International Business Studies, 44*(4), 334–362.

Bacq, S., & Eddleston, K. A. (2018). A resource-based view of social entrepreneurship: How stewardship culture benefits scale of social impact. *Journal of Business Ethics, 152*(3), 589–611.

Bacq, S., Hartog, C., & Hoogendoorn, B. (2013). A quantitative comparison of social and commercial entrepreneurship: Toward a more nuanced understanding of social entrepreneurship organizations in context. *Journal of Social Entrepreneurship, 4*(1), 40–68.

Balachandra, L., Briggs, T., Eddleston, K., & Brush, C. (2019). Don't pitch like a girl!: How gender stereotypes influence investor decisions. *Entrepreneurship Theory and Practice, 43*(1), 116–137.

Bergmann, H., & Stephan, U. (2013). Moving on from nascent entrepreneurship: Measuring cross-national differences in the transition to new business ownership. *Small Business Economics, 41*(4), 945–959.

Biddle, B. J. (1979). *Role theory: Expectations, identities, and behaviors*. Academic Press.

Biddle, B. J. (1986). Recent developments in role theory. *Annual Review of Sociology, 12*(1), 67–92.

Bliese, P. D. (2000). Within-group agreement, non-independence, and reliability: Implications for data aggregation and analysis.

Bolino, M. C., & Turnley, W. H. (2003). More than one way to make an impression: Exploring profiles of impression management. *Journal of Management, 29*(2), 141–160.

Bosma, N., Hessels, J., Schutjens, V., Van Praag, M., & Verheul, I. (2012). Entrepreneurship and role models. *Journal of Economic Psychology, 33*(2), 410–424.

Brewer, P., & Venaik, S. (2010). GLOBE practices and values: A case of diminishing marginal utility? *Journal of International Business Studies, 41*, 1316–1324.

Brieger, S. A., & De Clercq, D. (2019). Entrepreneurs' individual-level resources and social value creation goals: The moderating role of cultural context. *International Journal of Entrepreneurial Behavior & Research, 25*(2), 193–216.

Brinckmann, J., Grichnik, D., & Kapsa, D. (2010). Should entrepreneurs plan or just storm the castle? A meta-analysis on contextual factors impacting the business planning–performance relationship in small firms. *Journal of Business Venturing, 25*(1), 24–40.

Bruni, A., Gherardi, S., & Poggio, B. (2004). Entrepreneur-mentality, gender and the study of women entrepreneurs. *Journal of Organizational Change Management, 17*(3), 256–268.

Bruton, G. D., Ahlstrom, D., & Li, H. L. (2010). Institutional theory and entrepreneurship: Where are we now and where do we need to move in the future? *Entrepreneurship Theory and Practice, 34*(3), 421–440.

Bullough, A., Renko, M., & Abdelzaher, D. (2017). Women's business ownership: Operating within the context of institutional and in-group collectivism. *Journal of Management, 43*(7), 2037–2064.

Bullough, A., Guelich, U., Manolova, T. S., & Schjoedt, L. (2022). Women's entrepreneurship and culture: Gender role expectations and identities, societal culture, and the entrepreneurial environment. *Small Business Economics, 58*(2), 985–996.

Busenbark, J. R., Graffin, S. D., Campbell, R. J., & Lee, E. Y. (2022). A marginal effects approach to interpreting main effects and moderation. *Organizational Research Methods, 25*(1), 147–169.

Butticè, V., Croce, A., & Ughetto, E. (2023). Gender diversity, role congruity and the success of VC investments. *Entrepreneurship Theory and Practice, 47*(5), 1660–1698.

Calic, G., Lévesque, M., & Shevchenko, A. (2023). On why women-owned businesses take more time to secure microloans. *Small Business Economics*, 1–22.

Calic, G., & Mosakowski, E. (2016). Kicking off social entrepreneurship: How a sustainability orientation influences crowdfunding success. *Journal of Management Studies, 53*(5), 738–767.

