Understanding the drivers of sustainable entrepreneurial practices in Pakistan's leather industry

A multi-level approach

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Abstract

Purpose – The purpose of this paper is to analyse the drivers of sustainable entrepreneurial practices in SMEs operating in a developing economy. The secondary objectives are to explore the relationship between these drivers and to draw out the implications for policy and practice.

Design/methodology/approach – The paper is informed by the literature on sustainable entrepreneurship, and on the drivers of pro-environmental practices in SMEs. It reports on the results of an intensive multi-level empirical study, which investigates the environmental practices of SMEs in Pakistan's leatherworking industry using a multiple case study design and grounded analysis, which draws on relevant institutional theory.

Findings – The study identifies that coercive, normative and mimetic isomorphic pressures simultaneously drive sustainable entrepreneurial activity in the majority of sample SMEs. These pressures are exerted by specific micro-, meso- and macro-level factors, ranging from international customers' requirements to individual-level values of owners and managers. It also reveals the catalytic effect of the educational and awareness-raising activities of intermediary organisations, in tandem with the attraction of competitiveness gains, (international) environmental regulations, industrial dynamism and reputational factors.

Practical implications – The evidence suggests that, in countries where formal institutional mechanisms have less of an impact, intermediary organisations can perform a proto-institutional role that helps to overcome pre-existing barriers to environmental improvement by sparking sustainable entrepreneurial activity in SME populations.

Originality/value – The findings imply that the drivers of sustainable entrepreneurial activity do not operate in a "piecemeal" fashion, but that particular factors mediate the emergence and development of other sustainability drivers. This paper provides new insights into sustainable entrepreneurship and motivations for environmental practices in an under-researched developing economy context.

Keywords Environmental practices, Institutional isomorphism, Leather industry, Pakistan, SMEs, Sustainable entrepreneurship

Paper type Research paper

Introduction

Entrepreneurship is now viewed, not only a source of achieving different economic goals, but also a means to address persistent sustainability challenges (Hutter *et al.*, 2016; Pacheco *et al.*, 2010; Shepherd and Patzelt, 2011; York and Venkataraman, 2010). This has prompted researchers, practitioners and policy makers to search for ways of promoting the environmental and social contributions of entrepreneurial activity, alongside conventional commercial imperatives (Cohen and Winn, 2007; Dean and Mcmullen, 2007; Hamann *et al.*, 2017; Hockerts and Wüstenhagen, 2010; Hutter *et al.*, 2016; Kuckertz and Wagner, 2010; Muñoz and Dimov, 2015; Parrish, 2010; Shepherd and Patzelt, 2011).

The literature identifies several drivers of environmentally sustainable entrepreneurial practices, such as entrepreneurs' personal characteristics (Bansal and Roth, 2000; Hamann *et al.*, 2017; Kuckertz and Wagner, 2010; Patzelt and Shepherd, 2011;

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Testa *et al.*, 2016), business contexts (Allet, 2017; Bansal and Roth, 2000; De Clercq and Voronov, 2011; Hamann *et al.*, 2017; Jamali *et al.*, 2017; Pacheco *et al.*, 2010; Spence *et al.*, 2011) and value creation objectives (Cohen *et al.*, 2008; Font *et al.*, 2016; Young and Tilley, 2006). Often, these factors are examined as "piecemeal predictors" of sustainable entrepreneurship, but in practice they are more likely to operate in tandem (Hamann *et al.*, 2017; Muñoz and Dimov, 2015). Thus, there is a need for more holistic approaches to examine the complementarity between possible drivers of sustainable entrepreneurship.

Another gap in the literature relates to an overwhelming focus on developed economies, which limits our understanding about entrepreneurial dynamics in developing countries (Hall *et al.*, 2010, pp. 445-446). Therefore, in order to deepen our understanding of this phenomenon at the global level, and to distinguish generic sustainability drivers from their more geographically situated counterparts, there is a pressing need for more in-depth analysis of its emergence in developing economy contexts (Jamali *et al.*, 2017). These economies are characterised by a wide variety of institutional mechanisms in the environmental sphere (Tewari and Pillai, 2005; Wahga *et al.*, 2015). For example, some have relatively stringent environmental regulations, while others have fewer regulations and/or do not enforce them as rigorously. Therefore, the propensity to environmental compliance is variable across these countries (Ortolano *et al.*, 2014; Tewari and Pillai, 2005; Yu and Bell, 2007). Some national governments in developing economies provide fairly extensive support for firms to improve their environmental performance while others provide little support (Ciccozzi *et al.*, 2003; Hsu and Cheng, 2012; Ortolano *et al.*, 2014; Tewari and Pillai, 2005). In addition cultural and religious values (Abdelzaher and Abdelzaher, 2015), and different levels of environmentally relevant resources and capabilities are also identified as possible explanations for the observed variability (Ciccozzi *et al.*, 2003; Hsu and Cheng, 2012; Wahga *et al.*, 2015). Given the current state of knowledge, an in-depth investigation of the unique configuration of institutional and business contexts in a developing economy can therefore contribute to the extant literature while also enriching our understanding about sustainable entrepreneurship worldwide (Crane *et al.*, 2016; Hamann *et al.*, 2017; Jamali *et al.*, 2017).

Finally, while the sustainable entrepreneurship literature draws attention to smaller enterprises, much of the research on the adoption of environmentally responsible practices has focused on larger firms (Blundel *et al.*, 2013; Hamann *et al.*, 2017; Walker *et al.*, 2008; Worthington and Patton, 2005). Thus, for advancing the discourse on sustainable entrepreneurship, we also need to explore sustainable entrepreneurial practices in SMEs.

In order to address these gaps in the literature, this paper investigates the multi-level factors that exert isomorphic pressures on SMEs in Pakistan's leatherworking industry to adopt environmental practices.

In summary, this study finds that, in conjunction, coercive, normative and mimetic isomorphic pressures (DiMaggio and Powell, 1983) drive sustainable entrepreneurial activity in the majority of sample SMEs in Pakistan's leatherworking industry. These pressures are simultaneously exerted by macro- (e.g. environmental regulations of export markets), meso- (e.g. intermediary organisations) and micro-level (e.g. sustainability-oriented values of owner-managers) factors. It makes a distinctive contribution to the literature on sustainable entrepreneurship through its examination of the way that intermediary organisations can perform as proto-institutional sponsors (Zietsma and Mcknight, 2009, p. 150) of cleaner production practices in an industry by igniting environmental responsibility amongst its SME population. It complements and extends existing studies of proto-institutions (Gómez and Atun, 2013; Lawrence *et al.*, 2002; Zietsma and Mcknight, 2009) by applying the concept to a developing economy context where formal institutional mechanisms may be less effective. More specifically, it demonstrates how normative isomorphic pressure from proto-institutional actors can compensate, to some degree, for the coercive isomorphic pressure that might be exerted by national regulatory

authorities in economies that subject to fewer internal capacity constraints. The results also point to the value of social capital (Adler and Kwon, 2002; Fuller and Tian, 2006; Gergs, 2003; Nahapiet and Ghoshal, 1998) for advancing sustainable entrepreneurship and suggest that environmentally driven SMEs need to develop and deploy networking and alliance formation capabilities to collaborate with other institutional actors and effectively respond to the emerging challenges of environmental degradation.

