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The influence of local embeddedness on the economic, social, and environmental sustainability practices of regional small firms

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The influence of local embeddedness on the economic, social, and environmental sustainability practices of regional small firms

Abstract

Despite growing research on economic, social, and environmental sustainability, few studies explore all three sustainability pillars and implemented practices, in the context of regional small firms. This study uses a novel integration of two theoretical concepts, local embeddedness, and sustainability embeddedness orientation, to fill this knowledge gap. Using 26 interviews, the study highlights the nuanced interconnectedness of three new theoretical concepts that link local embeddedness and sustainability embeddedness - locally embedded sustainability values, spatially-driven sustainability and locally adapted sustainability. An integrated theoretical framework is provided that uses the three new concepts to explain how and why small firm local embeddedness in regional communities influences their sustainability embeddedness orientations and implementation of sustainability practices. Small firms were found to have an embedded orientation of economic sustainability, as it was core to the firms' values, strategies, and the practices, and was influenced by the region's locally embedded sustainability values. The region's values afforded locally adapted sustainability for all three pillars, where owners decide whether to pursue an embedded or emergent orientation when picking social and environmental sustainability practices to implement. The practical implications of the study are that regional small firms need additional support to encourage further embedding of these sustainability practices.

Keywords: Regional Small Businesses, Economic Sustainability, Social Sustainability, Environmental Sustainability, Local Embeddedness, Sustainability Embeddedness.

Introduction

Engagement by small firms in the three pillars of sustainability - economic, social, and environmental - has received much interest among governments, academia, and corporations (Kraus et al. 2020). Such engagement involves sustainability embeddedness or incorporating sustainability into a firm's values, strategies, decision-making (Valente 2015) and, especially, their practices (Font et al. 2016; Revell et al. 2010). Research on small firms is essential because their sustainability practices can have significant impacts on economies, societies, and the environment due to their large numbers (Bakos et al. 2020; Revell et al. 2010), and because they often find it difficult to implement sustainability practices compared to larger organisations as they have less human and financial capital, knowledge, and technology (Bakos et al. 2020; Barbosa et al. 2020). Furthermore, these issues can influence the ability of owners to determine which sustainability practices are critical and if these practices contribute to their

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business objectives (Bello and Kamanga 2020; Moyeen and Courvisanos 2012). Studies of small firms have found that their sustainable practices are often limited to isolated actions, are more informal, lack strategic planning or links to their business model or their available capital (Barbosa et al. 2020; Bocken and Geradts 2019; Depken and Zeman 2018). Even with access to the necessary capital, small firm owners still need the capability to identify, seize and reconfigure the capital to achieve sustainability embeddedness (Eisenhardt and Martin 2000; Roundy and Fayard 2019).

Most research on sustainability embeddedness by small firms has explored urban businesses (e.g., Westman et al. 2019), with comparatively little examining small firms in regional communities (Sharafizad and Brown 2020). Regional communities in Australia are defined as geographic areas located outside capital cities (Eversole 2017). Regions are influenced by both local government jurisdiction (Salder and Bryson 2019) and geospatial dimensions (Espinoza et al. 2019) relating to distance to major urban areas (Painter 2008). These geopolitical aspects and the isolation of small firms in these locations means they often face more challenges than those in urban areas (Evans and Bosua 2017; Sheppard 2018). This emphasises that research combining the concepts of sustainability embeddedness and local embeddedness is needed to theorise how small firms in regional communities engage in the three pillars of sustainability. The local embeddedness concept posits that businesses are integrated in their geographical or spatial area (e.g., an urban municipality, a peri-urban location, a regional/rural town). In regional/rural locations, small firms contribute to regional economic development (Salder and Bryson 2019) and are important economic and employment drivers for regional communities (Esposito et al. 2019; Salder and Bryson 2019). Small firms also need to engage in social sustainability (Muñoz and Kimmitt 2019) and environmental sustainability (Kraus et al. 2020) to help their local communities and governments pursue regional sustainability agendas (Barbosa et al. 2020; Moscardo et al. 2013). This emphasises

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the complexity of the stakeholder relations that these firms must develop in their communities for mutual gain. For these reasons, small firms are the very fabric of communities (Hettihewa and Wright 2018; Nyström 2018), and therefore implied that there was value in combining the concepts of sustainability embeddedness and local embeddedness.

Despite the apparent link between local embeddedness and sustainability embeddedness, there is limited empirical research in this area. There are many prior studies that focus on sustainability by regional small firms (e.g., Cunha et al. 2020; Dal Mas and Paoloni 2020; Kallmuenzer et al. 2018; Kilpatrick et al. 2021; Korsgaard et al. 2015; Muñoz and Kimmitt 2019; Parkinson and Howorth 2008; Salder and Bryson 2019). However, there is a lack of studies that examine the sustainability practices of small firms across all three pillars and consider the influence of local embeddedness on these practices. Moyeen and Courvisanos (2012) was an exception by looking at the influence of the regional community on sustainability practices across all three pillars, but they did not explore these through the lens of local embeddedness. This paper addresses this gap by reporting on regional small firms and identifying sustainability practices across the three pillars, and by examining the influence of local embeddedness. Furthermore, this study also takes a novel theoretical approach, compared to Moyeen and Courvisanos (2012), by combining the local embeddedness concept with Valente's (2015) theorisation of sustainability embeddedness as different orientations or degrees to which sustainability is embedded into values, strategies, and practices of a business. Valente posited three sustainability embeddedness orientations based on data from large businesses, and this study explores the relevance of these orientations in the context of regional small firms. This paper emphasises and echoes the prior findings that regional small firms are embedded in multiple social systems (Granovetter 1985) relating to their local embeddedness and sustainability embeddedness orientations.

Qualitative interview method was selected to provide depth and insight from the participants' perspective (Hyde 2000; Yin 2018) to identify emergent themes on the influence of local embeddedness on small firm owners' choice and implementation of sustainability practices. The paper addresses the following research question:

“How and why does small firm local embeddedness in regional communities influence the owners' sustainability embeddedness orientations and, in particular, implementation of economic, social and environmental sustainability practices?”

This paper contributes to the literature and practice in several ways. First, most studies of small firms and sustainability do not consider the specific issues faced by regional small firms. This study expands our understanding beyond urban locations by looking at how local embeddedness in regional communities influences small firms' owner decisions regarding sustainability practices. Second, the limited research on regional small firm sustainability practices does not tend to examine all three sustainability pillars in the one study, whereas this study explores if and how regional small firms combine all three types of sustainability practices. Third, the paper takes a novel theoretical approach by integrating two theoretical concepts that are treated separately in the literature: local embeddedness (Granovetter 1985) and the three sustainability embeddedness orientations posited by Valente (2015). This led to two interrelated theoretical contributions: three new theoretical concepts that emerged from the study that combine sustainability embeddedness and local embeddedness (locally embedded sustainability values, spatially-driven sustainability and locally adapted sustainability); and an integrated theoretical framework that uses the three new concepts to explain how and why small firm local embeddedness in regional communities influences their sustainability embeddedness orientations and implementation of sustainability practices.

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Theoretical Framework

Figure 1 summarises the initial theoretical framework that was derived from the literature on small firms, regional communities, and sustainability. The next sections explain the key concepts in Figure 1: social embeddedness (whereby small firms are embedded in various contexts); local embeddedness (where small firms are embedded in a physically bounded context or location including an urban city or, as in this paper, a regional community); and sustainability embeddedness (where small firms engage in sustainability practices within their context and using a particular orientation).

Insert Figure 1 Here

Social Embeddedness Theory

Social embeddedness theory conceptualises the interconnection between firms and their stakeholders, including the networks of relationships that develop and become established and in-grained (Granovetter 1985). It is this interconnectedness that enables information to be shared between a firm and its stakeholders, and that underpins the decision-making of small firm owners (Kloosterman 2010). Firms often connect with stakeholders in geographic areas ranging from local to national, and even across global communities (Smith and Stevens 2010). Prior research shows that small firms often follow community norms, which is vital to small firm success (Gedajlovic et al. 2013). A study by Anderson and Jack (2002) in entrepreneurial networks, establishes the importance of relational artefact in facilitating interactions. Similarly, Deller et al. (2018) confirm the importance of community norms and activities in creating opportunities for entrepreneurs and small business owners. Social embeddedness can act as a source of agency or constraint for small firms. Entrepreneurs must balance sustainability and profitability concerns, based on industry and stakeholder expectations (De Clercq and Voronov

2009a and 2009b). Hence, while some businesses may solely focus on profitability (economic sustainability) others may emphasise social and environmental sustainability to avoid government action (Banerjee et al., 2003; Jermier et al., 2006) and/or meet local community expectations. Therefore, different sectors within various locations are likely to have varying expectations about the actions of entrepreneurs and how small firms should balance their sustainability practices (economic, social and environment) (De Clercq and Voronov 2009a). However, the expectations of others do not prevent entrepreneurs improvising and acting strategically (De Clercq and Voronov, 2009a) especially regarding the relative importance of economic sustainability versus social and environmental sustainability. This highlights the importance of local embedded agency and individual agency through which entrepreneurs, based on their personal experience and knowledge, impose their own interests to select from available options (De Clercq and Voronov 2011) in their entrepreneurial practice.

