

The Regional Studies Association Global Conference

Sustaining Regional Futures

24-26 June 2012

China National Convention Centre, Beijing, China

Making environmental change stick: Using socially embedded leaders and stated norms to deliver sustainable behaviour change.

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Abstract:

Environmental behaviour change is directly challenged by slow uptake and a tendency to backslide, which diminish the effectiveness of government legislative and policy interventions. This is particularly a problem in small business, which despite stating support for green practices, routinely engages in environmentally unfriendly actions. In Australia, small business comprises 96 percent of all businesses, highlighting the need for strategies that engage small businesses in pro-environmental behaviour.

Small business owners are fiercely independent, poorly connected to reliable information sources, and resent government interference. Significantly, they are primarily motivated by issues that affect their immediate financial position and personal time, neither of which derive direct benefit from an investment in

improved environmental standards. Behaviour change interventions that target small business are challenged by the lack of homogeneous groups to which policy makers can direct social marketing programs, and small business owners tend to be disconnected from influential business networks.

Referencing research that sought to understand the mechanisms of successful interventions with a challenging demographic (small businesses) and a challenging behaviour (environmentalism), this paper describes qualitative research that effectively engaged this difficult-to-reach cohort. Underpinned by social capital theory, particularly the work of Granovetter (1973) and Burt (1992) who described the need for inter-group connections to accelerate learning and innovation, the research examined three cohorts of small businesses: a group with strong social capital connections; a group with loose social capital connections; and small businesses with no social capital connections.

The results indicate that two factors contribute to successful behaviour change: the role of norms as established by socially embedded leaders operating within local networks; and paying overt and on-going attention to the role of learning to change attitudes and generate new behaviours.

The paper will discuss the practical application of these findings in the Australian context, describing the institutional framework for local economic development, the factors that contribute to the development of social capital in small business, the role of government in developing and supporting business groups, and the features of local business associations that have successfully maintained strong bonding social capital at the same time as they bridge group boundaries to introduce new ideas.

Based on the Australian experience, the paper will consider the transferability of the findings to different cultures, and explore the potential for application in rural and remote areas, for regional competitiveness, and for behaviour and attitudinal change in fields other than environmental.

Finally, the paper will suggest areas of future research that will contribute to an improved understanding of the specific mechanisms of socially embedded leadership and normative function in delivering behaviour change.

Keywords:

Environment, policy, small business, norms, learning, socially embedded leadership, behaviour change

Introduction

Our current practices of economic and population growth are unsustainable and, to achieve a viable long-term future, governments, corporations and individuals need to change environmental attitudes and behaviour. Most governments are actively pursuing policies that aim to reduce carbon emissions and waste, and there is a popular movement toward limiting resource inputs and reducing unnecessary consumption. However, engaging small businesses in pro-environmental practices remains problematic.

As a sector, small business generates a sizeable pollution load, illustrated by KPMG (1997), who estimated that the aggregate environmental impact from small business may be greater than that of large enterprises, and that 70 per cent of the total pollution in the United Kingdom was created by small to medium enterprises. In South Australia, small business is the second highest contributor to the commercial waste stream (South Australia's Waste Strategy 2010-2015: 8).

We know from both personal experience and academic research (Eagly & Kulesa, 1997) that good intentions do not necessarily translate into appropriate action and where action does occur, there is every likelihood it cannot be sustained over time. Peters and Turner (2004: 450) note that small and medium sized enterprises (SMEs) have persistently failed to engage with environmental policy and ecological modernisation, and that for many small businesses, environmentalism is a peripheral issue.

Behaviour change requires individuals to understand both the need to act (a belief in the correctness of the new behaviour) and a reason to act (a trigger to shift from inaction to action). This paper explores the mechanisms of behaviour change by socially embedded leaders through the lenses of social capital and knowledge transfer, looking at how socialisation and enculturation (Dewey & Humber, 1966) influence attitudes and behaviour. The findings have widespread application where reluctant behaviours need to be addressed.

Why environmentalism in small business?

The research focused on small business because it is typically independent, disconnected from networks, and time and cash poor. These factors make small business owners a challenging target for behaviour change policy.

Environmental behaviour was used as the test condition because although the small business community appears to understand the *need* to act, there is insufficient *reason* to act, thus environmentalism can be classed as a reluctant behaviour. Indeed, there are strong forces to resist change, with perhaps the greatest being the enduring concept of the earth as a free resource, best illustrated by Ostrom's 'tragedy of the commons' (1990: 2), 'which has come to symbolise the degradation of the environment to be expected when many individuals use a scarce resource in common'. According to this theory, individuals receive a direct benefit from free use of the commons but only pay a share of the cost of over-use, and any individual attempting to make good would be disproportionately penalised as their 'good' is absorbed by over-users.

The small business sector exemplifies the tragedy of the commons in that the cost of voluntary compliance with sustainable environmental practices puts individual businesses at a competitive disadvantage, and the poor cohesiveness of the sector means that binding voluntary agreements that would ensure even distribution of cost are almost impossible to achieve. This sector presents a challenge for behaviour change interventions because there are few homogeneous groups to which policy makers can direct social marketing programs and small business owners tend to be disconnected from influential business networks.