Conceptual background

While all of the leading definitions of sustainable entrepreneurship refer to the co-production of economic, environmental and social goals (e.g. Cohen and Winn, 2007; Dean and Mcmullen, 2007), they reveal little about how these outcomes are achieved (Parrish, 2010). This question has been addressed, to some extent, through a parallel literature, which seeks to identify the factors that drive SMEs to adopt environmental practices. The most often commonly identified factors include: compliance with environmental regulations, economic and competitiveness benefits and the personal (ethical/moral) values of entrepreneurs. At the same time, the literature on drivers also reports some evidence about the supportive role of intermediary organisations in advancing sustainable entrepreneurship in SMEs (e.g. Klewitz *et al.*, 2012).

Environmental regulations

In the literature, the most frequently discussed driver of environmental practices in SMEs seems to be environmental regulations (Brammer *et al.*, 2012; Lewis and Cassells, 2010; Revell and Rutherfoord, 2003; Tilley, 1999; Wilson *et al.*, 2012). There is also evidence suggesting that SMEs do not welcome environmental regulations (Brammer *et al.*, 2012; Cordano *et al.*, 2010; Lewis and Cassells, 2010; Wilson *et al.*, 2012), primarily because of the complexities and costs attached with their observance (Simpson *et al.*, 2004; Wilson *et al.*, 2012). Moreover, research from some developing countries, like Pakistan and China, also refers to weaker implementation of environmental regulations reducing SMEs compliance (Wahga *et al.*, 2015; Yu and Bell, 2007). On the other hand, some studies refer to compliance-driven environmental improvement in SMEs (Patton and Worthington, 2003; Revell *et al.*, 2010; Studer *et al.*, 2006). The results of such studies appear encouraging for policy makers seeking to steer the environmental behaviour of small businesses through regulatory interventions (Revell *et al.*, 2010; Tilley, 1999). However, it is argued that unless the inherent complexities in regulations are reduced, they are made less cost intensive (Williamson *et al.*, 2006; Wilson *et al.*, 2012) and their threat is transformed into an opportunity (Studer *et al.*, 2006), compliance would remain the least appealing driver of environmental improvement in SMEs.

Economic gains and competitiveness

The research suggests continuing uncertainty in SMEs regarding the financial benefits from environmental practices (Parker *et al.*, 2009; Revell and Rutherfoord, 2003). Some SMEs are happy to invest in environmental initiatives because they perceive growth and profit in such measures (Collins *et al.*, 2007; Font *et al.*, 2016; Thorpe and Prakash-Mani, 2003). Such firms are seen to be innovative and opportunistic (Parker *et al.*, 2009) as well as pro-active in obtaining the resources and capabilities they need to exploit environmentally relevant market opportunities (Collins *et al.*, 2007; Roy and Thérin, 2008; Simpson *et al.*, 2004). Parker *et al.* (2009) consider businesses of this type as "advantage-driven SMEs" because they take environmental measures mainly to gain economic benefits such as reduced costs, increased revenues and enhanced reputation (Thorpe and Prakash-Mani, 2003), which can also enhance their competitiveness (Castka *et al.*, 2004; Parry, 2012; Simpson *et al.*, 2004; Studer *et al.*, 2006). In contrast, some SMEs regard environmental improvement as a drain from their profits

(Revell and Blackburn, 2007; Simpson *et al.*, 2004), which does not generate competitive advantage (Dahlmann *et al.*, 2008). The main reasons attributed to lack of faith in economic gains are described to include: extensive financial costs, extra time and additional efforts needed to adopt environmental practices (Revell and Blackburn, 2007).

Entrepreneurs' moral values

Another important factor relates to the personal values, vision and mission of entrepreneurs, which can be transmitted into their enterprises (Battisti and Perry, 2011; Hemingway and Maclagan, 2004; Vidal *et al.*, 2015; Williams and Schaefer, 2013). This implies that if owner-managers are personally considerate towards the natural environment, it is highly likely that they would introduce environmentally friendly practices in their businesses (Cambra-Fierro *et al.*, 2008; Cordano *et al.*, 2010; Font *et al.*, 2016; Hemingway and Maclagan, 2004). There is evidence that, in some SMEs, the environmental values of owner-mangers have induced the adoption of sustainable practices (e.g. Battisti and Perry, 2011; Hamann *et al.*, 2017; Hammann *et al.*, 2009; Hsu and Cheng, 2012; Testa *et al.*, 2016; Williams and Schaefer, 2013). However, though in a minority, some studies still suggest that the environmental attitudes of owners might not serve as an effective predictor of the environmental behaviour in smaller firms (Schaper, 2002).

Intermediary organisations and environmental practices in SMEs

Finally, the literature also suggests that intermediary organisations (e.g. industry associations, environment support institutes, NGOs and international donors) can exert normative pressure (DiMaggio and Powell, 1983) on firms to display environmentally responsible behaviour (Berrone *et al.*, 2008; Delmas and Toffel, 2004; Hoffman, 1999). Particularly, in the case of SMEs which are generally considered to be deterred by resource scarcity and capability deficiency to take sustainability-oriented initiatives (Del Brío and Junquera, 2003; Parker *et al.*, 2009), the role of environment support institutions in motivating and enabling these firms to take innovative measures for reducing their environmental footprints has been found to be influential (de Oliveira and Jabbour, 2017; Klewitz and Hansen, 2014; Ortolano *et al.*, 2014; Weltzien Høivik and Shankar, 2011). While operating as a meso-level driver, the intermediary entities have been successful in achieving their environmental targets through different interventions such as educational and training programmes, and collaborative asset development (Battaglia *et al.*, 2010; Ortolano *et al.*, 2014). Often such interventions have been cluster based (Battaglia *et al.*, 2010; Ortolano *et al.*, 2014), aimed at achieving more substantial ecological benefits from the environmental engagement of a larger community of smaller firms.

The literature on drivers has focused attention on some of the more significant micro-, meso- and macro-level factors that induce SMEs to adopt sustainable practices. There is also increasing recognition of the need to trace the interactive effect of these multi-level factors on environmentally sustainable entrepreneurial activity (Foxon, 2011; Menguc *et al.*, 2010; Muñoz and Dimov, 2015). Drawing on institutional theory, researchers have applied the concept of isomorphic pressures (DiMaggio and Powell, 1983), in an effort to explain how environmentally responsible business activity can be promoted (Bansal, 2005; Bansal and Roth, 2000; Delmas and Toffel, 2004; Rivera, 2004). However, these pressures remain under-explored in the context of developing economies, such as Pakistan. Furthermore, insufficient attention has been paid to their distinctive institutional arrangements and their interactions with firm-level behaviours. Accordingly, the reviewed literature provides a starting point for this study, informing our understanding about the possible drivers of environmental improvement in Pakistan's leatherworking industry, while a multi-level conceptual framework, informed by isomorphic institutionalism, allows us to accommodate the interactive effect of discrete drivers identified in the fieldwork in a more holistic way (Muñoz and Dimov, 2015, p. 650).