Granovetter's (1985) concept of social embeddedness has been used widely in the literature on small firms (Czernek-Marszałek 2021) to explain that owners often make decisions that appear non-rational and/or non-economically driven due to the influence of the social structures in which they are embedded. We therefore view owners of small firms as independent actors who "do not behave or decide as atoms outside a social context" (Granovetter 1985, p. 487).

Social embeddedness, as a theoretical concept, has resonated in the literature on small firms and has been viewed as a 'super set' comprised of different sub-types or sub-concepts of embeddedness. Sub-types of social embeddedness used in the literature include family embeddedness (Astner 2020), community embeddedness (Becker et al. 2017) and local embeddedness (Bau et al. 2019). Local embeddedness is of most relevance to this study due to the focus on small firms located in regional communities and is therefore explained further next.

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Local Embeddedness

Local embeddedness is a subset of social embeddedness (see Figure 1) and reflects the inseparable interconnections between businesses and their spatial location. This concept explains that the social structures (e.g., local norms, relationships among people, regulations) and physical infrastructures (e.g., ecology, buildings) of a locale (e.g., urban city, rural town) influence the values and practices of small firms, and also offer them resources (Bau et al. 2019; Korsgaard et al. 2015; Salder and Bryson 2019). Local embeddedness posits a recursive process whereby local social structures reproduce the values/practices of small firms, and these values/practices then reinforce the local social structures (Korsgaard et al. 2015).

The literature on regional small firms uses the local embeddedness concept to explain that the social and physical context of regional communities are different to other spatial locations (e.g., urban centres) due to isolation and fewer resources including human capital (Korsgaard et al. 2015; Muñoz and Kimmitt 2019; Salder and Bryson 2019). For this reason, the recursive reproduction of social structures and small firm values/practices helps explain why regions/towns have strong emotional connections and social networks among owners and stakeholders (Korsgaard et al. 2015; Salder and Bryson 2019). For example, regional small firms encounter greater scrutiny by local stakeholders, and therefore reasons to conform, because these communities are small relative to urban centres and offer less places “to hide” (Lähdesmäki et al. 2019; Lähdesmäki and Suutari 2012). These social structures and physical infrastructure can also give rise to unique regional identities, histories, culture, and knowledge that can be a resource and opportunity to small firms aiming to trade outside the regional area (Bau et al. 2019; Korsgaard et al. 2015; Muñoz and Kimmitt 2019; Salder and Bryson 2019).

This paper is concerned with the influence of local embeddedness on the sustainability practices of such small firms. Therefore, the next sections, respectively, elaborate on

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sustainability embeddedness (Le Roux and Pretorius 2016; Valente 2015), and review the limited literature combining local embeddedness with sustainability embeddedness.

Sustainability Embeddedness

Sustainability embeddedness for the purposes of this paper is adapted from Le Roux and Pretorius (2016, p. 823) and defined as follows: when the owner of a small firm embeds sustainability into their values, practices, decision-making, strategies, and policies “...their roles and responsibilities and those of the organisation are inseparable from the interests of the wider community of stakeholders.” This definition highlights that sustainability embeddedness is also a sub-type of social embeddedness and local embeddedness (see Figure 1) due to the recognition of the importance of stakeholder relationships in influencing owner decision making. It was therefore reasonable to assume that the elements associated with regionality and local embeddedness of small firm owners, such as living in small remote towns, might influence their sustainability embeddedness which includes their sustainability practices.

The theoretical concept of sustainability embeddedness involves organisational action across the economic, social, and environmental pillars of business performance and impact, and strives to achieve inter-generational equity and fair outcomes for all stakeholders (Moscardo et al. 2013). There have been many investigations into the concept of sustainability embeddedness by businesses and it is agreed that it involves business and society and the relations between them, while the extent of engagement by organisations in all three pillars varies depending on the chosen business model (Moratis and Melissen 2018). Scholars tend to focus on one or two pillars, rather than exploring how businesses combine all three, even when scholars accept that businesses need to engage in all three pillars (Epstein et al. 2015).

There is much uncertainty surrounding the role and meaning of sustainability in business practice (De Clercq and Voronov 2011; Purvis et al. 2019). For example, despite the plethora of literature about the financial management of businesses, it is uncommon to find a shared

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definition of economic sustainability with researchers offering many different views (Abidin 2010; Spicka et al. 2019). Spandenber (2005), an often-cited reference on economic sustainability, states that: “A sustainable economy must not undermine the sustainability of the systems it is interacting with while defending its own viability...” (p.57). This implies that economic endeavours of organisations should not adversely impact other external systems in society and the environment. Moreover, work by Jocevski, Arvidsson and Ghezzi (2020 p.1061) has confirmed that firms are part of an interconnected system which, if all aspects are attended to, help “ensure business survival in the ecosystem.” This highlights that external stakeholders must be considered for a business to achieve economic sustainability, which implies sustainability embeddedness is important. This leads us to assert that economic sustainability means that business owners must consider not only their firms’ economic position, but also their sustainability embeddedness and the impact of their decisions on the wider ecosystem and external stakeholders, when determining business strategy and practices.

This ecosystem and external stakeholder perspective emphasise that businesses need to engage beyond economic sustainability to include social and environmental sustainability. The concept of social sustainability is still in the development phase (Rohman et al. 2017), with no agreed definition, which has led researchers to focus on the different aspects of social sustainability (McKenzie 2004; Talan et al. 2020). For example, Anisul Huq et al. (2014) focus on human rights (e.g., child labour and freedom of association), workers’ health and safety, training, and community (e.g., charitable, philanthropic initiatives), while Mani et al. (2014) consider equity, wages, and education. Due to these varying foci (Reece 2020), we agree with Roca-Puig (2019) that social sustainability is a combination of essential ethical values including equity, trust, cooperation, justice, and fairness. There is more agreement in the literature about what constitutes environmental sustainability. It is often defined as the act and process of conservation and enhancement of resources by limiting pollution, managing waste

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effectively and eliminating processes that harm the environment (Bakos et al. 2020; Moscardo et al. 2013).

There is a large body of research on small firms and their business sustainability practices (Bakos et al. 2020). For example, small firms' activities cause considerable global pollution (Tutterow 2014) and implementing environmental sustainability practices can help them meet their legal obligations, improve financial performance, positively affect their business brand, customer satisfaction and loyalty, and employee commitment (Cantele and Zardini 2018; O'connor et al. 2017), in addition to reducing their negative environmental impact (Parker et al. 2009). It is therefore important to explore small firms, not just large organisations that have been studied by those introducing and using the notion of sustainability embeddedness (Le Roux and Pretorius 2016; Valente 2015).

Valente (2015), despite focusing on large organisations, determined that businesses operated along a continuum of sustainability embeddedness which begins from an extraneous sustainability orientation (i.e., firms engage in sustainability activities that offer no strategic benefit); transitioning to an emergent sustainability orientation (i.e., firms recognise the value of sustainability to the firm but do not integrate it into their strategy, values, and policies) and finally to an embedded sustainability orientation (i.e., where businesses integrate sustainability into their strategy, values, policies, and practices).

Figure 2 highlights the continuum of the degree of integration of sustainability into strategy, values, and formalisms (e.g., policies), which reflects the key difference between each sustainability embeddedness orientation.

Insert Figure 2 Here

There is some criticism of the primary indicators of a small firm's engagement in sustainability due to the prevalence of what has been termed the value-action gap (e.g., Font et al. 2016; Revell et al. 2010). The value-action gap refers to owners of small firms (and, indeed, any business) not embedding sustainability in their daily actions, practices, or operations, to a degree commensurate with their sustainability values and strategies. For this reason, this study focuses on sustainability embeddedness in practice, not just values and strategies.

Many studies of small firms have found that, due to their heterogeneity, different combinations of internal and external factors can act as drivers or barriers to progressing along the continuum of sustainability embeddedness. Internal factors are found at the firm and individual owner level. Firm factors include a small firm's composition, size, core product/service and structure, and culture. Internal factors also include individual influences and in small firms are dominated by the owner's values, ability, and willingness to engage in sustainability practices, and behavioural factors such as lifestyle (Dangelico et al. 2019; Kiefer et al. 2018). External factors to small firms include potential financial gains, level of rivalry among competing businesses, demands from stakeholders, the wider economy, as well as industry, government policies and regulations (Genc et al. 2019; Testa et al. 2017), and incentives and support programmes (Chassé and Boiral 2017; Font et al. 2016). While these factors mean small firm sustainability can be a challenge (Dyllick and Muff 2016), they can also offer opportunities to these firms (Drucker 2014) across the economic, social and/or environmental pillars (Epstein et al. 2015) of sustainability embeddedness.

This paper explores the influence of regionality (local embeddedness) on small firms' sustainability embeddedness (i.e., their orientations and practices). The next section therefore examines the existing research combining these two types of embeddedness.