Small businesses are at the same time influenced by broader societal norms but limited by their owners' skills, and cannot access the knowledge available to larger businesses that derives from powerful association and aggregated employee knowledge. Small business knowledge is therefore constrained, with greater importance placed on the direct experience of owners, who are less likely to have formal management education and whose business knowledge is more innate.

Small business owners tend to rely on single loop learning (receiving an answer to a question) and double loop learning (questioning the assumptions), but rarely have the time or skills to use triple loop learning (questioning the underpinning norms and values). Yet environmentalism requires a substantial shift in norms and values, overturning long-held beliefs about the limitless availability of resources.

The aim of the research is to identify strategies that were effective in engaging difficult populations and reluctant behaviours, with the intention that the findings could be applied more broadly to generate successful interventions in diverse population groups.

Social Capital, learning and attitude development

Social capital provides explanation for two elements essential to the development of new behaviours: connection to new ideas mediated through trusted others, and establishment and reinforcement of group norms. Hitchens (2001: 7-8) reminds us that the most important element in achieving sustainable business activity is the need to shift management thinking so that the environment is high on the business agenda and environmental concerns are integrated into company culture (citing O'Riordan, 1985; Stead and Stead, 1992; Roome, 1994) and that this is particularly the case for Small and Medium Enterprises (SMEs) which require owner or management support to improve environmental practice (citing Hutchison and Chaston, 1994; Winter and Ledgerwood, 1994; Christie, Rolf & Leggard, 1995; OECD, 1985, 1987; Schmidheiny, 1992). The question for this paper is 'how is this achieved given the challenges of engaging disconnected, isolated and strongly individualistic small business owners?'

The hypothesis that underpinned the research was that connection can be made with small business owners by seeding knowledge to leaders in social capital networks, and that social capital influence can change attitudes and behaviour in member businesses. The research sought to test the hypothesis and identify the specific mechanisms by which attitude and behaviour change were achieved.

Social capital theory is based on two key concepts: 'bridging' and 'bonding' capital, with bridging capital crossing network borders to generate trust, reciprocity and exchange between groups; and bonding capital reinforcing and strengthening groups internally. These two social capital components are examined from the perspective of learning from others outside the group (bridging) where bridges link numerous individuals (Anderson & Jack, 2002: 207) and internalising the learning within the group (bonding) 'the undercover activity – the learning activities – are the oil between the cogs' (Falk & Harrison, 1998: 611).

The necessity for group bonding was recognised early in the development of social capital theory, with Loury (1977) and Coleman (1988) determining that dense networks are a precondition for social capital, and highlighting the value of dense ties to increase adherence to norms that support exchange without recourse to formal systems of law (Barr, 2002: 92), thus establishing the potential for social capital to support the setting and reinforcing of environmental norms.

Granovetter (1973) and Burt (1992) explained bridging social capital as outside-of-group connections that link small-scale interaction into large-scale patterns. Granovetter's 'weak ties' allow members who stand on the bridges between groups to be exposed to and adopt new ideas which can then spread within the group through trust-based learning, increasing the likelihood of acceptance of ideas that, in tight inward-looking groups, would be resisted as risky or deviant. Individuals who create the weak ties benefit from connections within the group as well as from exposure to new ideas. Group members who are not positioned or predisposed to stand on or near bridges benefit from innovation interpreted by those with external links. Granovetter (1973: 1367) concludes that 'individuals with many weak ties are best placed to diffuse difficult innovation, since some of those ties will be local bridges'.

Burt (1992, 2004) developed Granovetter's theory of weak ties through research into inter-group interaction, identifying the role of 'structural holes' - flexible associations between groups and networks - in creating benefits from external interdependencies and information. These scholars remind us that bonding social

capital can restrict access to new knowledge and innovation when groups only look inward. Closely affiliated trusting networks are at risk of isolation and limited exposure to new contacts and ideas. In the case of environmentalism, which is a relatively new business paradigm, connections outside of the group are essential to obtain knowledge about new practices.

The field research was based on the premise that group norms about environmentalism are a necessary precondition for behaviour change, and that these norms could be influenced through transmission of ideas and attitudes via the agency of trusted leaders. In seeking to understand the specific mechanism of knowledge transfer and attitude development, the field research explored how business owners learn using the framework of single, double loop (Amin & Cohendet, 2004) and triple loop (Swieringa & Wierdsma, 1992) learning processes.

Single-loop learning (receiving an answer to a question) is defined by Amin & Cohendet (2004: 72) as the changes in subjective theories or mental models within an existing paradigm. Double-loop learning (questioning the assumptions), requires reflection upon what has been learnt and deliberate questioning of core assumptions, leading to exploration beyond the paradigm.