Pakistan's leatherworking industry

The leather industry, primarily made up of SMEs, is the third largest export-earning sector for Pakistan (Government of Pakistan, 2014-2015, p. 142), but it faces considerable environmental and social challenges. For example, the indiscriminate discharge of contaminated wastewater and poisonous solid wastes are considered a major source of pollution, causing diseases in local populations, reducing the productivity of agricultural land, threatening the existence of marine life and damaging the ozone layer (Vogt and Hassan, 2011; Wahga *et al.*, 2015). Unfortunately, compared to some other countries (Battaglia *et al.*, 2010; Tewari and Pillai, 2005), the national government in Pakistan has not been very active in supporting its leather industry in addressing its environmental problems. Institutional voids, which appear to exist largely due to a less developed interest of governmental agencies in environmental issues coupled with a lack of competency amongst local officials responsible for inspecting SMEs in this sector (Wahga *et al.*, 2015), make the enforcement of environmental regulations relatively weak (Ortolano *et al.*, 2014). Moreover, there is limited social control of tanneries by the local communities. However, during the last 10-15 years, leatherworking firms have started to face considerable pressure from different stakeholders, particularly from international buyers, to comply with environmental standards.

Challenged by threats to their survival in the international market, leatherworking firms that are members of Pakistan Tanners Association (PTA) have been successful in seeking technical support from some international organisations like United Nations Industrial Development Organization (UNIDO), to set up combined effluent treatment plants in two leatherworking clusters, Kasur and Karachi. Moreover, with financial support from international donors (mainly the Norwegian and Dutch governments) and the backing of industry associations, two environment support institutes – Cleaner Production Centre (CPC) and Cleaner Production Institute (CPI) – were established in early 2000s, which are actively working to advance cleaner production (Van Berkel, 2007) in Pakistan's leather industry. These institutes have taken substantial initiatives to ignite environmental values and raise environmental awareness amongst tanneries and have also supported them in the adoption of cleaner technologies (Ortolano *et al.*, 2014). A government entity, Small and Medium Enterprises Development Authority (SMEDA), is also collaborating to a limited extent with the industry associations and Chamber of Commerce to raise awareness amongst leatherworking firms for controlling pollution. As a result, many firms, particularly the export-oriented enterprises, have started to reconsider their production processes to reduce their environmental and social impacts (Ortolano *et al.*, 2014; Vogt and Hassan, 2011; Wahga *et al.*, 2015), providing an opportunity to explore the drivers of sustainable entrepreneurial practices in this largely unexplored developing economy context with its unique institutional settings.

Methodology

Research design

In this study, multiple case study design was adopted to develop a better understating of the phenomena and to achieve robustness in findings (Bryman and Bell, 2007; Easterby-Smith *et al.*, 2008; Yin, 2009). In accordance with Parrish (2010), the cases were considered as "multilevel phenomena stretching between the individual entrepreneurs and collective organisation" (p. 514).

Sampling

Snowball sampling strategy was adopted to recruit study participants (Easterby-Smith *et al.*, 2008). Early on in the access efforts, it became clear that SME owner-managers in

Pakistan tend to lack faith in government departments. The fear of someone unknown visiting the firm and collecting such information that would later on invite some form of penalties from the government means that entrepreneurs have mistrust even of researchers and are often unwilling to grant access. Referrals from trusted organisations or individuals turned out to be the best strategy to gain access. Initially, the industry associations and environment support institutes, such as CPC, CPI and SMEDA, were contacted to establish access to some SMEs. Later on, building on referrals from these initial participating SMEs, access was gained to further sample firms.

Data collection

For this research, 35 interviews were conducted with different owners and managers from 22 SMEs between October 2014 and March 2015 (Table I). In some firms, more than one person was interviewed. Depending on the need for clarification of issues some follow-up interviews were also conducted. The respondents from the sample SMEs provided useful information about the micro-, meso- and macro-level factors that they thought were driving sustainable entrepreneurial activity in their firms. However, not all sample firms were environmentally engaged. Environmentally distanced SMEs shared their thoughts on the factors deterring them from environmental engagement. The sample SMEs were from the Punjab province (areas include: Lahore, Kasur, Sialkot, Gujranwala, Sheikhupura and Muridkey) and the Sindh province (areas include: Karachi). The two provinces house the largest number of tanneries in the country.

In addition, a number of other industry stakeholders were interviewed in this study (Table II). This included detailed discussions with the representatives of environmental support institutes, such as CPI, CPC, Kasur Tanneries Waste Management Agency and Korangi Wastewater Management Project (Karachi), and a leather sector specialist from SMEDA – a representative agency of the national government's Ministry of Industries and Production. Representatives from industry associations, including the PTA, Pakistan Gloves Manufacturers and Exporters Association (PGMEA), Tanneries Association (Dingarh, Kasur) and Small Tanneries Association (Kasur) were also interviewed in this study. The members of these associations not only provided evidence about the influence of meso- and macro-level factors on environmental improvement, but also shared some of their own experiences and observations about firm-level sustainability drivers. Additionally, discussions with chemical suppliers explored their views about the industry dynamics arising from environmental developments, including the resulting pressures on firms and their own role in encouraging firms to use less harmful chemicals.

Different sets of questions were used for interviewing each group of respondents. Interview questions were initially based on desk research and the outcome of a pilot study with eight firms, and were further developed during the field visits using a "laddering technique" (Easterby-Smith *et al.*, 2008, pp. 146-147). While SME-focused interviews explored firm-level experiences and processes regarding the isomorphic pressures for environmental improvement, interviews with other industry stakeholders revolved around their role in assisting businesses to become environmentally responsible. Another objective behind collecting evidence from multiple respondents was to achieve reliability and validity in the findings (Bryman and Bell, 2007).

All the interviews were semi-structured and face to face. They were mostly digitally recorded and later on transcribed for analysis. In two cases, owner-managers were not comfortable with recording so notes were taken while interviewing them. Photographs were also taken during the site visits to provide additional evidence on firms' environmental practices. The review of secondary documents included the annual reports of the industrial associations, sector-specific reports, etc. Finally, while attending the Pakistan Mega Leather Show, held in Lahore in March 2015, informal discussions were made with a number of

Table I.
SMEs interviewed for this study

Cases	Founded	City	Size	Number of employees	Market of operation	Product(s)	Person(s) interviewed	No. of interviews	Length (hh:mm)
SME 1	1992	Kasur	Small	10-15	Domestic	Finished leather	Owner-managers	2	00:30
SME 2	2001	Kasur	Medium	50-60	Export	Finished leather	Production manager	1	00:35
SME 3	1992	Kasur	Small	15-20	Domestic and export	Finished leather	Owner-managers	2	00:25
SME 4	1974	Sheikhupura	Medium	200-240	Export	Finished leather	Manager	1	00:40
SME 5	2001	Kasur	Medium	50-60	Export	Finished leather	Owner-manager	2	01:13
SME 6	1989	Sialkot	Small	6-7	Domestic	Finished leather	Owner-managers	2	01:21
SME 7	1997	Sialkot	Medium	60-70	Domestic	Finished leather	Owner-manager	2	00:50
SME 8	1989	Sialkot	Medium	100	Export	Gloves, work wear, motorbike suits	Owner-manager	1	00:50
SME 9	1984	Sialkot	Medium	55-70	Export	Leather garments	Owner-manager and general manage	2	01:00
SME 10	1988	Sialkot	Medium	50	Domestic and export	Working gloves	Owner-manager	1	00:41
SME 11	1992	Sialkot	Medium	40-50	Domestic	Leather processing services	Owner-manager and general manage	2	01:11
SME 12	2005	Kasur	Medium	50-60	Domestic and export	Finished leather for shoes and garments	Owner-manager	2	02:16
SME 13	1971	Kasur	Medium	150-200	Domestic and export	Semi-finished leather for shoes, sofas, jackets, upholstery	Owner-manager and other partners	2	01:10
SME 14	1996	Sialkot	Small	10-12	Domestic	Finished leather for gloves	Owner-manager	1	00:36
SME 15	2001	Sialkot	Medium	200	Export	Leather garments	Owner-manager	2	01:00
SME 16	1989	Sialkot	Medium	40-60	Export	High performance leather clothing	Owner-manager	1	00:43
SME 17	2003	Sialkot	Medium	30-40	Domestic and export	Gloves	Owner-manager	1	00:29
SME 18	1992	Sialkot	Medium	100	Export	Leather garments, gloving leather, shoe upper, motorbike leather and fancy leather	General manager and production manager	2	00:30
SME 19	1949	Muridkey	Medium	200-240	Domestic and export	Leather shoes	Owner-manager	2	01:05
SME 20	1980	Karachi	Medium	200-250	Domestic and export	Finished leather	General manager	1	00:34
SME 21	1991	Karachi	Medium	100-120	Domestic and export	Finished leather	Owner-manager	1	01:05
SME 22	1985	Karachi	Small	15-20	Domestic and export	Leather garments	Owner-manager	2	01:10
Total								35	20:03