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Integration of Local Embeddedness and Sustainability Embeddedness

Sharafizad and Brown (2020) suggest that regional small firm owners' have a strong sense of belonging and desire for personal acceptance and the enhancement of their business brand due to their local embeddedness in their community, implying that local embeddedness may influence the sustainability embeddedness of these small firms. That is, it is reasonable to assume that regional small firm owners' need for affiliation and local embeddedness in their community (Lähdesmäki et al. 2019; Sharafizad and Brown 2020) will increase the likelihood that they will adopt substantive sustainability practices, or sustainability embeddedness, that benefit the owners and their firm's competitiveness and revenue, but also seek to benefit their local regional community (Barbosa et al. 2020; Lähdesmäki and Suutari 2012).

Despite the recognition of the potential influence of local embeddedness on sustainability embeddedness by small firms in communities, there has been comparatively limited research within the regional context. Most research on small firms in regional communities has explored small business embeddedness and/or the sustainability practices of small firms within one or two pillars of sustainability. For example, the literature explores how small firms can gain economic sustainability value by capitalising on the local ecology and associated traditions in the community (e.g., Korsgaard et al. 2015; Muñoz and Kimmitt 2019), or the local conditions and considerations which affect how small firms support local suppliers and customers (e.g., uniqueness of the locality, desire to support the region) and why they hire local staff (e.g., available local skills/knowledge), which in turn influences the economic and social sustainability of the region (e.g., Korsgaard et al. 2015; Muñoz and Kimmitt 2019; Salder and Bryson 2019). The literature does not, however, explore the environmental sustainability practices that small firms use to protect the local ecology, in addition to social sustainability practices. This is surprising given that sustainability embeddedness is important for small firms in regional communities, not just their urban counterparts. By examining the influence of local

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embeddedness across all three sustainability pillars, this paper helps address a research gap on regional small firms' sustainability embeddedness (e.g., orientations and practices).

Studies that have examined regional small firms and sustainability have typically not explored the specific sustainability practices used by these firms, not examined the influence of local embeddedness on the sustainability practices, nor determined which sustainability embeddedness orientations apply to the firm. For example, research on the influence of family members (Kallmuenzer et al. 2018) and personal values and business objectives (Cunha et al. 2020; Dal Mas and Paoloni 2020) on sustainability does not report on the firms' sustainability practices or orientations. Kallmuenzer et al. (2018) explicitly use the local embeddedness concept, referring to 'regional embeddedness', and focus on family firms' pursuit of social and environmental sustainability that go beyond regulations, but they do not examine the economic sustainability of these firms. Lähdesmäki and Suutari (2012) report on how local embeddedness can stifle and enhance sustainability values and strategies, but do not explore the sustainability practices of the regional small firms to confirm if/how values and strategies were implemented as practices nor Valente's sustainability embeddedness orientations. Finally, Moyeen and Courvisanos (2012) reported on the economic, social, and environmental practices of regional small firms, including how the owners' perspectives on the local community influenced the implementation of these practices such as increased local reputation from social sustainability practices that increased their economic survival. However, they do not explore the findings using the local and sustainability embeddedness concepts. In general, studies of regional small firms do not distinguish between social and environmental sustainability (Lähdesmäki and Suutari 2012), tend to focus on economic and environmental sustainability (e.g., Cunha et al. 2020; Dal Mas and Paoloni 2020), with some exceptions (Kallmuenzer et al. 2018; Moyeen and Courvisanos 2012). This lack of prior work emphasised the need to address the research question:

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“How and why does small firm local embeddedness in regional communities influence the owners’ sustainability embeddedness orientations and, in particular, implementation of economic, social and environmental sustainability practices?”

Research Methodology

Research Method

A qualitative research method is appropriate when asking “how” and “why” questions (Yin 2018), such as that posed in the present study. Furthermore, as the study aimed to determine the regional small firm owners’ choice and implementation of sustainable business practices, there was a good fit between deploying a qualitative approach and the desired research objective (Aguinis and Vandenberg 2014; King and Hugh-Jones 2018). A qualitative research strategy is often characterised as inductive (Bahari 2010). An inductive approach begins with the researcher gathering information from participants (e.g., through interviews) and developing this information into themes. These themes are then collated into broad patterns, and the findings are compared with the existing literature related to the topic (Creswell 2012). While most small firms are known to have implemented some sustainable business practices, the limited research on the sustainability practices of regional small firms meant it was important for the researchers to be open to new explanations and facts (Hyde 2000).

Sample

We focused on businesses comprising 1–20 employees as this definition accords with the Australian definition of small firms (ABS 2013). Medium-sized businesses were omitted because they tend to be closer in size to large businesses than small firms and are managed in a more formalised way (Lai et al. 2016). Similarly, franchises were not included in the target population for this research. The franchisor-franchisee relationship means that the businesses

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must follow the franchisor's policies and practices regarding sustainability, as such it is not operating in an independent single-business environment (Kaufmann and Stanworth 1995).

Guidelines for sample size in qualitative research range between 15 and 30 interviews (Creswell 2012; Marshall et al. 2013). Aligned with this recommendation, we recruited 26 participants. We did not specifically target those firms which were practicing sustainability but acknowledge that the topic was more likely to attract owners of small firms that were engaging in sustainability practices. Using purposeful and snowball sampling (Biernacki and Waldorf 1981) we sought the inclusion of small firm owners that were conducting their business within a specific region to look at how embeddedness may be influencing sustainability practices. The participants needed to be small firm owners of an established business within the South West Region of Western Australia (WA). Although much of this region's prosperity is based on mining (Productivity Commission 2017), it also has a strong reliance on tourism for its economic viability. The region has a notably higher number of small firms compared to other regional areas within WA (Brown et al. 2019) in various sectors which offer a range from standard products/service provision to the luxury end of the market (Brown et al. 2019). Thus, this region was an ideal setting for this research.

In line with prior research recommendations (Parker et al. 2009) owners of a variety of small firms were recruited to gain diverse viewpoints about their choices and implementation of the three pillars of sustainability. The participants did not need to fit specific owner demographics or have a specific length of time within the business or to be within a particular industry. We kept the inclusion criteria open to gain the best differentiated sample possible to investigate this relatively new area of embeddedness. Table 1 provides the demographic data of these owners and their firms.

Insert Table 1 Here

Data Collection

As this study explores how small-business owners understand sustainability concepts in the context of their business and local region, and how they translate their understanding into practice, it was necessary to investigate and conduct the research in an open way, where the small-business owners could explain their understanding, discuss their sustainability practices, and detail the reasons for implementation of these practices (Battisti and Perry 2011). To this end, semi-structured interviews were selected to collect data (Creswell 2012). This choice allowed each participant to discuss their business sustainability practices in their own words, and to enable unanticipated insights to emerge. Participants were asked a series of questions (see Appendix) about their choice and implementation of economic, social, and environmental sustainability practices, including the importance of each pillar for them and their business. The face-to-face interviews took on average 45 minutes and were audio-taped with the permission of the participants and then transcribed verbatim.

Data Analysis

The interview transcriptions were coded from the raw data using Creswell's (2012) hand analysis technique. Given the importance of retaining the context necessary to derive meaning from the data, the unit of analysis was the small firm. When analysing each interview transcript, we focused on five areas: (1) firm owner's choice and preferences; (2) examples of sustainability practices within their firms; (3) reasons for implementing their chosen practices; (4) whether these practices were formal or informal in nature (e.g. level of policies and documentation, if these were ongoing/one-off/ad-hoc) to determine the sustainability embeddedness orientations of the small firms (Valente 2015), and (5) evidence of the influence of local embeddedness on sustainability practices.

Following Braun and Clarke (2005), we checked the transcripts for accuracy, then repeatedly read them and recorded reflective remarks in the margins. We generated codes to identify important text relating to the research and associated interview questions. Each researcher coded the interviews independently, separating references to economic, social, and environmental sustainability. The researchers gained a more in-depth analysis of the collected data by identifying and matching participants' comments to the above five areas. Two researchers initially resolved disparities by discussing the results and interpretation through face-to-face discussions (Uslu and Welch 2018) and the results were further validated through dialogue with the third researcher.

In the second stage of the data analysis, the researchers followed Miles and Huberman's (1994) recommendation that a matrix be used to present and organise the data effectively. Rows were devoted to the numbers assigned to participants (1 to 26), and columns to each of the above five focal areas for each pillar. Direct quotes from the transcripts were identified and used as entries in the matrix. Recurring themes in the data were identified in this process (King and Hugh-Jones 2018) which provided a logical structure to investigate the research question.

Figures 3 to 5 below provide examples of how direct quotes were used to identify themes in the data analysis, that were then used in the 'Findings' related to economic, social, and environmental practices.