Calza, F., Cannavale, C., & Nadali, I. Z. (2020). How do cultural values influence entrepreneurial behavior of nations? A behavioral reasoning approach. *International Business Review, 29*(5), 101725.

Canestrino, R., Ćwiklicki, M., Magliocca, P., & Pawełek, B. (2020). Understanding social entrepreneurship: A cultural perspective in business research. *Journal of Business Research, 110*, 132–143.

del Carmen Triana, M., Song, R., Um, C. T., & Huang, L. (2024). Stereotypical perception in management: A review and expansion of role congruity theory. *Journal of Management, 50*(1), 188–215.

Chen, L., Yi, J., Li, S., & Tong, T. W. (2022). Platform governance design in platform ecosystems: Implications for complementors' multihoming decision. *Journal of Management, 48*(3), 630–656.

Chua, R. Y., Roth, Y., & Lemoine, J. F. (2015). The impact of culture on creativity: How cultural tightness and cultural distance affect global innovation crowdsourcing work. *Administrative Science Quarterly, 60*(2), 189–227.

Cohen, D. (2001). Cultural variation: Considerations and implications. *Psychological Bulletin, 127*(4), 451–471.

Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. Psychology press.

Cooley, C. H. (1922). *Human nature and the social order* (Rev, p. 352). Scribner.

Cowden, B. J., Creek, S. A., & Maurer, J. D. (2021). Gender role congruity and crowdfunding success. *Journal of Small Business Management, 59*(sup1), S134–S152.

Davidsson, P. (1995). Culture, structure and regional levels of entrepreneurship. *Entrepreneurship & Regional Development, 7*(1), 41–62.

De Clercq, D., Lim, D. S., & Oh, C. H. (2013). Individual–level resources and new business activity: The contingent role of institutional context. *Entrepreneurship Theory and Practice, 37*(2), 303–330.

Dees, J. G. (1998). The meaning of social entrepreneurship.

Dees, J. G. (2018). The meaning of social entrepreneurship 1, 2. *In Case studies in social entrepreneurship and sustainability* (pp. 1–2). Routledge.

Delmar, F., & Shane, S. (2003). Does business planning facilitate the development of new ventures? *Strategic Management Journal, 24*(12), 1165–1185.

Dressler, W. W., Balieiro, M. C., & Dos Santos, J. E. (2018). What you know, what you do, and how you feel: Cultural competence, cultural consonance, and psychological distress. *Frontiers in Psychology, 8*, 2355.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*(3), 573.

Eagly, A. H., Wood, W., & Diekman, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. *The Developmental Social Psychology of Gender, 12*(174), 9781410605245–12.

Eagly, A. H., & Wood, W. (2012). Social role theory. *Handbook of Theories of Social Psychology, 2*, 458–476.

Eddleston, K. A., Ladge, J. J., Mitteness, C., & Balachandra, L. (2016). Do you see what I see? Signaling effects of gender and firm characteristics on financing entrepreneurial ventures. *Entrepreneurship Theory and Practice, 40*(3), 489–514.

Edwards, J. R. (2001). Ten difference score myths. *Organizational Research Methods, 4*(3), 265–287.

Estrin, S., Korosteleva, J., & Mickiewicz, T. (2013). Which institutions encourage entrepreneurial growth aspirations? *Journal of Business Venturing, 28*(4), 564–580.

Feldmann, M., Lukes, M., & Uhlaner, L. (2022). Disentangling succession and entrepreneurship gender gaps: Gender norms, culture, and family. *Small Business Economics, 58*(2), 997–1013.

Festinger, L. (1957). *A theory of cognitive dissonance* (Vol. 2). Stanford university press.

Fiske, S. T. (2000). Stereotyping, prejudice, and discrimination at the seam between the centuries: Evolution, culture, mind, and brain. *European Journal of Social Psychology, 30*(3), 299–322.

François Dengah, H. J., Falcão, A., & Henderson, N. (2022). Doing gender in Brazil: An examination of the motivations for cultural consonance. *Ethos, 50*(2), 131–152.