Source: Developed by the researchers

Stakeholders	Nature of organisation	City	Person(s) interviewed	No. of interviews	Length (hh:mm)
Pakistan Tanners Association (PTA)	National-level industrial association	Lahore	Association secretary and three members	4	02:44
Pakistan Gloves Manufacturers and Exporters Association (PGMEA)	National-level industrial association	Sialkot	Chairman and two members	2	01:00
Tanneries Association, Dingarh, Kasur	Regional industrial association	Kasur	A representative member of association	1	00:45
Small Tanneries Association, Kasur	Regional industrial association	Kasur	A representative member of association	1	00:55
Cleaner Production Centre (CPC)	Environment support institute	Sialkot	Project manager	3	01:35
Cleaner Production Institute (CPI)	Environment support institute	Lahore and Karachi	Two programme managers	4	02:52
Small and Medium Enterprises Development Authority (SMEDA)	A government entity – Ministry of Industries & Production, Pakistan	Sialkot	Station officer	4	02:21
Kasur Tanneries Waste Management Agency (KTWMA)	A private-public partnership initiative – a combined effluent treatment plant for a tannery cluster in Kasur	Kasur	In-charge	2	01:41
Korangi Wastewater Management Project (KWMP)	A private-public partnership initiative – a combined effluent treatment plant for tannery cluster in Karachi	Karachi	Manager administration	1	00:54
SGS	Testing laboratory	Lahore	Marketing manager/senior executive officer	1	00:33
National Institute of Leather Technology (NILT)	Industry-related educational institute	Karachi	Staff member	1	00:15
Leather Technology Institute (LTI)	Industry-related educational institute	Gujranwala	Principal and ex-principal	2	02:33
Pakistan Council for Scientific and Industrial Research (PCSIR)	Research and testing laboratories complex – an institute of national government	Lahore	Two staff members	2	01:35
CC1	Chemical supplier	Lahore	Staff member – technical manager	1	00:17
CC2	Chemical supplier	Lahore	Staff member – leather technician	1	00:17
CC3	Chemical supplier	Lahore and Karachi	Owner-manager	1	00:36
CC4	Chemical supplier	Lahore	Staff member	1	00:25
CC5	Chemical supplier	Kasur	Owner-manager	1	00:45
TS1	Cleaner technology seller (e.g. solar tubes)	Lahore	Executive staff member	1	00:30
Total				34	22:39

Source: Developed by the researchers

Table II. Other stakeholders of Pakistan's leatherworking industry interviewed for this study

entrepreneurs and industry stakeholders, which deepened the understanding of researchers about the dynamics of leather industry and particularly about the nature of firm-level environmental engagement. These discussions also provided an opportunity to validate findings from the preliminary analysis of data.

Since most of the interviews were conducted in the local language (Urdu), transcripts were therefore translated into English for analytical purposes. The field researcher was fluent in Urdu and English and the accuracy of translation was checked by an academic in Lahore who had good understanding of both languages.

Analysis

In this study, NVIVO software was used for data analysis, which was informed by the grounded analysis approach (Easterby-Smith *et al.*, 2008; Gioia *et al.*, 2013; Miles and Huberman, 1994; Williamson *et al.*, 2006). After getting familiarised with the data in a first reading, transcripts were re-read to draw initial concepts and start to develop the coding scheme. In the second round, the initial concepts were catalogued before developing consolidated themes in the third stage of analysis. At this stage, the identified themes were also classified as micro-, meso- and macro-level factors. The micro-level factors were labelled as L1, meso-level as L2 and macro-level as L3. Where necessary, recoding was done to refine the themes. Finally, themes were collated to inform the research objectives more precisely by developing aggregated and analytical dimensions (Figure 1).

Following Gioia *et al.* (2013), Figure 1 illustrates this inductive process of theme identification. A theme customer requirements and industry dynamics, for example, derived from the inductive analysis of data shows that multiple macro-level (L3) factors underpin the international orientation and experience of SMEs. The evidence suggests that the environmental sensitivity of international customers (L3) coupled with the environmental regulations of foreign countries (L3) and pressures from leather industry-related international monitoring bodies (L3) simultaneously generate coercive isomorphic pressure for SMEs in Pakistan's leather industry to adopt sustainable practices. Similarly, the emergence of other themes was informed by an analysis of their respective micro-foundations.

Findings

Figure 1 provides a summary of the multi-level (micro, meso and macro) factors that drive sustainable entrepreneurial activity in Pakistan's leatherworking industry. The detailed findings reveal how particular micro-, meso- and macro-level factors have combined to exert coercive, normative and isomorphic pressures on the sample firms. However, despite some evidence that micro-level factors played an independent role, it was noteworthy that these micro-level environmental drivers were generally mediated by specific meso- and macro-level forces. For example, the study demonstrates that the educational and awareness-raising initiatives of CPI (meso-level factor) and the environmental pressures from international buyers (macro-level factor) activated sustainability-oriented values amongst SME owner-managers.

The following paragraphs summarise findings related to the most significant; macro-, meso- and micro-level factors driving leatherworking SMEs to adopt environmental practices.

Customers' requirements and industry dynamics (macro)

We found that international buyers and environmental regulations of foreign countries acted as macro-level institutional actors to exert coercive isomorphic pressure (DiMaggio and Powell, 1983) on the majority of our sample firms. In this way, international exposure (Bansal, 2005) and field cohesion (Bansal and Roth, 2000) pushed SMEs in Pakistan's leatherworking industry to become environmentally responsible. Directly or indirectly, many sample firms were exporting their leather and/or leather products to European countries such as the UK, Germany, France and Italy. Some SMEs were also selling in the Chinese market from where leather was then exported to European countries, resulting in indirect export. All respondents from exporting firms were equally adamant that

Source: Developed by the researchers

Figure 1.
An illustration of theme identification stages

"Customers require this. The big brands ask about environmental compliance" (SME 12). European markets were thought to not only have environmentally conscious customers, the environmental regulations of these countries were also seen as strict and to be becoming more rigorous over time. International buyers from such markets were therefore

pressing their Pakistani suppliers to adopt sustainable practices. For example, as one owner-manager explained:

> Look, our international market, especially the European market where new laws have been introduced, they give more business to those who work on these things, whose factory is environmentally friendly and does not drain poisonous water, and does not cause land or air pollution […] (SME 7).