Insert Figures 3-5

Findings and Discussions

Figure 6 shows the novel, integrated theoretical framework that emerged from the data analysis, which is a modified version of Figure 1. The framework comprises the three emergent theoretical concepts in the dark grey boxes (locally embedded sustainability values, spatially-driven sustainability, and locally adapted sustainability) that extend the local embeddedness

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concept, and the emergent sustainability practices in light grey ellipses that extend the sustainability embeddedness concept. The three theoretical concepts relate to how and why local embeddedness influences the sustainability practices by regional small firms. The first section discusses the locally embedded sustainability values concept and associated economic sustainability practices (e.g., pursuing business growth), social sustainability practices (e.g., sourcing from local suppliers) and environmental sustainability practices (supporting eco-tourism). The second section discusses the spatially-driven sustainability concept and an associated social sustainability practice (hiring diverse local staff) and environmental sustainability practice (conserving water). The third section discusses the locally adapted sustainability concept and related sustainability practices. These sections also discuss how the sustainability practices link to Valente's (2015) sustainability embeddedness orientations.

Insert Figure 6

Locally Embedded Sustainability Values

The emergent theoretical concept locally embedded sustainability values, which extends the local embeddedness concept in the literature, reflects the findings of this study that the values of stakeholders in the region within the South West of Western Australia (WA) related to economic sustainability, social sustainability, and environmental sustainability. A central value of the region was economic survival (economic sustainability), which relied on both mining (Productivity Commission 2017) and eco-tourism (environmental sustainability) to attract revenue from customers external to the region. Environmental sustainability was therefore an important value because all local stakeholders were expected to contribute to the region's eco-tourism image. The social sustainability values of the region were that local stakeholders

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needed to buy local goods and support community-based organisations including schools and charities, which contributed to the region's economic sustainability and community spirit.

Locally embedded sustainability values and participants' values

The values of the owners in this study were consistent with the region's locally embedded sustainability values, as explained by social embeddedness theory (Granovetter 1985) and the associated local embeddedness concept. This is because the owners' primary value was economic survival (economic sustainability) and, like the region, the owners recognised the need for environmental sustainability and social sustainability for their economic survival. A quote illustrating this is:

We've been in business for a long time, over sixteen years, and realise what sells and what people like to see. We're in a really good tourist town, so our products are aimed at the tourist. Tourists can identify with the photographs we sell; they are place where they have been to and it's just a lovely memory for them. We look after our customers; we do the right thing, always giving back to the community. That all adds up to being successful with people, so that they know who you are and what you stand for, and if they like that, they are more likely to spend money with you, which is a good thing (P1).

This finding suggests a recursive link, where locally embedded sustainability values reinforced the owners' business values, and their business values were norms among firms in the region which reproduced the locally embedded sustainability values. The finding that regional and business values were consistent, and that the values related to the connectedness of the three sustainability pillars, confirms existing literature on regional small firms (e.g., Cunha et al. 2020; Kallmuenzer et al. 2018; Korsgaard et al. 2015; Muñoz and Kimmitt 2019; Salder and Bryson 2019). This literature does not, however, explore the business practices and the connectedness of these practices resulting from these sustainability values. This study

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extends knowledge by reporting on the connectedness of the sustainability practices, as explained next.

Locally embedded sustainability values and economic sustainability practices

Figure 6 shows that there were three emergent business practices that underpinned the owners' economic survival value and reinforced the locally embedded sustainability values: pursuing business growth; using software to manage finances and learn about customer needs; and making business changes to meet evolving customer needs. These business practices are explained next, including how the practices aligned with the three sustainability pillars that underpinned the locally embedded sustainability values and the participants' values. The description starts with how the practices aligned with economic sustainability, and then how these practices contributed to environmental sustainability and social sustainability values.

Most owners focused on being in the 'right' business by starting a venture that enabled them to pursue business growth and then expand, within their financial constraints, by selecting and maintaining product(s) that had economical sustainability.

We're in a business that has long term continual growth and minimal supply uncertainty (P2).

Only two other companies in Australia manufacturer what we do... because we're in a very limited market, we know what the pricing structure is and know we're in a good position (P4).

The second using software practice extends the literature because most research on regional small firms does not explore their use of software (e.g., Cunha et al. 2020; Korsgaard et al. 2015; Moyeen and Courvisanos 2012; Salder and Bryson 2019). All participants had recently increased using software to support their operations and to understand and interact with customers. For example, all owners used accounting software to control their debt and finances. The owners understood the need to manage their cash flow and be cautious about

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how and where they spent their profits, because they knew hard times were never far away.

Using software therefore contributed to economic sustainability.

Using accounting software, we have a monthly cash flow projection and accurate income and expenditure records, assessing those against targets, marrying it up with bank statements into a quarterly MYOB [software] summary (P11).

The participants also used social media, and related analytics in particular to gain insights including the number of “likes” received, to attract customers and to engage within their industry so that they remained contemporary.

... individuals and a lot of people who attend various functions here find us through social media, and we make sure that we put out on social media...(P11).

Our website and use of Facebook give our business the exposure to attract the new generation and translate that into sales (P19).

Using software like social media therefore contributed to the firms’ economic sustainability by helping owners to derive knowledge about customer needs.

Facebook and social media can be where your customers are coming from and why they’re calling you, there’s lots to understand (P14).

We’re working on a new website, it’ll be more current, with latest trends, ... we do targeted advertising on the internet...to get more recognition on social media and more followers (P8).

The participants’ use of software is related to firm sustainability as they needed to change practices to ensure they could reach new audiences and streamline processes. Moreover, like all businesses (Li et al. 2019; Turan and Kara, 2018) they accessed and took advantage of emerging technologies to help them do this in the most economical way possible. Similarly, progressing their use of social media improved their business competitiveness as it enabled them to better communicate and reach customers beyond their local borders.

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The third business practice was making business changes. All owners recognised the need to maintain a flexible attitude to change based on customer needs to achieve economic sustainability, as shown in the following quotes.

I keep my finger on the pulse, if something's not working then change it immediately, ...It's like a moving target, ... changing programmes to have a dashboard so you can see exactly where you are rather than wait quarterly (P3).

If somebody had a good product that's good value ... I buy it up and feed it back in. I pride myself on being intuitive – watching trends (P1).

Overall, these findings suggest these three business practices helped firms achieve economic sustainability in large part by meeting customer needs. That is, the business practices involved using software to meet (changing) customer needs, promote the firm and pursue business sustainability and/or growth.

Locally embedded sustainability values, economic sustainability practices and environmental and social sustainability practices

The study suggests that the customer needs linked to these three business practices also led the owners to implement environmental sustainability and social sustainability practices. As explained earlier, the region's locally embedded sustainability values were linked to the needs of customers who were local and external to the region. Customers therefore expected local firms to implement social and environmental sustainability practices. Figure 6 shows that the social sustainability practices were grouped as supporting local community organisations (e.g., schools, charities, sporting clubs) and sourcing from local suppliers while environmental sustainability practices were broadly categorised as supporting local eco-tourism. These practices aligned with locally embedded sustainability values and the participants' values, as noted earlier, including the region's, and the small firms' economic survival (economic sustainability). Extant literature has overlooked the sustainability practices by regional small

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firms, so this study's insights into the connectedness of business practices for all three sustainability pillars makes an important contribution. For example, the first and second quotes next show that social sustainability practices and environmental sustainability practices (respectively) helped market the participants' businesses relative to customers' expectations:

.... making sure that every time we give a donation, it is going up on social media so that people are aware of the amount of support that we give to the town. (P11).

We always use packaging that's more environmentally conscious because that's a marketing thing for us it is our point of difference; people see us as the sustainable and ethical business (P5).

The finding that social sustainability practices were linked to economic sustainability and locally embedded sustainability values is consistent with research on regional small firms and sustainability that uses the local embeddedness concept (e.g., Korsgaard et al. 2015; Muñoz and Kimmitt 2019; Salder and Bryson 2019) and those that do not use this concept (e.g., Cunha et al. 2020; Kallmuenzer et al. 2018; Lähdesmäki and Suutari 2012). In contrast to this study, the extant literature does not tend to explore the social sustainability practices used by regional small firms. Further, this study challenges recent research suggesting that the owners of regional small firms only adopt social sustainability practices based on their strong desire to belong and gain personal acceptance without expecting economic benefit (Almeida and Bertone 2016; Sharafizad and Brown 2020). This study, in contrast, found that participants focused on economic sustainability by addressing customer needs, whereby these needs were driven by the region's locally embedded sustainability values that expected local firms to engage in social sustainability practices.

The environmental sustainability practices identified contribute to the literature on regional small firms because existing research (e.g., Korsgaard et al. 2015; Muñoz and Kimmitt 2019; Salder and Bryson 2019) reports on how firms can exploit the local ecology for economic

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gain (environmental sustainability) but not how firms protect the region's ecological resources. The region's locally embedded sustainability values included exploiting the local ecology for the economic survival of the region (e.g., mining) and its businesses (e.g., eco-tourism related sales based on customer needs), which confirms the extant literature. Nevertheless, the study also found that the region's values emphasised the need to protect their ecology and that this encouraged the participants to incorporate ecology preserving environmental sustainability practices.