It was expected that the research would reveal a preference for single and double loop learning among small business owners, whose knowledge-gathering focuses on immediate information needs. Yet environmentalism requires a substantial shift in norms and values, overturning long-held beliefs about the limitless availability of resources, indicating a need for triple loop learning that questions the individual's cognitive maps, their underpinning norms and values (Swieringa & Wierdsma, 1992; Wierdsma, 2004: 261).

The two foci for the research were therefore: the role of social capital in developing norms and engaging with new ideas; and the role of learning as a mechanism for adoption and ongoing practice of new ideas.

The research

The research was set within a critical realist philosophy: that what we see, feel and do are evidence of the (often) unobservable structures, entities and mechanisms that make up the social world (after Bhaksar 1978, 1989), or in Maritain's terms, critical realism holds that 'what the mind knows is identical with what exists' (Stanford Encyclopaedia of Philosophy, 2007, 2008). The critical realist philosophy supported self-reporting of participant experiences, learning styles and environmental practices.

The research was conducted in four waves of interviews during 2009 and 2010, comprising:

1. Interviews with Coordinators of local business associations across the Adelaide (South Australia) metropolitan area to identify local business associations that met the criteria of the target cohort.
2. In-depth interviews with Coordinators of the two selected groups (Hillview and Seascape in Adelaide's southern suburbs) to determine their associations' perspective of the strength of group's social capital, their emphasis on the environment, and the strategies used to support member learning.
3. In-depth interviews with ten business owners from each association (twenty in total) to establish their experience of social capital and learning in general terms, and more specifically to explore the role of their association in developing and reinforcing norms and values, encouraging good environmental practices, and accelerating member learning.
4. Comparative interviews with an additional ten businesses with no organised 'non trade' relationships with other local businesses - exploring the same issues as the member businesses but from a non-member perspective.

The research used a qualitative approach, with interview instruments having a mix of structured interview questions in which the researcher asked each respondent a set of pre-established questions with a limited set of response categories, thus

reducing variation and error (Fontana & Frey, 1994: 363), and unstructured questions aimed at eliciting explanation, values and assumptions. Questions included a mix of 'loose' inductive, and 'tight' deductive design (Huberman & Miles, 1994: 431), typically structured as a quantitative lead-in (using Lickert scales) and a follow up 'tell me about' explanation.

Self-reporting of the acquisition of knowledge (because it is difficult to remember the 'before known' state) does not follow simple temporal cause and effect (Huberman & Miles, 1994; Faulconer & Williams, 1985; Abbott, 1992). To account for this, the research investigated causal multiplexity, 'where causes are multiple and conjunctural, combining and affecting each other as well as the supposed effects' (Ragin, 1987 in Huberman & Miles, 1994: 435) using a traditional framework of followability (Abbott, 1992; Polkinghorne, 1998 – both in Huberman & Miles, 1994: 435).

Discussion

The social capital element of the research was structured in three ways: general indicators of social capital, examination of the links and bonds between businesses, and examination of the role of social capital in behaviour change, particularly in the case of environmental behaviour. The most frequently-reported reason for joining local business associations was to gain strength in representing local needs to government. The Hillvale group grew out of local concern about the look of the area (a perceived lack of investment in signage, footpath and roads, and lack of police action on graffiti and vandalism), whereas Seascope's founding members had some interest in pressuring Council, but were not driven by activism, their key driver was general business connectivity, indicating a weaker causal trigger.

A greater proportion of Hillvale members joined their association to access connections and networks, which shows a direct interest in the social capital opportunities provided by the association. On the other hand, Seascope members mainly joined because it seemed to be 'the right thing to support local businesses',

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a quite different imperative than seen at Hillvale, and one which does not imply social capital motives such as active membership or social connection. Seascope members were also motivated to join in order to obtain access to information; again a 'hands off' motivation that reflected the primary activity of the association at that time and one that may indicate an already low level of connection with others who hold useful information.

There were benefits, I could see what other businesses are doing, it gave a sense of solidarity, we could find out about other little businesses in the area so we could refer people. At that time there had been a high turnover of businesses in our area and it was getting hard to keep track of who was there, so the association gave us connections. (Hillvale member)

Overall, Hillvale members valued their local business association membership much more than Seascope members, and Hillvale businesses valued knowledge acquisition over socialising.

The social capital literature establishes the importance of interpersonal connections to create and maintain social capital linkages. The research sought to discover whether members of associations used different relationship-building strategies (to non members) when seeking learning opportunities. Eight of the ten Hillvale businesses, seven Seascope and all non-members purposely built relationships to gain new knowledge (bridging) – with the higher incidence of relationship-building by non-members supporting the hypothesis that this cohort have no ready access to a pool of knowledgeable people. The personal relationship-building by Hillvale appears counterintuitive to the formation of social capital, as it would seem more logical that groups with high social capital would rely on connections within the group (supporting the concept of bonding social capital, Putnam, 2000). However, viewed from another perspective this finding indicates a foundation skill set that enabled Hillvale to develop a strong social capital culture, their willingness to seek out information from others created the 'oil' that lubricated social capital formation. The following quote epitomises the multiple-linkage approach mentioned by a number of Hillvale members and relates to the structure/agency debate in the social capital literature:

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The association breeds familiarity and it goes back to us previously being isolated and the association now being there for you. The other members will wave to you, it is a good thing. If I have a specific need I could ask the Coordinator and he would ask around and get an answer for me. I can turn to the well established businesses to get an answer to questions that I may have.
(Hillvale member)

The interviews explored whether business groups or networks were used as a basis for discussing problems or challenges (i.e. acquiring new knowledge). A greater percentage of Hillvale and non-members discussed businesses with their networks than Seascope members, but Hillvale and Seascope members attributed slightly more value to regular contact than non-members, which aligns with the previous finding that non-members are more likely to use loose networks when they need information. Seascope members reported a lower level of trust than at Hillvale, symptomatic of the looser social capital structures in that precinct.

As might be expected, non-members' use of networks was less bounded by place: 'I have a vast network of family and friends that I can talk to for gaining knowledge and workshop experience', but still recognised the (sometimes reluctant) necessity 'I find talking shop out of hours a bit boring but it is unavoidable' of connectivity 'regular contact is very important and the pub is always a good place', so non-members sought out business networks when needed, but lacked a structure of regular contact to acquire information.

In summary, the findings support the social capital literature through the recurrent theme of connectedness and trust between association members, and the strongest bonds were reported by the members of the Hillvale Business Association with its more durable spatial and historical bonds. The discussion below addresses transfer of knowledge within a social capital framework.

Shared activities are a feature of the process of social capital formation (Nahapiet, 1988), but they are also important in the transfer of knowledge, particularly tacit knowledge (Cummings & Teng, 2003). The research sought to identify whether local business associations created opportunities for shared activities to support

learning and strengthen social capital ties and whether the learning experience was any different for non-members who lacked this social infrastructure.

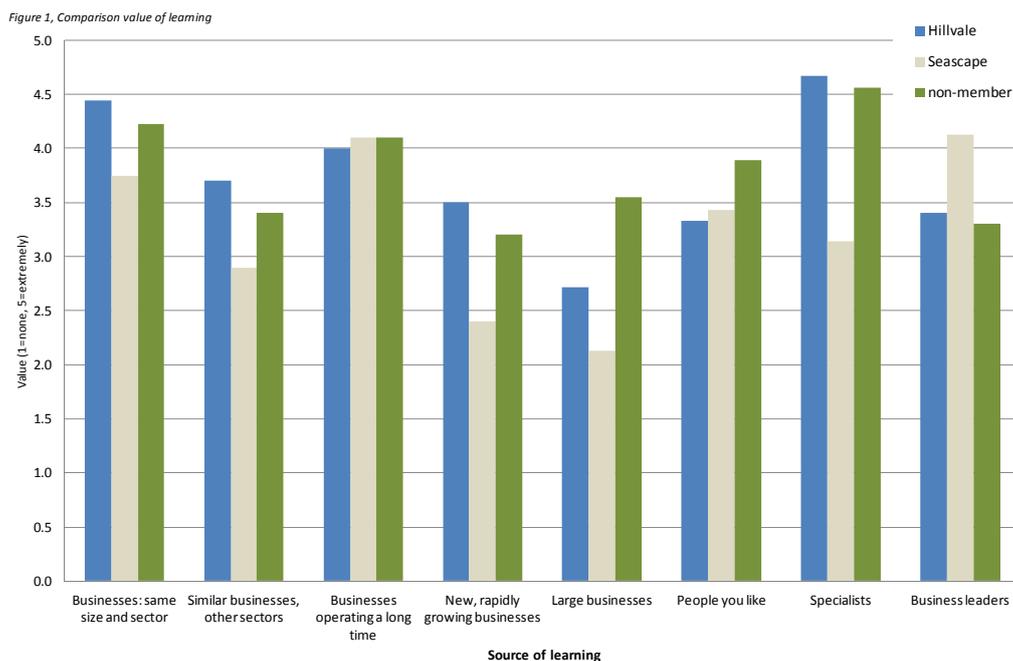
Participant comments indicate that practical learning is accepted as a normal part of being in small business: 'I am a hands on learner and I have to do it myself to learn something', and that learning is typically focused on the specific demands of the job, rather than looking deeper at underlying methods or more broadly about the implications of the business activity in the wider world.

The Hillvale Business Association purposely created opportunities that develop an appreciation of the benefits of shared learning: 'we went to a lecture organised by the association about how to do things, learning it together helped our approach to the business.' It is evident that a culture of learning has been developed at Hillvale, demonstrated by member interest in learning, and a willingness to seek out new knowledge and to discuss their learning experiences. Hillvale's leadership should be acknowledged for the establishment of the learning culture, reflecting Akbar's (2004) view that higher trajectories of knowledge are endogenised, and individuals (in this case the Hillvale leaders) are repositories of new knowledge and achieve the status of institutions in their own right, which in turn realises advantages from sharing rather than withholding knowledge.