Respondents explained that environmental compliance had become a basic requirement for exporting leather and leather products. Non-compliance with international environmental standards could result in rejection of the whole order.

International industry dynamics also provided isomorphic pressures (DiMaggio and Powell, 1983) on our sample firms. For example, the Leather Working Group (LWG), an international multiple stakeholder group and monitoring body, was working to promote environmentally friendly business practices across tanneries worldwide. LWG provides guidelines for continued environmental improvement and gives awards to confirm that a tannery is environmentally compliant. Tanneries that consider themselves more progressive strive to win such awards in order to develop their symbolic capital (Fuller and Tian, 2006; Gergs, 2003; Shaw *et al.*, 2008; Stringfellow and Shaw, 2009) and attract more business from international customers:

> […] now the pressure for [wastewater] treatment is coming from LWG [Leather Working Group] […] If the [wastewater treatment] plant is not there, the values cannot be met and the LWG medal would not be awarded […] Any tannery that aims to export will have to adopt this […] (SME 4).

Tanneries use a number of different chemicals for processing leather. Of these, some are regarded as carcinogenic and their use is banned. To confirm that the suppliers have not used harmful chemicals, many international customers now ask for lab reports confirming that the processed leather would not cause any harm to its users. Thus, it seems that in order to satisfy their customers, by pursuing the acquiescence strategy (Oliver, 1991) and drawing on their pollution prevention and product stewardship capabilities (Hart, 1995), many export-oriented SMEs have established responsible supply chains (Gold *et al.*, 2010) for accessing and using environmentally less harmful chemicals. Across the industry, such inputs are known as REACH compliant chemicals:

> […] we use chemicals according to the export requirements and their standards (SME 2).

> […] it is a must, for the export business, it is a must. The importers want to know if you are REACH compliant or you are ISO certified. So it is a must without it you are not going to do the export business (SME 18).

This was confirmed by the representatives of environment support institutes, who had also observed the prevalence of customer requirements as a leading driver of environmental improvement in export-oriented leatherworking firms:

> Their buyers also had their requirements. So, they were to adopt these things anyway […] the export-oriented tanneries adopted the new processes more (Programme manager, CPI).

Overall, the findings about customer requirements and industry dynamics lend support to a key theme of sustainable entrepreneurship: that environmentally relevant market opportunities (e.g. Cohen and Winn, 2007), which in the case of Pakistan's leather industry are environmentally sensitive international customers, can profoundly drive sustainable entrepreneurial activity.

Regulations (macro)

At the macro level, compliance with environmental regulations was found to have only a moderate influence in persuading SMEs to adopt environmental practices because most of

the sampled firms did not regard the pressure from national government a major push for environmental improvement. In contrast with a number of previous studies describing regulation as exerting strong coercive isomorphic pressure (DiMaggio and Powell, 1983) on SMEs to behave environmentally responsibly (Revell *et al.*, 2010; Studer *et al.*, 2006), our findings suggest that in Pakistan's leatherworking industry generally SMEs perceive that "[…] there is some pressure from the government […], but that is limited […]" (SME 4):

> Government asks about it and in many cases customers also require it. So you can say it is fifty fifty […] (SME 12).

This study finds multiple factors for legislation to have remained a less effective driver of environmental improvement in this industry sector. The major ones are the limited interest of national government in environmental issues and the weaker enforcement of environmental regulations:

> I do not think that there has been any significant pressure from the government […] it is only on occasional basis that government may wake up for few days and pressurise the industrialists. However, if I talk about overall situation, I do not think that they are doing that due to the pressure from government (Programme manager, CPI),

> The implementation of regulation is weak therefore people do not care much about pollution (SME 22).

This provides an opportunity to some noncompliant firms to escape from serious penalties (Ortolano *et al.*, 2014). Moreover, though in isolated instances, the noncompliant attitude of competitors, who were saving costs through non-compliance, was also deterring some other SMEs from complying with regulations. However, it was found that in the recent past the relevant government departments had become more active and were pushing firms to adopt sustainable practices:

> It is about 4 to 5 years now that the Department of Environment has become stricter […] [therefore] at the moment, everyone is trying [for environmental improvement] because there is pressure from the government, from the Department of Environment (SME 14).

Overall, the analysis reveals that although the enforcement of environmental regulations is weaker in Pakistan that does not mean non-existence of environmental legislation. There is a potential to enhance the effectiveness of regulations as a macro-level driver of environmental improvement in SMEs in leather industry, but that would require serious interest of the national government in environmental issues. However, given the current circumstances, compared to many developed economies where regulations are not only made but are also enforced strictly (Revell *et al.*, 2010), formal compliance might not serve as an effective driver of sustainable entrepreneurial activities in Pakistan's leather industry. In the light of available evidence, to motivate SMEs for environmental improvement, it looks more appealing to seek support from a set of complimentary drivers of sustainable practices such as sustainability values and support services of intermediary organisations rather than just relying on regulations.

Proto-institutional sponsors (meso)

At the meso level, this study finds that in the absence of effective formal institutional mechanisms in Pakistan intermediary organisations have performed as proto-institutional sponsors (Gómez and Atun, 2013; Lawrence *et al.*, 2002; Zietsma and Mcknight, 2009, p. 150). By taking substantive measures to institutionalise cleaner production in the leatherworking industry, they have been successful in exerting normative isomorphic pressure (DiMaggio and Powell, 1983) on many SMEs to adopt sustainable practices. Our findings show that, in addition to their international experiences with multi-level institutional actors, the majority of SMEs attributed their adoption of environmental

practices to a large extent to the efforts of different intermediary organisations. Consistent with Ortolano *et al.* (2014), this study finds that the environmental interventions made by CPC and CPI changed the environmental orientation of many leatherworking firms and pushed them to adopt cleaner production. These environmental support institutes aim to motivate SMEs to control indiscriminate discharge of potentially harmful solid wastes and heavily polluted wastewater by adopting cleaner production techniques. Such techniques, when adopted, have the potential to help SMEs to comply with environmental regulations, meet customers' demands and achieve eco-efficiency (Van Berkel, 2007). For instance, as an owner-manager described:

> […] problems are emerging […] CPC has been working on this and telling us that if we do not meet the [environmental] requirements, we would not be able to export […] CPC is a very good institute regarding leather and they tell us everything about environment. Initially, courses were arranged on a monthly basis with trainers coming from abroad. They used to do experiments here for showing us in order to develop our better understanding. Then they used to conduct tests and exams. They also used to visit our units (SME 6).

On the same topic, the project manager from CPC stated:

> We made them realise that they were causing diseases […] people gradually started to get convinced. It was like we regularly used to knock at their doors and at times used to invite them for training sessions, and at times we used to visit them personally […] whenever we start, we start from good housekeeping and try to motivate people that they would not be required to spend a lot of money and by making minor investments they could save themselves from major [environmental] problems (Project manager, CPC).

Nevertheless, it was not easy for the environment support institutes to bring an attitudinal change in SMEs:

> […] we really had to struggle hard to motivate them. Mostly, we convinced them that they would conserve their resources. They were more interested in this, that they would have some economic benefits. So, we kept this factor in mind while motivating them (Programme manager, CPI).

The intermediary organisations also arranged inter-firm visits, which were considered an influential tool to encourage SMEs to adopt environmental practices:

> They had formed groups and my group worked on energy conservation […] (SME 14).