Locally embedded sustainability values and sustainability embeddedness

Overall, the study reveals that locally embedded sustainability values and the business values of the participants were quite consistent, and related to economic, social, and environmental sustainability. Further, these values underpinned and were reinforced by three economic sustainability practices: pursuing business growth, using software to manage finances and learn about customer needs, and making business changes to meet changing customer needs. Figure 6 shows that these findings suggest that the participants had an embedded economic sustainability orientation within the broad concept of sustainability embeddedness (Valente 2015) due to their strategic decision of starting a business with growth potential, using formal management practices (e.g., using software to manage debt, cash flow and marketing), and changing their approaches proactively to the needs of the market. This study extends the literature by linking the sustainability embeddedness concept (Valente 2015), which has not been explored in the literature on regional small firms, with local embeddedness and our emergent theoretical concept, locally embedded sustainability values.

The emergent theoretical concepts discussed next suggest the degree of sustainability embeddedness with respect to environmental and social sustainability was more variable among participants than for economic sustainability.

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Spatially-driven Sustainability

The emergent theoretical concept locally embedded sustainability values in the previous section relates to the human-based social structures of the region that influenced the regional small firms' economic, environmental, and social sustainability practices. A second theoretical concept that emerged in this study, spatially-driven sustainability shown in Figure 6 (see dark grey boxes), related to the region's spatial or geographical features that influenced some of the participants' sustainability practices. This emergent concept extends the local embeddedness concept from the literature, with two sustainability practices explained next: hiring diverse local staff (social sustainability) and conserving water (environmental sustainability).

The first example of spatially-driven sustainability was that the physical distance between the participants' locations and higher population locations (e.g. urban centres) meant that the participants had to hire staff from diverse backgrounds because the region's spatial isolation restricted the available pool of potential employees, as in the following quote.

We are a small community, you pick whoever is here and can do the work, you have also got to consider travel distances. It's not seen as viable here that anyone would drive more than 70kms for work each day (P15).

The importance of local embeddedness, which resulted in spatially-driven sustainability, was further highlighted by the participants stating they wanted to be flexible and hire individual who lived within the region so they could capitalise on staffs' knowledge of the local community. So, the participants both had to, and wanted to, hire local staff as they were available and had local knowledge which helped them to retain customers and support the local area. The employment diversity criterion is important because social sustainability practices include offering equal opportunities to people in society. Diversity had become ingrained in their hiring decisions due to their embeddedness in a regional area.

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This study extends the literature by exploring the influence of local embeddedness on hiring diverse local staff (social sustainability) in regional communities that is overlooked in the literature. Spatial constraints required that owners of regional small firms were open to diversity due to shortages within the available talent pool. This finding is similar to Salder and Bryson (2019) and Muñoz and Kimmitt (2019), who found that participants needed to minimise the time to travel to work and therefore employed locals. This finding, however, contrasted with Korsgaard et al. (2015), who found hiring was mainly from outside regional locations. These studies do not report on diverse hiring practices and the influence of local embeddedness.

This study also confirms research that found regional small firms prefer to employ locals due to their local knowledge and understanding of the region, which could be harnessed to attract customers (Muñoz and Kimmitt 2019). This study extends this knowledge by showing that employing locals can also encourage diverse hiring practices. While the decision to hire locals may offer economic value for the local community, and therefore align with locally embedded sustainability values, over embeddedness (Uzzi 1996) can lead to problems including, as found in this study, restriction on employee talent in the region (Salder and Bryson 2019) that limits the future talent pool available to these owners.

The second example of spatially-driven sustainability was the implementation of water conservation practices. Currently, the region continues to experience a reduction in rainfall (DWER, 2017), and many of the participants interviewed said they were more aware of the need to protect water supplies to ensure the sustainability of their businesses and support regional efforts to do the same.

Water is precious here, so we put our water into a fibre glass tank... and we fill that with rainwater as many times as we can so that we don't use a lot of water (P4).

We have a huge concrete rainwater tank, and we are putting another one in (P2).

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Given the region and the local businesses strong reliance on mining and tourism for their economic viability, their concern for preserving local natural resources that attract tourists to their region and creates demand for regional products and services was rational. Therefore, we have reported this as a motivation to be sustainable.

Locally Adapted Sustainability

The previous emergent concepts reflected the region's overarching values and spatial conditions that meant participants viewed many sustainability practices as a necessity. A third emergent concept was locally adapted sustainability shown in a large grey box at the bottom of Figure 6. This emergent concept applied when participants had a degree of agency to adapt some sustainability practices within the context of the region's locally embedded sustainability values and/or spatially-driven sustainability conditions. The findings suggest an overlap of locally adapted sustainability values and/or spatially-driven sustainability conditions for participants as a reality of where they operated their business, and their engagement based on their values to support sustainability.

First, participants engaged in locally adapted sustainability with respect to their sustainability practice of pursuing business growth because participants could decide about pursuing local and/or external growth, as also summarised for each participant in Table 2.

Insert Table 2 Here

More than half the participants were pursuing external growth beyond local borders because their goods could be sold to any location online (e.g., P8 photography, P1 and P9 graphic design, P4 manufacturing, P13 consulting) and/or were sought by local and external customers (e.g., P25 real estate agency, P26 warehouse, P11 hotel/accommodation). This is consistent with the literature on regional small firms (e.g., Korsgaard et al. 2015; Salder and

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Bryson 2019) finding that participants addressed the risks of local embeddedness by selecting and starting businesses with growth potential beyond local borders, as in the next quotes.

Increased the brand of the business to include more international reach, pick up more customers overseas... (P8).

Expanding [beyond local borders] and staying ahead of the trends and maintaining the service to make sure our business stays there (P13).

The remaining participants were pursuing local growth within the region. In some cases, the goods sold by the businesses were not suited for selling outside the region (e.g., P15 barbershop, P3, P16 and P17 cafés) or would have required travel to clients beyond the region to provide the goods (e.g., P14 air conditioners). In other cases, their goods could be sold outside the region, but participants decided to focus on local customers and growth (e.g., P20 and P24 accountant). While these business types might be seen as constrained by the spatial characteristics of the region (local embeddedness), these goods are commonly needed by most local citizens and/or organisations. Further, the participants had agency to decide whether to start such businesses and to determine if there was sufficient business/growth potential.

Second, locally adapted sustainability extended to participants deciding what specific practices they implemented that aligned with locally embedded sustainability values relating to environmental sustainability and social sustainability. Participants needed flexibility due to their need to balance implementation costs and affordability against achieving the region's sustainability values, as indicated by P25 with respect to environmental sustainability.

The costs, you can't spend a fortune on these things, and sometimes the cost of it wouldn't warrant the savings (P25).

The next few quotes show how participants were able to implement different combinations of practices, and therefore were choosing environmental practices to use, choosing local suppliers to support and how, and choosing local initiatives to support and how.

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We don't have plastic cutlery or containers.... we have solar panels and are looking at getting batteries. We use environmentally friendly and local suppliers... our appliances are the energy saving style, reduces our energy bills... We have changed every light with LEDs (P2).

We support one of our local shops... who has completely 100% natural products. We have shifted how we are buying things and try and buy some of them because they are local, and they are big on environmental sustainability and natural products... We use completely environmentally friendly cleaning products. We recently got all our windows tinted to reduce the effect of sun on the shop to lower our usage of power for cooling in the summer. We recycle our hair products containers and bottles and propagate cacti and succulents in them and give them to people... Eliminated all paper towel usage and gone to like a coloured hand towel system. We do our laundry at home... so the water from our washing machine goes out onto our garden (P15).

Show casing local produce using products from an organic farm to our customers, we actively work with local vendors and promote local organic produce... We also promote the fact that we've joined the wildlife land trust and that we're on a mission to preserve the forest ... encourage the guests to valuing the native flora and fauna and the sustainability of the environment... We provide guests with recycling bins at the cottages so that they hopefully separate wastes, ... it was easy and quick to implement (P7).

Sponsor local football, three haircuts a week; we often offer free haircuts to families in need that are struggling. Something every week support local schools and children's run for charity each year (P15).

Third, Figure 6 shows that participants engaged in locally adapted sustainability when choosing the degree of formality of their social sustainability and environmental sustainability practices in the strategies and policies. Next are examples of the formality differences among

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the participants with regards to social sustainability and environmental sustainability practices (respectively), which relates to Valente's (2015) sustainability embeddedness orientations. This study contributes to theory by linking Valente's concepts to the emergent theoretical concept of locally adapted sustainability.

The participants varied between having an embedded social sustainability orientation or an emergent social sustainability orientation. Over half had formalised their social sustainability practices in their business strategy to align, as noted earlier, with their economic sustainability (e.g., marketing, reputation) and the region's locally embedded sustainability values. That is, they had an embedded social sustainability orientation. The remainder had an informal or ad-hoc manner of choosing local initiatives to support and how. The finding that over half the regional small firms had formalised practices contrasts with prior studies that argue the sustainability practices of small business are more likely to be informal, ad-hoc and for personal reasons (Barbosa et al. 2020; Depken and Zeman 2018). The next two quotes are examples of a formalised and informal approach respectively regarding social sustainability practices:

We have a small fundraising committee for [organisation]. Every year we hold a fundraising dinner which has auctions, and it raises a reasonable amount of money...and puts the business in the spotlight (P24).