By comparison, only one Seascope member spoke about hands-on learning, but lamented that this is not always available: 'In practice, we would like to be very hands-on. But we mostly learn in 'sit and listen' environments, I hate it, I'd prefer hands on practice, it's more important than theory.' These comments illustrate the difference in approach between the two local business associations, with Hillvale focusing on involvement and Seascope on passive receipt of information.

The Hillvale Business Association Coordinator said that he actively encouraged members to teach each other about environmental practices; the approach was to create opportunities to 'talk to each other and ask how to do things'. In comparison, the Seascope Coordinator felt that the association implicitly valued environmentalism and that this message was communicated through information sessions, but there was no attempt to create a culture that supported discussion outside these sessions or to contribute to shared learning about the environment.

Association leaders correctly anticipated member feedback that ‘learning from others in the same industry’ provided the largest benefit, which supports Dewey’s observation (1910: 84) that, where possible, business owners seek information that is one step removed from their current level of understanding. *Figure 1* shows the breakdown of learning preference by the three cohorts, with greater



similarities between Hillvale and non-members than between the two associations.

A generally higher value was placed on all sources by non-members (average score for all types of learning was 3.8) and Hillvale (3.7) and compared to Seascope (3.2). For both Hillvale and non-members, the highest value was placed on learning from specialists (4.7 and 4.6 respectively), while Seascope gave a low score to specialists. It could be hypothesised that Hillvale and non-members are receiving value from weak ties (to specialists), and Hillvale is gaining further benefit from group interpretation of this knowledge; while non-members are simply needing to access the best information available in the shortest time. Seascope’s poor response to specialists is echoed elsewhere in the findings and suggests that the lack of group mediation of information renders it of lower value.

The highest Seascope values were placed on long-standing businesses and business leaders (both 4.1), again indicating that the lack of group interpretation

of received knowledge made source trustworthiness more important. For business leaders and businesses that had been operating a long time, their greater ability to interpret the information in a way that made it relevant to their audience would also account for the high score by Seascope members who lacked a trusted network to help mediate this information. These findings reinforce that all three groups in the study sought information external to their group, demonstrating a practical application of Granovetter's (1973) weak ties and Burt's (1992) structural holes.

The lowest value overall was placed on learning from large businesses (Hillvale 2.7 and Seascope 2.1) and from new, rapidly growing businesses (non-members, 3.2) both situations where there was limited relevance to the small business experience. These data support Dewey's (1910) hypothesis that learning is a process of moving from the known to unknown in small increments, with specialists and business leaders more likely to be able to tailor learning to their audience, but large and fast-growth businesses operating at too great a stretch from small business to be relevant.

From a social capital perspective, it was interesting that 'learning from people you like' scored approximately midway in value, which reinforces earlier findings that connectivity is not necessarily based on likeability, but on trust and usefulness and reflects Putnam's (2000: 411) observation that to build bridging social capital, individuals need to transcend their social and political and professional identities to connect with people unlike themselves.

Comments by Hillvale businesses indicate that this group has a conscious approach to learning from others (Machlup's (1980: 181) painstaking searchers and alert watchers): 'sometimes they have funny ideas, the way that they do business is different – not bad just different' and 'I listen to everybody and then analyse it and put my spin on it'. The research suggests that this is because the Hillvale Business Association purposely and overtly encourages learning from other businesses.

The Committee have all been in business a long time, they look at what each other are doing, and go out of the area and find out other ways of doing it. We

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seed topics with the members, otherwise they wouldn't even think about it, and if there's a leader who can say 'you should be doing it this way', then we support that idea. For example, XXX's business is very successful, and he spends a lot of time going round to the newer businesses and talking about the way other businesses do things. People might not listen at first, but they respect him, and we all talk about how good it is and eventually they get the message. (Hillvale Coordinator)

This quote shows that Hillvale leaders understand and model the value of tacit learning, and that there is a clear expectation that group norms are actively implemented and clearly articulated. As a result, Hillvale members accept learning from other precinct businesses as a normal and natural way of doing business and their comments reveal that they consciously reflect on the ways in which they learn. In a number of factors (usefulness of learning from other businesses, learning from businesses of the same size and sector, learning from similar businesses in other sectors, learning from new rapidly-growing businesses, learning from large businesses, and learning from specialists) Hillvale and non-member businesses provided similar (and higher) ratings than Seascap, whose coordinator reported a focus on information dissemination rather than facilitating learning, and whose members' comments suggested negative learning experiences despite a larger and more diverse pool of businesses from which to learn. By only providing information, the Seascap Business Association had decoupled its members from tacit learning, illustrated by their high score for 'learning from business leaders', and reflecting the 'sit and listen' methods supported by their association where business leaders are regularly engaged as speakers.

This set of questions showed non-members in an interesting light, particularly in their high value of tacit learning despite the lack of connecting agency to drive and support this. Their very high rating of 'learning from specialists' suggests a lack of peer input, and their proportionally high rating of 'learning from big business' reveals a different set of connections and the need for different methods of learning than businesses that receive this information through the agency of a local business association.