The philosophy behind organising such visits was to establish a network of environmentally motivated SMEs and provide the firms an opportunity to share success stories as well as learn from each other's failures, which can be considered an instance of developing field cohesion (Bansal and Roth, 2000). Thus, in a way, environmentally engaged peers also exerted normative pressure (DiMaggio and Powell, 1983) on some SMEs and pushed them towards better environmental awareness and performance. These findings also suggest the presence of mimetic isomorphic behaviour (Delmas and Toffel, 2004; DiMaggio and Powell, 1983) in some SMEs. As some firms see others successfully adopting cleaner production, they follow them. The words of a programme manager of CPI also speak to the presence of mimetic isomorphic pressure for environmental improvement in the majority of SMEs:

> Now when we start working with one tannery, the other tanneries also start doing that after seeing that the other tannery is doing something new. This is very common culture here that if you introduce some new process in one industry, the rest would also start adopting that. So, when we started working in four or five tanneries, all of them started to come to us. Then they also develop confidence (Programme manager, CPI).

The evidence from Pakistan's leatherworking industry suggests that intermediary organisations seeking to activate environmental values amongst SMEs and making them

realise the salience of the issue of environmental degradation share environmental knowledge, raise awareness of supply chain pressures and enable them to adopt cleaner production through training programmes and workshops. Intermediaries create further normative and mimetic isomorphic pressure (Bansal, 2005; DiMaggio and Powell, 1983) by forming small working groups to establish networks, which provide an opportunity for entrepreneurs to observe successful implementation of cleaner production processes in other firms and legitimise their own business behaviour while also developing the feeling of being a modern tannery. This is a further means of institutionalising cleaner production in the industry.

However, the active presence of these environment support institutes depended on the continued support from national and regional industrial associations such as the PTA and PGMEA. Referring to the key role of PTA, for example, a programme manager from CPI stated:

> Whatever project we do, we do those through the association […] we involve them and tell them about the project […] Then they tell us about three or four tanneries to start our activities with […] tanneries which are progressive because they understand these things they show interest and invite us to start our practices […] (Programme manager, CPI).

These findings regarding the active role of intermediary organisations in achieving environmental goals lend support to the stream of literature which refers to the success of environment support programmes in developing environmental attitudes in SMEs in a number of European countries (Bruijn and Lulofs, 2001; Klewitz *et al.*, 2012; Pimenova and van der Vorst, 2004; York and Venkataraman, 2010). However, in contrast with the European context where national governments have provided financial support and political endorsement for environmental programmes, these environmental initiatives in Pakistan were mainly funded by international sponsors (Ortolano *et al.*, 2014). As a respondent from CPI explained:

> Almost all our major projects are with the Dutch government. The Netherland Embassy in Islamabad has been providing funding for all these (Programme manager, CPI).

Given that external funding streams are time limited, it seems likely that these initiatives will require ongoing support from the Pakistani Government if the sustainability benefits gained during the earlier phases of these programmes are to be retained and extended.

Sustainability-driven values (micro)

At a micro level, the environmental values of owner-managers also drive leatherworking SMEs to adopt environmental practices (Hamann *et al.*, 2017; Williams and Schaefer, 2013). Many respondents perceived themselves to have a value-driven engagement with cleaner production for protecting the natural environment. For instance, as two respondents asserted: "We will have to protect the mother earth if we are to live on it" (SME 16) and "[…] largely these are the moral values […] that drive us that it should be done" (SME 4). At the same time, some respondents asserted that "Humanity is our priority" (SME 9) and therefore they considered it their liability to protect the planet so that they could play a positive role in providing a better place for fellow human beings and future generations to live:

> […] we are not doing this just to get the business; we are going for this because it is imperative for the survival of human beings. It is important to save our children from pollution (SME 7).

When asked: how sustainability values were formed, respondents gave a number of reasons. The majority of respondents referred to the mediating role of environmental support institutes in activating pro-environmental values amongst them, which was also confirmed by the project manager of CPC: "We made them realise that they were causing diseases […] people gradually started to get convinced" (Project manager, CPC). In a way, these findings suggest that the

intermediary organisations transmitted their normative isomorphic pressure to SMEs by activating sustainability values amongst owner-managers. Some other respondents mentioned their real-life observations regarding the miseries of the general public due to pollution, such as health issues like stomach and breathing disease (e.g. SME 7) and limited access to clean drinking water (e.g. SME 11) as factors underpinning their sustainability values. It also implies that the sustainability values of SME owner-managers may be activated by international buyers' demand for environmentally responsible production processes. It thus appears that leatherworking SMEs internalise some external drivers through micro-level internal factors and therefore adopt environmental practices (Vidal *et al.*, 2015).

In the Pakistani context, an Islamic country where many people attach significant value to religious convictions in almost all spheres of their lives, we had expected that religious values might play a major role in the development of sustainability values of entrepreneurs. However, there was very little evidence of SME owners and managers referring specifically to religious values. Only one respondent referred to religious convictions informing his sustainability values:

> First of all we are Muslims. Being Muslims, we have more rules to follow than the rest of the world - about cleanliness, honesty, quality and measurement. We are different from others because this is what our religion teaches us (SME 11).

These findings are in contrast with some earlier studies which argue for religious values as a potentially powerful driver of environmental practices in SMEs (e.g. Abdelzaher and Abdelzaher, 2015; Vives, 2006), and should be considered with caution because we did not set out explicitly explore the influence of religion on sustainable practices in SMEs. The responses could be different with a more religion-focused discussion. However, in agreement with some of the recent studies on sustainable entrepreneurship, our findings confirm that sustainability-driven owner-managers do "recognise equanimity between 'self' and 'other', where 'other' includes other people and nonhuman nature" (Parrish, 2010, p. 520).

Competitiveness gains (micro)

We also found that, at the micro level, sustainability practices of leatherworking SMEs were driven to a large extent by a competitiveness logic, i.e. to save resources and achieve eco-efficiency for cultivating economic benefits (Bansal and Roth, 2000; Font *et al.*, 2016). Owner-managers of environmentally progressive leatherworking SMEs were keen to achieve process efficiency by reducing their input intensity (Van Berkel, 2007) and therefore to address the issues of environmental degradation and rising costs of production at the same time:

> […] costs are rising and process efficiency would have to be improved […] You may consider this one of the main reasons (SME 4).

Thus, by adopting cleaner production, many sample firms were trying to achieve financial and ecological benefits simultaneously. Such evidence suggests that, in a way, environmentally driven leatherworking SMEs follow the dual principles of sustainable entrepreneurship – "benefit stacking" and "strategic satisficing" (Parrish, 2010), as an owner-manager's also responded:

> […] a lot of chemical is saved [due to cleaner production]. If environment is saved, we also get the money (SME 15).

Moreover, the competitiveness gains were also perceived to come from resource substitution:

> […] we have developed a system in which we do not have to make extensive use of the boiler. We have fitted a small steam generator. That definitely uses less energy as compared to the boiler and it gives better production. This also results in less use of gas (SME 12).

It is, again noteworthy that the proto-institutional sponsors played a key role in raising awareness amongst SMEs owner-managers about the potential competitiveness gains of greening. They motivated them to adopt cleaner production practices by highlighting the economic advantages of these practices. As the programme manager from CPI said:

> Mostly, we convinced them that they would conserve their resources. They were more interested in this, that they would have some economic benefits. So, we kept this factor in mind while motivating them (Programme manager, CPI).