We sponsor a few charities, supplying them with signage and printing at reduced rates, it is ad-hoc when they need something and a nice way to get our brand out there (P18).

Further, the participants' formality of social sustainability practices varied with regards to choosing how to ensure safe staff conditions in terms of formal policies, procedures and/or training. Most of the participants stated that their firms were low risk, and they did not require such formality, as shown in the next quotes.

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We don't have any health and safety issues, we have the policy [verbal agreement] if you see something unsafe, do something about it (P3).

We're a relatively low risk business. Probably 3% or 5% of what we do falls into high-risk category, nothing that requires health and safety policies (P9).

The participants did not indicate that local community concerns (e.g., reputation issues) affected their approach to managing staff working conditions. This suggested that local embeddedness failed to influence this aspect of sustainability embeddedness. Instead, external considerations including national regulations (e.g., occupational health and safety laws) appeared to be the main influence, whereby these regulations in Australia recognised that different industries have different risk profiles.

Similarly, the participants' varied in terms of whether their environmental sustainability practices were embedded in their business operations using formal or informal methods, which corresponded with the embedded environmental sustainability orientation and emergent environmental sustainability orientation respectively (see Figure 6). The following quotes are, respectively, indicative of those having a formal approach (embedded environmental sustainability orientation) and those using informal approaches (emergent environmental sustainability orientation) that may or may not be formalised in future policies/strategies.

We are the first contractors to claim our operations are carbon neutral, we are currently going through a process right now... we got a goal that by the end of the first quarter, we will be able to put the carbon neutral symbol on our operations (P21).

We don't have any environmental policies, although it is part of the longer-term marketing plan to focus more on those aspects (P24).

Conclusion and Implications

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Research Contribution

This study addressed the research question “How and why does small firm local embeddedness in regional communities influence the owners’ sustainability embeddedness orientations and, in particular, implementation of economic, social and environmental sustainability practices?” The paper argued that this question needed addressing because the literature does not integrate local embeddedness, sustainability embeddedness and sustainability practices. The research on the local embeddedness in regional communities, for instance, reports on small firm exploitation of (but not practices protecting) the local ecology (e.g., Korsgaard et al. 2015; Muñoz and Kimmitt 2019). Furthermore, the literature on small firms and sustainability has often not combined all three pillars of sustainability and not explored regional small firms. The few studies that do explore small firms in regional communities and two or three sustainability pillars do not explore the sustainability practices implemented by the firms (e.g., Cunha et al. 2020; Dal Mas and Paoloni 2020; Kallmuenzer et al. 2018).

The limited research suggested that an important contribution would be to develop a novel theoretical framework, based on the initial version in Figure 1, that integrated local embeddedness and sustainability embeddedness concepts that underpin the sustainability practices of regional small firms. The limited work that examines regional small firms and their economic, social, and environmental sustainability practices (e.g., Moyeen and Courvisanos 2012) do not offer a theoretical framework. This paper therefore discussed the findings relating to the theoretical framework in Figure 6.

The emergent, holistic framework contributes to theory in two ways. First, the framework introduces three new sub-concepts that extend the local embeddedness concept: locally embedded sustainability values, spatially-driven sustainability and locally adapted sustainability. Second, the framework integrated the local embeddedness concept and the three new sub-concepts with Valente’s (2015) sustainability embeddedness orientations, particularly

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an emergent sustainability orientation and embedded sustainability orientation. The latter contributes to theory because Valente's orientations had not been empirically studied in a small firm context nor in a regional community context. This paper provides empirical evidence that two of Valente's orientations are relevant to regional small firms, and thereby integrates the broader concepts of local embeddedness and sustainability embeddedness.

The integration of the three new local embeddedness concepts and Valente's notion of sustainability embeddedness orientations helps address the research question. The locally embedded sustainability values within the regional community reported in this study were linked to all three sustainability pillars. The values were a key reason why the participants implemented economic, social, and environmental practices because the values related to the needs or expectations of local and external customers of the regional small firms. The owners implemented economic sustainability practices, which evidenced an embedded economic sustainability orientation, to understand and promote their focus on customer needs (i.e., using software), to address customer needs (i.e., making business changes) and to achieve their economic objectives (i.e., pursuing business growth). The region's values required small firms to implement broad categories of social sustainability practices (e.g., supporting local community organisations) and environmental sustainability practices (e.g., supporting eco-tourism), but provided owners the flexibility regarding how to implement these categories of practices. The owners had the flexibility of locally adapted sustainability whereby they decided what specific practices within these categories to implement, and how, within their financial constraints and context of their industry and business. This included deciding on the degree to which the social and environmental sustainability practices were formalised. Some participants had more ad-hoc or informal approaches to deciding what practices were implemented and how, which was consistent with an emergent social sustainability orientation and/or an emergent environmental sustainability orientation. Other participants had more formal

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approaches, where their social and/or environmental sustainability practices were incorporated into the strategies, policies and/or procedures of the small firms. The latter was consistent with an embedded social sustainability orientation and/or an embedded environmental sustainability orientation. Finally, some social sustainability practices (hiring diverse local staff) and environmental sustainability practices (conserving water) were a necessity due to the spatial or geographical nature of the regional community (i.e., spatially-driven sustainability).

Practical Implications

Regional small firms in this study have implemented various economic, social and environmental sustainability practices, but these can be further enhanced by local governments and business services through training and support and the owner participation. For example, the use of social media and data analytics for marketing suggests that local governments and business services can provide short data analytical training courses to help small firm owners make more informed decisions that will support their economic sustainability. Similarly, while targeted training initiatives can encourage regional small firms to engage in further social and environmental sustainability practices, owners must also respond and engage in these programmes. Thus, it is important to provide incentives that encourage owners to implement social and environmental sustainability practices that may not be financially beneficial to the firm but contribute to the community and the environment (e.g., supply chain management for sustainable products and ethical practices). This support will benefit all stakeholders, including the regional firms and communities, and extend beyond local influence. Finally, although most of our participants have a diverse local workforce, this strategy may also be limiting the future available talent pool into regional areas. Thus, governments would do well to encourage greater diversification within regional areas to integrate others from beyond the local community to improve sustainability.

Limitations and Future Research

This study has limitations that tend to be commonly found in exploratory studies including the sample size and that the research is based in one country and region. A second limitation of the study is that it only looked at local and sustainability embeddedness and did not drill further into sub-types of embeddedness such as structural embeddedness, emotional embeddedness, or circumstantial embeddedness (Salder and Bryson 2019). Despite these limitations, this study has extended previous research by contributing new and valuable insights into regional small firm owners' sustainability practices (e.g., strategic selection of a business; increasing use of social media and data analytics for marketing; a limited but diverse workforce). The study has also highlighted the importance of examining the interconnections between the three sustainability pillars and the influence of local embeddedness and sustainability embeddedness orientations on the sustainability practices of these firms in future studies. Recommendations for future research include testing these findings in different regions and locations. Future studies can extend the theoretical framework by examining the influence of other sub-types of embeddedness (e.g., family embeddedness) on regional small firms' sustainability practices. Finally, although participants in this study did not suggest any tensions existed when responding to the two major industries in their region (i.e., mining and ecotourism), this may occur if the expectations across industries substantially differ. Therefore, future studies can extend this work by exploring if serving multiple industries can cause tensions for small firms in regard to their sustainability practices.

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References

- Abidin, N.Z. 2010. "Investigating the awareness and application of sustainable construction concept by Malaysian developers". *Habitat International* 34(4): 421-426.
- Aguinis, H., and R.J. Vandenberg. 2014. "An ounce of prevention is worth a pound of cure: Improving research quality before data collection." *Annual Review of Organizational Psychology and Organizational Behavior* 1: 1-27.
- Almeida, S., and S. Bertone. 2016. "The role of contextual factors in employer recruitment decision making: Evidence from regional Australia." *New Zealand Journal of Employment Relations* 41(1): 22-40.
- Anderson, A.R., & S.L. Jack. 2002. "The articulation of social capital in entrepreneurial networks: a glue or a lubricant?" *Entrepreneurship & Regional Development*, 14(3): 193-210.
- Anisul Huq, F., M. Stevenson and M. Zorzini 2014. "Social sustainability in developing country suppliers: an exploratory study in the ready-made garments industry of Bangladesh." *International Journal of Operations & Production Management* 34(5): 610-638.
- Astner, H. 2020. "The marionette: embeddedness in a community of family-controlled firms." *Journal of Enterprising Communities: People and Places in the Global Economy* (in press). doi:10.1108/JEC-01-2020-0011
- Australian Bureau of Statistics. 2013. Counts of Australian businesses, including entries and exits. (Cat. No. 8165.0). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/8165.0Media%20Release1Jun%202008%20to%20Jun%202012?opendocument&tabname=Summary&prodno=8165.0&issue=Jun%202008%20to%20Jun%202012&num=&view=>
- Bahari, S.F. 2010. "Qualitative versus quantitative research strategies: Contrasting epistemological and ontological assumptions". *Journal of Technology*, 52(May): 17-28.
- Bakos, J., M. Siu, A. Orengo, and N. Kasiri 2020. "An analysis of environmental sustainability in small & medium-sized enterprises: Patterns and trends." *Business Strategy and the Environment* 29(3): 1285-1296.
- Banerjee, S.B., E. S. Iyer, and R. K. Kashyap. 2003. "Corporate environmentalism: Antecedents and influence of industry type." *Journal of Marketing* 67(2): 106-122.
- Barbosa, M., J.A. Castañeda-Ayarza, and D.H.L. Ferreira. 2020. "Sustainable strategic management (GES): Sustainability in small business." *Journal of Cleaner Production* 258: 120880.