Friedrich, J. (2010). Naturalistic fallacy errors and behavioral science news: The effects of editorial content and cautions on readers' moral inferences and perceptions of contributors. *Basic and Applied Social Psychology, 32*(4), 369–383.

Gimenez-Jimenez, D., Edelman, L. F., Dawson, A., & Calabrò, A. (2022). Women entrepreneurs' progress in the venturing process: The impact of risk aversion and culture. *Small Business Economics, 58*(2), 1091–1111.

Gras, D., Moss, T. W., & Lumpkin, G. T. (2014). *The use of secondary data in social entrepreneurship research: Assessing the field and identifying future opportunities*. Emerald Group Publishing Limited.

Greenberg, J., & Mollick, E. (2017). Activist choice homophily and the crowdfunding of female founders. *Administrative Science Quarterly, 62*(2), 341–374.

Guo, G., & Zhao, H. (2000). Multilevel modeling for binary data. *Annual Review of Sociology, 26*(1), 441–462.

Gupta, V. K., Turban, D. B., Wasti, S. A., & Sikdar, A. (2009). The role of gender stereotypes in perceptions of entrepreneurs and intentions to become an entrepreneur. *Entrepreneurship Theory and Practice, 33*(2), 397–417.

Gupta, V. K., Goktan, A. B., & Gunay, G. (2014). Gender differences in evaluation of new business opportunity: A stereotype threat perspective. *Journal of Business Venturing, 29*(2), 273–288.

Gupta, V. K., Mortal, S. C., & Guo, X. (2018). Revisiting the gender gap in CEO compensation: Replication and extension of Hill, Upadhyay, and Beekun's (2015) work on CEO gender pay gap. *Strategic Management Journal, 39*(7), 2036–2050.

Gupta, A., Batra, S., & Gupta, V. K. (2022). Gender, culture, and implicit theories about entrepreneurs: a cross-national investigation. *Small Business Economics, 58*(2), 1073–1089.

Harmon-Jones, E., Harmon-Jones, C., & Levy, N. (2015). An action-based model of cognitive-dissonance processes. *Current Directions in Psychological Science, 24*(3), 184–189.

Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice, 26*(4), 33–52.

Hechavarría, D. M. (2016). The impact of culture on national prevalence rates of social and commercial entrepreneurship. *International Entrepreneurship and Management Journal, 12*(4), 1025–1052.

Hechavarría, D. M., & Ingram, A. E. (2019). Entrepreneurial ecosystem conditions and gendered national-level entrepreneurial activity: A 14-year panel study of GEM. *Small Business Economics, 53*(2), 431–458.

Hechavarría, D. M., & Brieger, S. A. (2022). Practice rather than preach: cultural practices and female social entrepreneurship. *Small Business Economics, 58*(2), 1131–1151.

Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues, 57*(4), 657–674.

Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization, 10*(4), 15–41.

Hofstede, G. (2010). The GLOBE debate: Back to relevance. *Journal of International Business Studies, 41*(8), 1339–1346.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. Sage publications.

Homburg, C., Wieseke, J., & Bornemann, T. (2009). Implementing the marketing concept at the employee-customer interface: The role of customer need knowledge. *Journal of Marketing, 73*(4), 64–81.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.

Hox, J. J., Moerbeek, M., & Van de Schoot, R. (2017). *Multilevel analysis: Techniques and applications*. Routledge.

Jaén, I., Fernández-Serrano, J., Santos, F. J., & Liñán, F. (2017). Cultural values and social entrepreneurship: A cross-country efficiency analysis. *Social Entrepreneurship in Non-Profit and Profit Sectors: Theoretical and Empirical Perspectives* (pp. 31–51)

Javidan, M., House, R. J., Dorfman, P. W., Hanges, P. J., & De Luque, M. S. (2006). Conceptualizing and measuring cultures and their consequences: A comparative review of GLOBE's and Hofstede's approaches. *Journal of International Business Studies, 37*(6), 897–914.