Similarly, the respondent from CPC also explained that financial benefits were a major attraction for SMEs to become environmentally responsible:

> […] the thing that attracts people most is economy, we tell them that […] you would be using lesser chemicals and your product would be processed with lower cost, then even slumbering people become attentive (Project manager, CPC).

By and large, our findings about economy-led environmental behaviour of SMEs in leatherworking industry are not surprisingly new, and lend support to the arguments made elsewhere in the literature that the attraction of economic gains can be a leading driver of environmental improvement in some SMEs (Collins *et al.*, 2007; Font *et al.*, 2016; Naffziger *et al.*, 2003; Thorpe and Prakash-Mani, 2003). However, one important finding of our research is that intermediary organisations (meso-level actors), through their motivational and educational initiatives, have performed a pivotal role in making the leatherworking firms (micro-level actors) realise that the economic and competitive advantages are attached with environmental improvement. They have also been generating normative isomorphic pressures for them to adopt cleaner production practices. This highlights the interaction of meso- and micro-level factors in promoting environmental improvement in the context of our study. Factors at different levels do not seem to act in isolation but operate in tandem to drive environmentally responsible SME behaviour.

Symbolic capital (micro)

Though in a minority, in a few SMEs sustainable entrepreneurial activity was also driven by the desire for developing symbolic capital (Fuller and Tian, 2006; Gergs, 2003) and therefore improving reputation. Developing better reputation equates with building symbolic capital, which is about how one is valued by others, such as the honour and prestige that a person or firm possesses (Fuller and Tian, 2006; Shaw *et al.*, 2008; Stringfellow and Shaw, 2009). Since symbolic capital can be converted into economic capital through entrepreneurial initiatives (Gergs, 2003), environmentally pro-active SMEs may strive to build their reputation as environmentally responsible businesses through adopting eco-friendly practices, allowing them to attract more customers and augment their sales (Fuller and Tian, 2006). By developing symbolic capital, they try to satisfy their stakeholders, such as the regulatory bodies, industry associations and NGOs, and this enables them to seek legitimacy of their behaviour and existence (DiMaggio and Powell, 1983; Fuller and Tian, 2006; Gergs, 2003). The simultaneous pursuance of resource accumulation in the form of symbolic capital and augmenting sales to environmentally sensitive buyers suggest that reputation-driven leatherworking SMEs also seem to follow the "principle of benefit stacking" (Parrish, 2010), as an owner-manager also explained:

> […] our image will also improve. It is very clear that the benefit of adopting these [environmental] practices will be an improvement in image […] we will establish a better image in international market. It becomes easier to work with brands (SME 12).

At the same time, another entrepreneur perceived that the reputation of being an ecologically responsible firm would be helpful for enriching social capital (Fuller and Tian, 2006) and broadening the network of customers:

> […] when customers come and during the round of factory when they see what we are doing about cleaning, recycling or work processes, they get satisfied […] and they also tell others that the factory is clean, does good work and setup is organised then things move ahead (SME 13).

Moreover, we found that some SMEs were following the "principle of worthy contribution" (Parrish, 2010) of sustainable entrepreneurship because they were aspiring to positively contribute to national image building by adopting sustainable practices. For instance, as an owner-manager narrated:

> We also want to earn profit. Although companies offer us chemicals at cheaper rates, we do not go for them. We are still using expensive chemicals. We also know that if we use cheaper chemicals that will increase our profits, but sometimes, profit is not everything because, if unfortunately, if anyone who is buying furniture [leather] and it does not clear the tests, at the end we will suffer and bring a bad name to the country also (SME 5).

The above findings are consistent with previous literature which argues that the desire to have better reputation can drive some SMEs to adopt environmental practices (e.g. Pimenova and van der Vorst, 2004). However, in Pakistan's leather industry, some SMEs do not only appear to attach importance to their own image but are also driven by the ambition to contribute to the national reputation. This suggests that they do not only have micro- and meso-level considerations towards environmental improvement but also realise the macro-level implications of their actions. It appears that, again, (international) buyers are the ones who push SMEs to think about the reputational aspect of environmental practices. Nevertheless, we can trace a clear link between sustainability-driven values and image building: the ecological values of owner-managers that can make them responsible enough to think not only about themselves or profitability of their business but to consider the reputation of their country as well.

Environmentally disengaged SMEs

Overall, the findings of this study reveal that Pakistan's leatherworking industry is now a relatively dynamic sector (Eisenhardt and Martin, 2000), where local industry practices and processes are keeping pace with the sustainability requirements of international markets.

Nevertheless, not every firm in our sample was environmentally progressive. Four of the 22 cases, SME 1, SME 3, SME 21 and SME 22, showed no signs of engaging with the emerging sustainability goals. The owner-managers of these businesses tended to distance themselves from any discussion about environmental challenges, as illustrated by the following comments:

> It is a time wasting activity to talk about pollution. Talk about the socio-economic issues. Talk about security, I will not die because of the pollution but because of insecurity (SME 21).

> We are worried about the survival of our businesses, what to talk about pollution […] we are worried about our survival, how can we think about the environment (SME 22).

Most of these firms were smaller size units (Table I), with little engagement in export markets. With a primary focus on domestic market, these SMEs were not selling their products to environmentally sensitive buyers. In addition, these firms were generating limited revenues and many were struggling for survival because their regions were subject to political instability and violence. Respondents from Karachi region were particularly concerned about the security situation in their area discouraging customers from visiting them. Moreover, the owner-managers of these businesses were not highly educated and had

not attained any formal industry-related education, so were relying largely on their own experience and informal, locally acquired learning.

In summary, the analysis suggests that a minority of SMEs remain environmentally disengaged as a result of the following: instability in socio-economic and security situation in their regions, inability to incorporate sustainable practices in businesses, lack of education, limited environmental awareness, weaker inter-firm knowledge exchange collaborations and illegitimate practices of some peers. While some of these structural obstacles may be difficult to overcome, there is considerable scope for policy makers and intermediary organisations to build on the learning experiences of environmentally driven SMEs in order to promote sustainable practices amongst these environmentally disengaged firms.

Discussion

In addition to informing our understanding about the geographically situated coercive, normative and mimetic isomorphic pressures driving SMEs in Pakistan's leatherworking industry to adopt sustainable entrepreneurial practices, this paper contributes to the field of entrepreneurship more generally by linking two streams of literature – sustainable entrepreneurship and motivations for environmental practices in SMEs. At the same time, it examines multi-level (micro, meso and macro) factors influencing the environmental behaviour of leatherworking SMEs. The main contribution of this study is to show how, in the relative absence of effective formal institutional mechanisms (e.g weak support from national government and poor enforcement of environmental regulations), sustainability-oriented informal arrangements between institutional actors, such as between environmental intermediary organisations and SMEs in Pakistan's leather industry, can lead to the emergence of proto-institutions and help advance sustainable entrepreneurship.