- Battisti, M., and M. Perry. 2011. "Walking the talk? Environmental responsibility from the perspective of small-business owners". *Corporate Social Responsibility and Environmental Management*, 18(3): 172-185.
- Bau, M., F. Chirico, D. Pittino, M. Backman, and J. Klaesson. 2019. "Roots to grow: family firms and local embeddedness in rural and urban contexts." *Entrepreneurship Theory and Practice* 43(2): 360-385.
- Becker, S., C. Kunze, and M. Vancea 2017. "Community energy and social entrepreneurship: Addressing purpose, organisation and embeddedness of renewable energy projects." *Journal of Cleaner Production*, 147, 25-36.
- Bello, F.G., and G. Kamanga. 2020. "Drivers and barriers of corporate social responsibility in the tourism industry: The case of Malawi." *Development Southern Africa* 37(2): 181-196.
- Biernacki, P., and D. Waldorf. 1981. "Snowball sampling: Problems and techniques of chain referral sampling." *Sociological Methods & Research* 10(2): 141-163.
- Bocken, N.M., and T.H. Geradts. 2019. "Barriers and drivers to sustainable business model innovation: Organization design and dynamic capabilities." *Long Range Planning* 53(4): 101950.
- Braun, V., and V. Clarke. 2005. "Using thematic analysis in psychology". *Qualitative Research in Psychology*, 3, 77-101.
- Brown, K., S. Dhakal, M. Wiedemann, and L. Daniel 2019. "Enhancing Niche Tourism. Prospects for south west Western Australia to integrate tourism and agri-food systems." BankWest Curtin Economics Centre, Research Report No. 21/19.
- Cantele, S., and A. Zardini. 2018. "Is sustainability a competitive advantage for small businesses? An empirical analysis of possible mediators in the sustainability–financial performance relationship." *Journal of Cleaner Production* 182: 166–176.
- Chassé, S., and O. Boiral. 2017. "Legitimizing corporate (un) sustainability: A case study of passive SMEs." *Organization & Environment* 30(4): 324–345.
- Creswell, J.W. 2012. "Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research." Fourth Edition. USA.
- Cunha, C., E. Kastenholz, and M.J. Carneiro. 2020. "Entrepreneurs in rural tourism: Do lifestyle motivations contribute to management practices that enhance sustainable entrepreneurial ecosystems?" *Journal of Hospitality and Tourism Management* 44: 215-226.
- Czernek-Marszałek, K. 2021. "The sources and components of social embeddedness as determinants of business cooperation in a tourist destination." *Journal of Destination Marketing & Management*, 19, 100534.

- Dal Mas, F., and P. Paoloni. 2020. "A relational capital perspective on social sustainability; the case of female entrepreneurship in Italy." *Measuring Business Excellence* 24(1): 114-130.
- Dangelico, R.M., A. Nastasi, and S. Pisa. 2019. "A comparison of family and nonfamily small firms in their approach to green innovation: a study of Italian companies in the agri-food industry." *Business Strategy and the Environment* 28(7): 1434-1448.
- De Clercq, D., and M. Voronov. 2009a. "The role of domination in newcomers' legitimation as entrepreneurs." *Organization* 16(6): 799-827
- De Clercq, D., and M. Voronov. 2009b. "Toward a practice perspective of entrepreneurship: Entrepreneurial legitimacy as habitus." *International Small Business Journal* 27(4): 395-419
- De Clercq, D., and M. Voronov. 2011. "Sustainability in entrepreneurship: A tale of two logics." *International Small Business Journal*, 29(4): 322-344.
- Deller, S.C., T. Conroy, and B. Markeson. 2018. "Social capital, religion and small business activity." *Journal of Economic Behavior & Organization*, 155: 365-381.
- Department of Water and Environmental Regulation (DWER), 2017. "South West Water Resources". Retrieved from water.wa.gov.au/planning-for-the-future/allocation-plans/managing-water-in-a-changing-climate/south-west-water-resources.
- Depken, D., and C. Zeman. 2018. "Small business challenges and the triple bottom line, TBL: Needs assessment in a Midwest State, USA." *Technological Forecasting and Social Change* 135: 44-50.
- Drucker, P. 2014. "Innovation and entrepreneurship." Abingdon, New York: Routledge.
- Dyllick, T., and K. Muff. 2016. "Clarifying the meaning of sustainable business: Introducing a typology from business-as-usual to true business sustainability." *Organization & Environment* 29(2): 156-174.
- Eisenhardt, K.M., and J.A. Martin. 2000. "Dynamic capabilities: what are they?" *Strategic Management Journal* 21(10-11): 1105-1121.
- Espinoza, C., and C. Mardones, K. Sáez, and P. Catalán. (2019). "Entrepreneurship and regional dynamics: The case of Chile." *Entrepreneurship & Regional Development* 31(9-10): 755-767.
- Epstein, M.J., A.R. Buhovac, and K. Yuthas 2015. "Managing social, environmental and financial performance simultaneously". *Long Range Planning* 48(1): 35-45.
- Esposito, A.S., M. Abbott, and P. Juliano. 2019. "Growing regions through smart specialisation: A methodology for modelling the economic impact of a food processing hub in Australia." *Economic Papers* 38(2): 114-130.

- Evans, N., and R. Bosua. 2017. "Exploring innovation in regional manufacturing SMEs." *Small Enterprise Research* 24(2): 149-166.
- Eversole, R. 2017. "Economies with people in them: Regional futures through the lens of contemporary regional development theory." *Australasian Journal of Regional Studies* 23(3): 305-320.
- Font, X., L. Garay, and S. Jones. 2016. "Sustainability motivations and practices in small tourism enterprises in European protected areas." *Journal of Cleaner Production* 137: 1439–1448.
- Gedajlovic, E., B. Honig, C. B. Moore, G.T. Payne, and M. Wright. 2013. "Social capital and entrepreneurship: a schema and research agenda." *Entrepreneurship Theory and Practice*, 37(3): 455-478.
- Genc, E., M. Dayan, and O.F. Genc. 2019. "The impact of SME internationalization on innovation: The mediating role of market and entrepreneurial orientation." *Industrial Marketing Management* 82: 253-264.
- Granovetter, M. 1985. Economic action and social structures: The problem of embeddedness. *American Journal of Sociology* 91(3): 481–510.
- Granovetter, M. 1995. The economic sociology of firms and entrepreneurs. In *The economic sociology of immigration; essays on networks, ethnicity and entrepreneurship*, ed. A. Portes, 128–65. Oxford: Oxford University Press.
- Hettihewa, S., and C.S. Wright. 2018. "Nature and importance of small business in regional Australia, with a contrast to studies of urban small businesses." *Australasian Journal of Regional Studies* 24(1): 96-121.
- Hyde, K.F. 2000. "Recognising deductive processes in qualitative research." *Qualitative Market Research: An International Journal* 3(2): 82-89.
- Jermier, J., Forbes, L., Benn, S., R. Orsato. 2006. The new corporate environmentalism and beyond: Green politics and critical reflective organizational systems. In S. Clegg, C. Hardy, T. Lawrence & W. Nord (eds.), *Handbook of Organization Studies*, London: Sage.
- Jocevski, M., N. Arvidsson, and A. Ghezzi. 2020. "Interconnectedness business models: Present debates and future agenda." *Journal of Business & Industrial Marketing* 35(6): 1051–1067.
- Kallmuenzer, A., W. Nikolakis, M. Peters, and J. Zanon, J. 2018. "Trade-offs between dimensions of sustainability: exploratory evidence from family firms in rural tourism regions." *Journal of Sustainable Tourism* 26(7): 1204-1221.
- Kaufmann, P., and J. Stanworth. 1995. "The decision to purchase a franchise: A study of prospective franchisees." *Journal of Small Business Management*, 33(4): 22-33.