Jennings, J. E., & Brush, C. G. (2013). Research on women entrepreneurs: Challenges to (and from) the broader entrepreneurship literature? *Academy of Management Annals, 7*(1), 663–715.

Johnson, J. A. (2005). Ascertaining the validity of individual protocols from web-based personality inventories. *Journal of Research in Personality, 39*(1), 103–129.

Johnson, M. A., Stevenson, R. M., & Letwin, C. R. (2018). A woman's place is in the… startup! Crowdfunder judgments, implicit bias, and the stereotype content model. *Journal of Business Venturing, 33*(6), 813–831.

Jonason, P. K., & Fletcher, S. A. (2018). Agentic and communal behavioral biases in the Dark Triad traits. *Personality and Individual Differences, 130*, 76–82.

Jussim, L., Coleman, L. M., & Lerch, L. (1987). The nature of stereotypes: A comparison and integration of three theories. *Journal of Personality and Social Psychology, 52*(3), 536.

Kedmenec, I., & Strašek, S. (2017). Are some cultures more favourable for social entrepreneurship than others? *Economic Research-Ekonomska Istraživanja, 30*(1), 1461–1476.

Kelley, D. J., Singer, S., & Herrington, M. (2012). Global entrepreneurship monitor. *2011 Global Report* (Vol. 7, pp. 2–38). GEM 2011.

Klein, F. B., Chaigneau, P., & Devers, C. E. (2021). CEO gender-based termination concerns: Evidence from initial severance agreements. *Journal of Management, 47*(3), 567–596.

Laskovaia, A., Shirokova, G., & Morris, M. H. (2017). National culture, effectuation, and new venture performance: Global evidence from student entrepreneurs. *Small Business Economics, 49*(3), 687–709.

Lauring, J., Bjerregaard, T., & Klitmøller, A. (2018). Understanding culture in international management: Functionalism, constructivism, and the emerging practice turn. *International Studies of Management & Organization, 48*(3), 264–276.

Lea, D. (1999). The infelicities of business ethics in the third world: The Melanesian context. *Business Ethics Quarterly, 9*(3), 421–438.

Lee, M., & Huang, L. (2018). Gender bias, social impact framing, and evaluation of entrepreneurial ventures. *Organization Science, 29*(1), 1–16.

Lee, B., & Kelly, L. (2019). Cultural leadership ideals and social entrepreneurship: An international study. *Journal of Social Entrepreneurship, 10*(1), 108–128.

Lepoutre, J., Justo, R., Terjesen, S., & Bosma, N. (2013). Designing a global standardized methodology for measuring social entrepreneurship activity: The Global Entrepreneurship Monitor social entrepreneurship study. *Small Business Economics, 40*(3), 693–714.

Liñán, F., Moriano, J. A., & Jaén, I. (2016). Individualism and entrepreneurship: Does the pattern depend on the social context? *International Small Business Journal, 34*(6), 760–776.

Liu, Y., & Almor, T. (2016). How culture influences the way entrepreneurs deal with uncertainty in inter-organizational relationships: The case of returnee versus local entrepreneurs in China. *International Business Review, 25*(1), 4–14.

Ljunggren, E., & Kolvereid, L. (1996). New business formation: does gender make a difference? *Women in Management Review, 11*(4), 3–12.

Mair, J., & Marti, I. (2006). Social entrepreneurship research: A source of explanation, prediction, and delight. *Journal of World Business, 41*(1), 36–44.

Makeel, R., Ashraf, J., Ariyesti, F. R., & Ali, S. (2022). The influence of social supportive culture and performance-based culture on social enterprise performance: The mediation role of Social entrepreneurial orientation. *Journal of Global Entrepreneurship Research, 12*(1), 205–218.

Malmström, M., Johansson, J., & Wincent, J. (2017). Gender stereotypes and venture support decisions: How governmental venture capitalists socially construct entrepreneurs' potential. *Entrepreneurship Theory and Practice, 41*(5), 833–860.