Findings show that coercive, normative and mimetic isomorphic pressures (DiMaggio and Powell, 1983) drive SMEs in the Pakistan leather industry to become environmentally responsible businesses. While multi-level factors including international customers, regulatory authorities, intermediary organisations and peers simultaneously exert these environmental pressures on SMEs, the intensity of the impact of each of these varies. In contrast with some earlier studies, which highlight the role played by regulations in making SMEs behave environmentally responsible (Masurel, 2007; Revell and Rutherfoord, 2003; Studer *et al.*, 2006; Tilley, 1999), local and national-level regulatory frameworks have not proved particularly effective in the case of Pakistan's leather industry. Several more effective environmental drivers have been identified, such as customer requirements, supply chain pressures, international environmental laws, industrial dynamism and image building, which are consistent with the opportunity-seeking premise that characterised much of the sustainable entrepreneurship:

> [T]he massive changes occurring in the natural environment, and a growing attention to, and understanding of, these changes redefine the institutional and natural environment of firms and their markets, thus generating additional opportunities in the marketplace (Cohen and Winn, 2007, p. 44).

However, while these commercial priorities play a decisive role in this developing economy context, the study has also revealed other important drivers, including the sustainability-driven values of SME owners and managers (Hamann *et al.*, 2017; Hammann *et al.*, 2009; Testa *et al.*, 2016; Williams and Schaefer, 2013). Crucially, it has shown how both value-based motivations for adopting pro-environmental practices, and a greater awareness of their potential commercial benefits, have largely been mediated by the educational and awareness-raising activities of intermediary organisations, such as CPC and CPI (Ortolano *et al.*, 2014). The study contributes to the literature by uncovering that these environmental support institutes appear to have been successful in performing a proto-institutional role (Gómez and Atun, 2013; Lawrence *et al.*, 2002;

Zietsma and Mcknight, 2009) and institutionalising cleaner production in the Pakistan leather industry to a greater extent. In contrast with some other developing countries, where intermediary organisations have been seen as a less effective driver of environmental improvement in SMEs (e.g. Hamann *et al.*, 2017), this study demonstrates that these organisations have made substantial efforts for developing environmental orientation in the majority of leatherworking SME owners, managers and employees through raising their level of "eco-literacy" (Tilley, 2000). They have made them realise that by becoming environmentally responsible they could simultaneously protect the wider natural environmental, serve environmentally sensitive customers, comply with regulations and achieve eco-efficiency (Ortolano *et al.*, 2014; Van Berkel, 2007). While such an active role of intermediary organisations in transforming environmental behaviour of firms has been observed in some European countries (Bruijn and Lulofs, 2001; Klewitz *et al.*, 2012; Pimenova and van der Vorst, 2004; York and Venkataraman, 2010), these organisations have been financially supported by national governments, highlighting the effectiveness of strong institutional structures in these economies. In contrast, the CPCs in Pakistan have not been financially backed by national government, but by international sponsors (Ortolano *et al.*, 2014). Their emergence is largely attributed to the efforts of industry associations which strived to seek support from international actors for environmental capacity building of leatherworking firms. Our study thus demonstrates that in countries like Pakistan, where local formal institutional mechanisms are less effective, collaborations between other stakeholders of an organisational field with common environmental objectives can lead to the emergence of proto-institutes (Gómez and Atun, 2013; Lawrence *et al.*, 2002; Zietsma and Mcknight, 2009) that can more effectively create normative isomorphic pressure (DiMaggio and Powell, 1983) to drive SMEs to behave environmentally responsibly. It also appears that to an extent, the normative isomorphic pressure exerted by the CPC and CPI on leatherworking SMEs to comply with environmental regulations has compensated for lacked coercive isomorphic pressure that local and national regulatory authorities could not generate sufficiently due to their internal capacity constraints. These findings lead to the following proposition:

P1. In cases of less effective formal institutional mechanisms but where SMEs and other actors in the organisational field have common interest in advancing a sustainability agenda, collaborations around this shared logic are likely to play a catalytic role in the evolution of proto-institutes aimed at diffusing cleaner production practices.

More generally, findings reveal patterns of intertwined effects of micro-, meso- and macro-level factors on environmental engagement of SMEs, confirming that these factors operate in tandem with each other (Font *et al.*, 2016; Hamann *et al.*, 2017; Muñoz and Dimov, 2015). Clearly, many respondents who referred to pressure from international customers also mentioned changes in international environmental regulations, sustainability-driven values and financial benefits. There is also evidence that some environmental drivers can mediate the influence of others, and might even be regarded as precursors to their emergence. More specifically environmental support institutes, CPC and CPI, have been stimulating sustainability values amongst SME owners, managers and employees, while also raising their awareness about potential commercial gains within this moderately dynamic industry (Eisenhardt and Martin, 2000). The collaborative efforts of local industrial associations, CPCs and international sponsors, which have also aimed at bringing attitudinal change in human resources in SMEs, illustrate how positive environmental outcomes can be achieved through collaborations between micro-, meso- and macro-level factors (Bruijn and Lulofs, 2001; Wassmer *et al.*, 2014). Thus, we offer the following proposition:

P2. As SMEs operate in an organisational field, it is likely that they will be driven towards environmental improvement by multi-level factors (micro, meso and macro) emanating in that field.

The importance of social capital clearly emerged from the findings (Adler and Kwon, 2002; Fuller and Tian, 2006; Gergs, 2003; Nahapiet and Ghoshal, 1998). For example, while appreciating the value of networks some respondents described how they were influenced by visits to more environmentally engaged SMEs and to environment support institutes, where they observed the successful implementation of cleaner production processes. Peer support and demonstration of successful environmental projects by CPC and CPI provided these SMEs with opportunities to appreciate the value of sustainable practices, while also developing mimetic and normative isomorphic pressures (DiMaggio and Powell, 1983), respectively, which drove these firms to become more sustainable enterprises. These findings reinforce previous work that highlights a key role for effective networks that can exchange environmental knowledge and support SMEs through a successful transformation process to become more eco-friendly businesses (Bruijn and Lulofs, 2001; Halme and Korpela, 2014; Parry, 2012; Shearlock *et al.*, 2000; Wassmer *et al.*, 2014). While acknowledging the heterogeneity of SME populations (Parker *et al.*, 2009, pp. 296-297), evidence from this study reinforces the case for adopting relational approaches (Blundel *et al.*, 2013, p. 258), and for policy makers to configure effective regional and national-level support networks as a catalyst for promoting sustainable entrepreneurship. Inter-firm collaborations between environmentally progressive and distanced SMEs can particularly encourage the latter group of firms to adopt environmentally sustainable practices.

Finally, while religious motivations were rarely identified explicitly most of the respondents also referred to observing the principles of "benefit stacking" and "strategic satisficing" (Parrish, 2010). This shows that SME owners and managers seek to co-produce multiple benefits for the individual self, other people and the wider natural environment. This emphasis on multiple, inter-related benefits, including protection of planet and creating a better living place for future generations, represents an important addition to our understanding of discrete motivators such as cost saving or reputational gains.

Conclusions

The findings of this study suggest that, given the heterogeneity of institutional structures in countries across the globe, a holistic, multi-level approach provides an effective framework for examining drivers of sustainable entrepreneurial practice. The study has also demonstrated that environmental improvements can be achieved in the absence of formal institutional support mechanisms. In this instance, it traced the consequences of a well-designed intervention, which attracted interested stakeholders to perform a proto-institutional role by forming alliances with local actors. This meso-level innovation has proved instrumental in advancing sustainable entrepreneurial practice in Pakistan's leather sector. There is scope to extend the approach adopted in this study to examine drivers operating amongst SMEs in other industry sectors. This would allow us, first, to verify the relevance of particular factors and, second, to gain a better understating of how they can be promoted, both in Pakistan and in other developing economy contexts.

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