- Kiefer, C.P., P.D. González and J. Carrillo-Hermosilla. 2018. "Drivers and barriers of eco-innovation types for sustainable transitions: A quantitative perspective." *Business Strategy and the Environment* 28(1): 155–172.
- Kilpatrick, S., J. Farmer, S. Emery and T. DeCotta. 2021. "Social enterprises and regional cities: working together for mutual benefit". *Entrepreneurship & Regional Development* (in press). doi:10.1080/08985626.2021.1899293
- King, N., and S. Hugh-Jones. 2018. "The interview in qualitative research." In: *Qualitative research in psychology: a practical guide* (second edition) (pp. 121-144) edited by C. Sullivan and M.A. Forrester, M.A. London: Sage.
- Kloosterman, R.C. 2010. "Matching opportunities with resources: A framework for analysing (migrant) entrepreneurship from a mixed embeddedness perspective". *Entrepreneurship & Regional Development*, 22(1): 25-45.
- Korsgaard, S., R. Ferguson, and J. Gaddefors. 2015. "The best of both worlds: how rural entrepreneurs use placial embeddedness and strategic networks to create opportunities." *Entrepreneurship & Regional Development* 27(9-10):574-598.
- Kraus, P., P. Stokes, C. Cooper, Y. Liu, N. Moore, B. Britzelmaier, and S. Tarba. 2020. "Cultural antecedents of sustainability and regional economic development - a study of SME 'Mittelstand' firms in Baden-Württemberg (Germany)". *Entrepreneurship & Regional Development* 32(7-8): 629-653.
- Lähdesmäki, M., M. Siltaoja and L.J. Spence. 2019. "Stakeholder salience for small businesses: a social proximity perspective". *Journal of Business Ethics* 158: 373-384.
- Lähdesmäki, M. and T. Suutari. 2012. "Keeping at arm's length or searching for social proximity? Corporate social responsibility as a reciprocal process between small businesses and the local community". *Journal of Business Ethics* 108: 481-493.
- Lai, Y.G., G. Saridakis, R. Blackburn, and S. Johnstone. 2016. "Are the HR responses of small firms different from large firms in times of recession?". *Journal of Business Venturing*, 31(1): 113-131.
- Le Roux, C., and M. Pretorius. 2016. "Conceptualizing the limiting issues inhibiting sustainability embeddedness". *Sustainability*, 8(4): 364-386.
- Li, X., X. He, and Y. Zhang. 2019. "The impact of social media on the business performance of small firms in China". *Information Technology for Development*, pp. 1-23. Retrieved from <https://www.tandfonline.com/doi/full/10.1080/02681102.2019.1594661>.
- Mani, V., R. Agrwal, and V. Sharma. 2014. "Supplier selection using social sustainability: AHP based approach in India." *International Strategic Management* 2: 98–112.
- Marshall, B., P. Cardon, A. Poddar, and R. Fontenot. 2013. "Does sample size matter in qualitative research? A review of qualitative interviews in IS research." *Journal of Computer Information Systems* 54(1): 11-22.

- McKenzie, S. 2004. "Social sustainability: towards some definitions." Hawke Research Institute, University of South Australia, Adelaide, Australia.
- Miles, M.B., and A.M. Huberman. 1994. "Qualitative data analysis – A sourcebook of new methods." Beverly Hills, CA: Sage.
- Moratis, L., and F. Melissen. 2018. "How do the sustainable development goals question rather than inform corporate sustainability?" *Resources, Conservation & Recycling* 141: 253-254.
- Moscardo, G., G. Lamberton, G. Wells, W. Fallon, P. Lawn, A. Rowe, J. Humphrey, R. Wiesner, B. Pettitt, D. Clifton, M. Renouf, and W. Kershaw. 2013. "Sustainability in Australian business: Principles and practice." Brisbane, Queensland: John Wiley & Sons.
- Moyeen, A., and J. Courvisanos. 2012. "Corporate social responsibility in regional small and medium-sized enterprises in Australia." *Australasian Journal of Regional Studies* 18(3): 364–92.
- Muñoz, P. and Kimmitt, J. 2019. "Rural entrepreneurship in place: an integrated framework." *Entrepreneurship & Regional Development* 31(9-10): 842-873.
- Nyström, K. 2018. "Regional resilience to displacements." *Regional Studies* 52(1): 4-22.
- O'Connor, A., J. Parcha, and K. Tulibaski. 2017. "The institutionalization of corporate social responsibility communication: An intra-industry comparison of MNCs' and SMEs' CSR reports". *Management Communication Quarterly* 31(4): 503–532.
- Painter, J. 2008. "Cartographic anxiety and the search for regionality." *Environment and Planning* 40: 342-361.
- Parker, C.M., J. Redmond, and M. Simpson. 2009. "A review of interventions to encourage SMEs to make environmental improvements." *Environment and Planning: Government and Policy* 27(2): 279–301.
- Parkinson, C., and C. Howorth. 2008. "The language of social entrepreneurs". *Entrepreneurship & Regional Development* 20(3): 285-309.
- Productivity Commission. 2017. "Transitioning Regional Economies, Study Report. Commonwealth of Australia." Canberra. ISBN 978-1-74037-652-5.
- Purvis, B., Y. Mao. and D. Robinson. 2019. "Three pillars of sustainability: in search of conceptual origins." *Sustainability science*, 14(3): 681-695.
- Reece, J. 2020. "In pursuit of just communities: supporting community development for marginalized communities through regional sustainability planning." In *Research Handbook on Community Development* (pp. 48-66) edited by R. Phillips, E. Trevan, and P. Kraeger. Georgia, US: Edward Elgar Publishing.

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- Revell, A., D. Stokes, and H. Chen. 2010. "Small businesses and the environment: turning over a new leaf?" *Business Strategy and the Environment* 19(5): 273-288.
- Roca-Puig, V. 2019. "The circular path of social sustainability: An empirical analysis". *Journal of Cleaner Production*, 212, 916-924.
- Rohman, M.A., H. Doloi, and C.A. Heywood. 2017. "Success criteria of toll road projects from a community societal perspective." *Built Environment Project and Asset Management* 7(1): 32-44.
- Roundy, P.T., and D. Fayard. 2019. "Dynamic capabilities and entrepreneurial ecosystems: the micro-foundations of regional entrepreneurship." *The Journal of Entrepreneurship* 28(1): 94-120.
- Salder, J., and J.R. Bryson. 2019. "Placing entrepreneurship and firming small town economies: manufacturing firms, adaptive embeddedness, survival and linked enterprise structures." *Entrepreneurship & Regional Development* 31(9-10): 806-825.
- Sharafizad, J., and K. Brown. 2020. "Regional small businesses' personal and inter-firm networks." *Journal of Business & Industrial Marketing* 35(12): 1957-1969.
- Sheppard, M. 2018. "The relationship between discretionary slack and growth in small firms." *International Entrepreneurship and Management Journal* 16: 195-219.
- Smith, B.R., and C.E. Stevens. 2010. "Different types of social entrepreneurship: The role of geography and embeddedness on the measurement and scaling of social value". *Entrepreneurship & Regional Development* 22(6): 575-598.
- Spangenberg, Joachim H. 2005. "Economic sustainability of the economy: concepts and indicators." *International journal of sustainable development* 8(1-2): 47-64.
- Spicka, J., T. Hlavsa, K. Soukupova, and M. Stolbova. 2019. "Approaches to estimation the farm-level economic viability and sustainability in agriculture: A literature review." *Agricultural Economics* 65(6): 289-297.
- Talan, A., R.D. Tyagi and R.Y. Surampalli. 2020. "Social dimensions of sustainability." In *Sustainability: Fundamentals and Applications* (pp. 183-206) edited by R.Y. Surampalli, T.C. Zhang, M.K. Goyal, S.K., Brar, and R.D. Tyagi. Hoboken, New Jersey: John Wiley & Sons.
- Testa, F., B. Nucci, F. Iraldo, A. Appolloni and T. Daddi. 2017. "Removing obstacles to the implementation of LCA among SMEs: A collective strategy for exploiting recycled wool." *Journal of Cleaner Production* 156: 923–931.
- Turan, M. and Kara, A. 2018. "Online social media usage behavior of entrepreneurs in an emerging market: Reasons, expected benefits and intentions", *Journal of Research in Marketing and Entrepreneurship*, 20(2): 273-291.

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- Tutterow, V. 2014. "Embedding sustainability into small & medium-sized manufacturing enterprises (SMEs)." Virginia Tech, Center for Leadership in Global Sustainability.
- Uslu, B., and A Welch. 2018. "The influence of universities' organizational features on professorial intellectual leadership." *Studies in Higher Education* 43(3): 571-585.
- Uzzi, B. 1996. "The sources and consequences of embeddedness for the economic performance of organizations: The network effect". *American Sociological Review*, 674-698.
- Valente, M. 2015. "Business sustainability embeddedness as a strategic imperative: A process framework." *Business & Society*, 54(1): 126-142.
- Westman, L., C. Luederitz, A. Kunderpi, A.J. Mercado, O. Weber, and S.L. Burch. 2019. "Conceptualizing businesses as social actors: a framework for understanding sustainability actions in small- and medium-sized enterprises." *Business Strategy and the Environment* 28(2): 388-402.
- Yin, R.K. 2018. "Case study research and applications: Design and methods" (6th ed.). Los Angeles, CA: Sage.