Within the broader social capital context, this research aims to identify the role of group influence on behaviour change, specifically looking at environmental practices in small business. The research sought to establish whether local business associations that had a stated intention to change the behaviour of their members realised this intention. In this way, the research was exploring both stated and hidden aspects of the organisational culture by the local business associations.

The interviews with the coordinators revealed their personal beliefs about the main influences on member behaviour, with Seascope suggesting that cost was the main influence, and Hillvale suggesting visits to other businesses as the strongest influence:

Seeing other practices that aren't right, and saying to themselves 'we don't do it that way' or seeing something you do but in a different light and saying 'that's not right'. What really works well are visits to other businesses in the same sector and looking at how they do things, they pick up a lot of additional knowledge, sometimes unconsciously. (Hillvale Coordinator)

Businesses were asked 'Is it up to the individual business, or is there a general view within the association about what makes good environmental behaviour?'. Both coordinators felt that their association valued good environmental practices amongst members, but neither association thought they promoted a cohesive view about what constitutes good environmental management, and in both cases this was left up to individual businesses. However, both associations noted a good level of member interest in the environment. The Seascope Coordinator reported that whenever the association 'has had anything to do with the environment, we get quite a bit of interest from members, more than for general topics'. Hillvale's Coordinator commented:

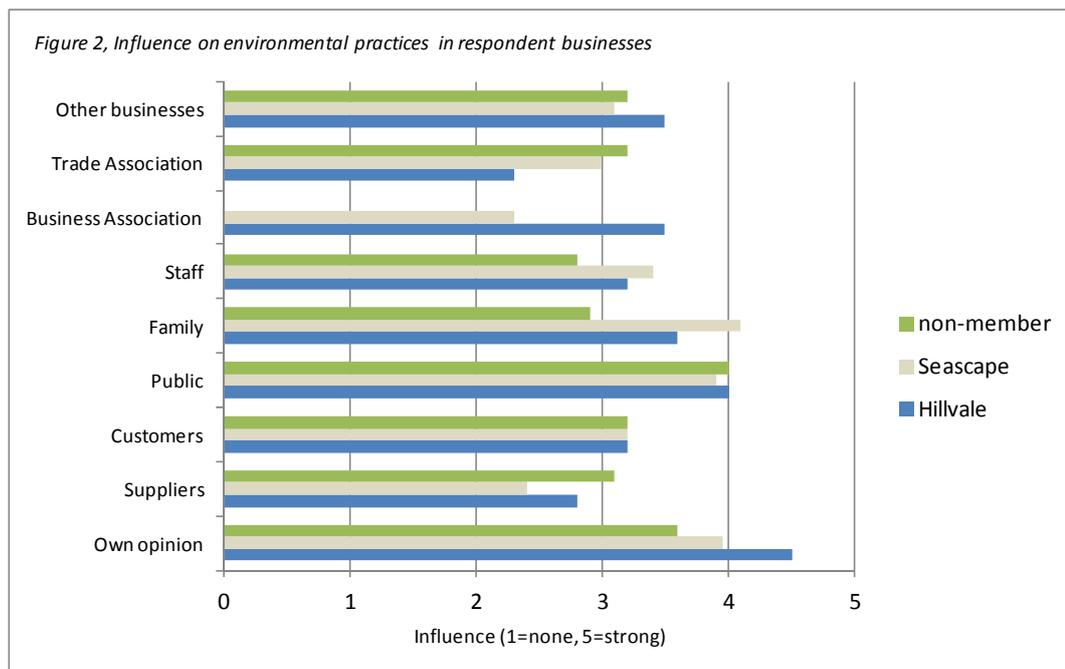
It is top of mind with the Committee because they are long term business people. They've been in business a while and have chemicals and wastes that need specific treatment. The leadership comes from people who are environmentally aware, and who implement environmental programs. (Hillvale Coordinator)

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However, few Seascope members felt that their association developed member attitudes toward environmental management, whereas Hillvale members said the association set the culture ‘everyone upholds the view about the environment’, ‘the presence of the business association in the background influences you’. Importantly the Hillvale committee took action to discourage poor environmental practices:

There was a guy at the end of the street who had an untidy block and others commented and said ‘something should be done about it’. One of our committee members went round and saw him and they cleaned it up. (Hillvale Coordinator)

Figure 2 shows environmental influences on business by cohort (noting that non-members were not asked about membership of a business association).



Overall, the strongest influences were ‘my own opinion about the environment’ and ‘public opinion about my business’ (both averaged 4.0 out of 5); and the weakest influences were ‘suppliers’ expectations about environmental practices’ and ‘other industry or trade associations’ (both 2.8), quite a different result than that obtained by Roy & Thérin (2007: 256), whose research with Canadian SMEs found that environmental knowledge is more likely to be gained from trade

associations, suppliers and public agencies than from normal sources of business information.