Malmström, M., Voitkane, A., Johansson, J., & Wincent, J. (2020). What do they think and what do they say? Gender bias, entrepreneurial attitude in writing and venture capitalists' funding decisions. *Journal of Business Venturing Insights, 13*, e00154.

Martiarena, A. (2022). How gender stereotypes shape venture growth expectations. *Small Business Economics, 58*(2), 1015–1034.

Maseland, R., & Van Hoorn, A. (2009). Explaining the negative correlation between values and practices: A note on the Hofstede–GLOBE debate. *Journal of International Business Studies, 40*, 527–532.

McMullen, J. S., Brownell, K. M., & Adams, J. (2021). What makes an entrepreneurship study entrepreneurial? Toward a unified theory of entrepreneurial agency. *Entrepreneurship Theory and Practice, 45*(5), 1197–1238.

Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. *Psychological Methods, 17*(3), 437.

Meyskens, M., Allen, I. E., & Brush, C. G. (2011). Human capital and hybrid ventures. *In Social and Sustainable Entrepreneurship, 13*, 51–72. Emerald Group Publishing Limited.

Minniti, M., Bygrave, W. D., & Autio, E. (2006). Global Entrepreneurship Monitor 2005 executive report.

Morales, C., Holtschlag, C., Masuda, A. D., & Marquina, P. (2019). In which cultural contexts do individual values explain entrepreneurship? An integrative values framework using Schwartz's theories. *International Small Business Journal, 37*(3), 241–267.

Mueller, S. L., & Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country study of locus of control and innovativeness. *Journal of Business Venturing, 16*(1), 51–75.

Muralidharan, E., & Pathak, S. (2017). Informal institutions and international entrepreneurship. *International Business Review, 26*(2), 288–302.

Nga, J. K. H., & Shamuganathan, G. (2010). The influence of personality traits and demographic factors on social entrepreneurship start up intentions. *Journal of Business Ethics, 95*(2), 259–282.

Pan, N. D., Gruber, M., & Binder, J. (2019). Painting with all the colors: The value of social identity theory for understanding social entrepreneurship. *Academy of Management Review, 44*(1), 213–215.

Patterson, O. (2014). Making sense of culture. *Annual Review of Sociology, 40*, 1–30.

Powell, W. W., & DiMaggio, P. J. (Eds.). (2012). *The new institutionalism in organizational analysis*. University of Chicago press.

Urbano Pulido, Ferri Jiménez, & Noguera i Noguera (2014). Female social entrepreneurship and socio-cultural context: An international analysis. *Revista de Estudios Empresariales Jaén*, *2*(2), 26–40

Puumalainen, K., Sjögrén, H., Syrjä, P., & Barraket, J. (2015). Comparing social entrepreneurship across nations: An exploratory study of institutional effects. *Canadian Journal of Administrative Sciences/revue Canadienne Des Sciences De L'administration, 32*(4), 276–287.

Rauch, A., Frese, M., & Sonnentag, S. (2000). Cultural differences in planning-success relationships: A comparison of small enterprises in Ireland, West Germany, and East Germany. *Journal of Small Business Management, 38*(4), 28–41.

Reynolds, P., Bosma, N., Autio, E., Hunt, S., De Bono, N., Servais, I., & Chin, N. (2005). Global entrepreneurship monitor: Data collection design and implementation 1998–2003. *Small Business Economics, 24*(3), 205–231.

Romney, A. K., Weller, S. C., & Batchelder, W. H. (1986). Culture as consensus: A theory of culture and informant accuracy. *American Anthropologist, 88*(2), 313–338.

Rosette, A. S., & Tost, L. P. (2010). Agentic women and communal leadership: How role prescriptions confer advantage to top women leaders. *Journal of Applied Psychology, 95*(2), 221.

Rosette, A. S., Koval, C. Z., Ma, A., & Livingston, R. (2016). Race matters for women leaders: Intersectional effects on agentic deficiencies and penalties. *The Leadership Quarterly, 27*(3), 429–445.

Rudman, L. A., & Phelan, J. E. (2008). Backlash effects for disconfirming gender stereotypes in organizations. *Research in Organizational Behavior, 28*, 61–79.