When analysed by group, the greatest single influence was Hillvale members' own opinion (4.5):

For example, we bought a machine to extract and recycle the gas in fridge bodies. It pumps it out so that it isn't released into the environment. We weren't required to do this (there's nothing in the law that makes us do it), but we feel it's 'doing our share', it was a cost to us, but it's the right thing to do. (Hillvale member)

Interestingly, the influence of business associations was rated quite low, which is thought to reflect the internalisation of belief by Hillvale and the lack of overt attention to environmentalism by Seascope, which rated the 'Local Business Association' lowest of all influences (2.3). The comparatively large proportion of Hillvale members who felt that they set their own environmental standards is particularly interesting, as it suggests that association attitudes have been internalised to such a degree that the accepted pro-environmental culture is owned and unquestioned by members.

The research found that media attention and public opinion alone do not necessary trigger behaviour change, but when a raised level of awareness is combined with normative pressures and active intervention, associations provide a catalyst for action. While this influence can be overt (such as the example of the Committee member visiting a recalcitrant business' premises), the findings show that:

- The more subtle process of shared attitudes and experience helps to form individual opinions, reinforcing the value of purposely creating regular socio-learning situations (developing relational strength that provides a solid grounding for both social and learning situations, after Upadhyayula & Kumar, 2004);
- Being clear in the norms and values of the organisation is important, as is
- Sanctioning unacceptable behaviour, and
- Developing trust between members.

This research has reinforced Svendsen & Svendsen's (2004: 28) view that social capital is built up in small groups where 'face-to-face interaction generates common social norms and creates predictable behavioural patterns' and that in small groups, the process of development of culture and behavioural rules is achieved through repetition, tradition and example (Wenger et al.'s 'rhythm of engagement'; 2002, in Amin & Cohendet, 2004: 116).

The longevity of active membership in the Hillvale Business Association suggests that the process of individual development pursued by the organisation's leadership accurately supports an iterative process of driving toward stated organisation goals at the same time as listening for and adjusting activities to suit the specific needs of the current cohort of members. Thus Hillvale provided an exemplar for Grix's (2004: 48-49) 'structure and agency problem', where the social context guides, determines, constrains or facilitates individual actions; and individuals in turn form and shape the social context and institutions around them, and reinforced Bourdieu's (1986: 249) belief that a network of connections is not constituted in one action, rather it is the product of an endless effort at institution.

Both local business associations provided sufficient evidence about the investment of member time to refute Semlinger's (1995: 23-24) assertion that business networks are not necessarily suited to small firms because small firms are less well organised in developing voluntary associations, and lack the time and resources to spare personnel to work on committees.

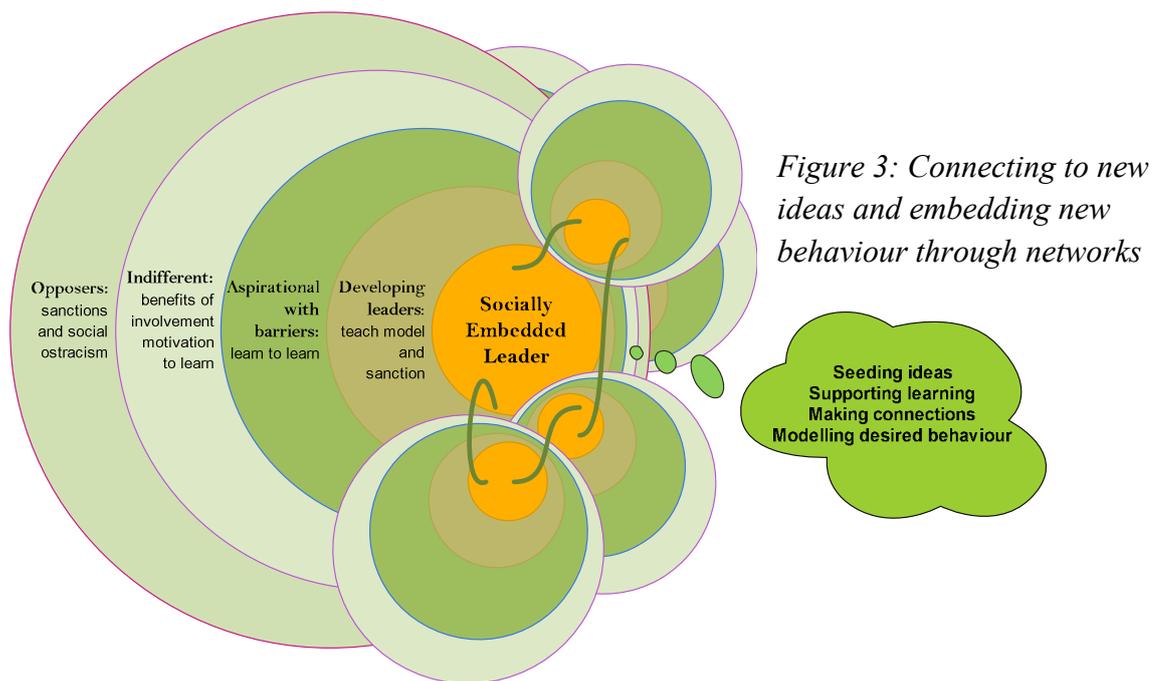
Application of the research

The intent of the research is to contribute to better understanding of the mechanisms of leadership in delivering behaviour change in disconnected populations. The relevance for environmental practices is unmistakable, but the research has implications for a wide range of other attitude and behaviour change such as health behaviour, enterprise development in poor communities, and integration of refugees.