Saebi, T., Foss, N. J., & Linder, S. (2019). Social entrepreneurship research: Past achievements and future promises. *Journal of Management, 45*(1), 70–95.

Short, J. C., Moss, T. W., & Lumpkin, G. T. (2009). Research in social entrepreneurship: Past contributions and future opportunities. *Strategic Entrepreneurship Journal, 3*(2), 161–194.

Smith, E. R., & Semin, G. R. (2004). Socially situated cognition: Cognition in its social context. *Advances in Experimental Social Psychology, 36*, 57–121.

Snijders, T. A., & Bosker, R. (2011). Multilevel analysis: An introduction to basic and advanced multilevel modeling.

Stephan, U. (2022). Cross-cultural innovation and entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior, 9*, 277–308.

Stephan, U., & Pathak, S. (2016). Beyond cultural values? Cultural leadership ideals and entrepreneurship. *Journal of Business Venturing, 31*(5), 505–523.

Stephan, U., & Uhlaner, L. M. (2010). Performance-based vs socially supportive culture: A cross-national study of

descriptive norms and entrepreneurship. *Journal of International Business Studies, 41*(8), 1347–1364.

Stephan, U., Uhlaner, L. M., & Stride, C. (2015). Institutions and social entrepreneurship: The role of institutional voids, institutional support, and institutional configurations. *Journal of International Business Studies, 46*(3), 308–331.

Swidler, A. (2008). Comment on Stephen Vaisey's "Socrates, Skinner, and Aristotle: Three Ways of Thinking about Culture in Action." In *Sociological Forum* (pp. 614–618). Blackwell Publishing.

Swindler, A. (1986). Culture in action: Symbols and strategy. *American Sociological Review*.

Taras, V., Steel, P., & Kirkman, B. L. (2010). Negative practice–value correlations in the GLOBE data: Unexpected findings, questionnaire limitations and research directions. *Journal of International Business Studies, 41*, 1330–1338.

Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review, 107*(3), 411.

Thai, M. T. T., & Turkina, E. (2014). Macro-level determinants of formal entrepreneurship versus informal entrepreneurship. *Journal of Business Venturing, 29*(4), 490–510.

Therborn, G. (2002). Back to norms! On the scope and dynamics of norms and normative action. *Current Sociology, 50*(6), 863–880.

Vogel, D. L., Wester, S. R., Heesacker, M., & Madon, S. (2003). Confirming gender stereotypes: A social role perspective. *Sex Roles, 48*, 519–528.

Welter, F., Baker, T., & Wirsching, K. (2019). Three waves and counting: The rising tide of contextualization in entrepreneurship research. *Small Business Economics, 52*(2), 319–330.

Welter, F., & Baker, T. (2021). Moving contexts onto new roads: Clues from other disciplines. *Entrepreneurship Theory and Practice, 45*(5), 1154–1175.

Wennekers, S., Van Wennekers, A., Thurik, R., & Reynolds, P. (2005). Nascent entrepreneurship and the level of economic development. *Small Business Economics, 24*(3), 293–309.

Westlund, H., & Adam, F. (2010). Social capital and economic performance: A meta-analysis of 65 studies. *European Planning Studies, 18*(6), 893–919.

Whatley, M. A., Webster, J. M., Smith, R. H., & Rhodes, A. (1999). The effect of a favor on public and private compliance: How internalized is the norm of reciprocity? *Basic and Applied Social Psychology, 21*(3), 251–259.

Yang, T., & del Carmen Triana, M. (2019). Set up to fail: Explaining when women-led businesses are more likely to fail. *Journal of Management, 45*(3), 926–954.

Yang, S., Kher, R., & Newbert, S. L. (2020). What signals matter for social startups? It depends: The influence of gender role congruity on social impact accelerator selection decisions. *Journal of Business Venturing, 35*(2), 105932.

Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes and ethical challenges. *Journal of Business Venturing, 24*(5), 519–532.

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