The key findings of this research are that:

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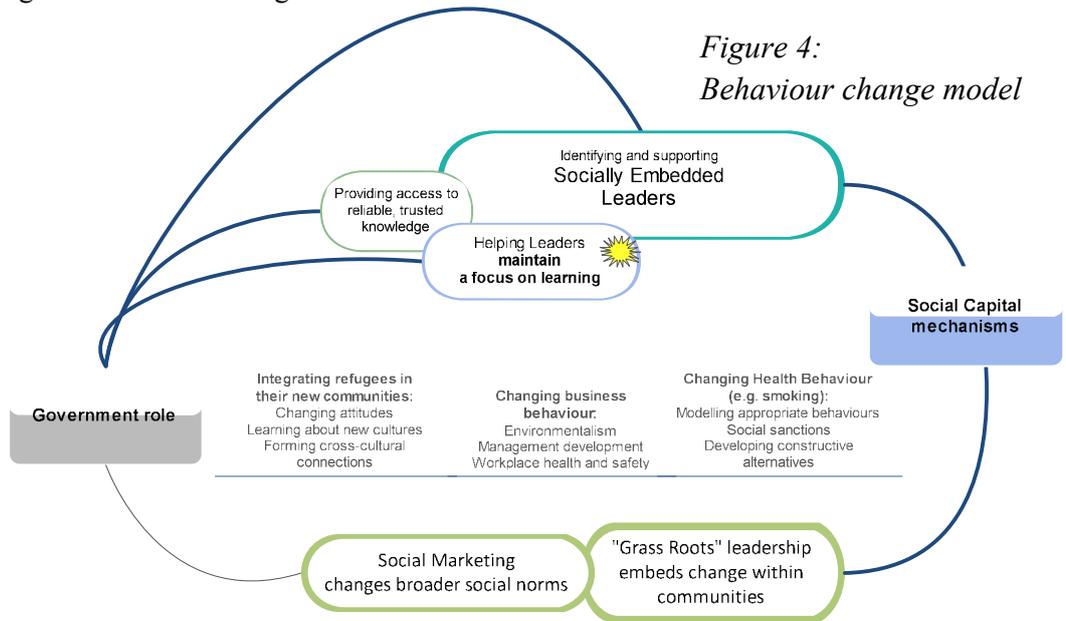
1. Socially Embedded Leaders (Peters, 2012), that is leaders developed from within the group, demonstrate strong connections, generate high levels of trust and exert a strong influence on the behaviour of group members.
2. Ideas 'seeded' to socially embedded leaders, when supported with reliable knowledge from trusted sources, contributes to the dissemination of those ideas through the community (after Granovetter, 1973; Burt, 1992).
3. An important and generally overlooked mechanism for change is the need to habitualise learning by group members. When a group norm of learning has been established, individuals are more likely to be receptive to new ideas, will have the skills to evaluate and modify new ideas, and can access a sympathetic *and informed* social network to explore, adapt and innovate. The result is a learning community, where learning is valued as a resource, and where new ideas fall on fertile ground.
4. The model generated from this research (see *Figure 3*) is scaleable. Leaders from many groups can connect to hear about new ideas, and (as with their own groups) explore and test these ideas in sympathetic environment. Policy can be 'seeded' into these groups thus expediting the adoption of new ideas and behaviour.



One of the benefits of this model is that it has implicit barriers to exploitation. Because it depends on endogenous leadership (leadership is conferred from within the group based on attitude and behaviour) operating in an open communication framework, the aspiration and actions of leaders are under scrutiny by members and by other leaders in the network. Aberrant behaviour is subject to the same sanctions that occur within the groups, reinforced through social ostracism (Svendsen & Svendsen, 2004: 28).

Burns' (1998: 133) reminds us that the forces that motivate local leaders may have little in common with the goals of government, and that leadership type can significantly impact on the outcomes of government programs in local communities. Implementation of the socially embedded leadership model requires alignment between the goals of governments wishing to influence community behaviour and the groups they are working with. The agency of government is subject to a similar level of critique as leaders and groups, and agents must therefore adopt and demonstrate the same ethos of openness, learning and change. This approach (*Figure 4*) calls for a greater understanding of Sotarauta's (2005:

Making environmental change stick



60) thought leaders - people who significantly influence the thinking and behaviour of others.

The leadership and social capital methods presented in this paper are transferable across the regional development continuum (*Figure 5: Layers of Capacity*, Peters, 2004),

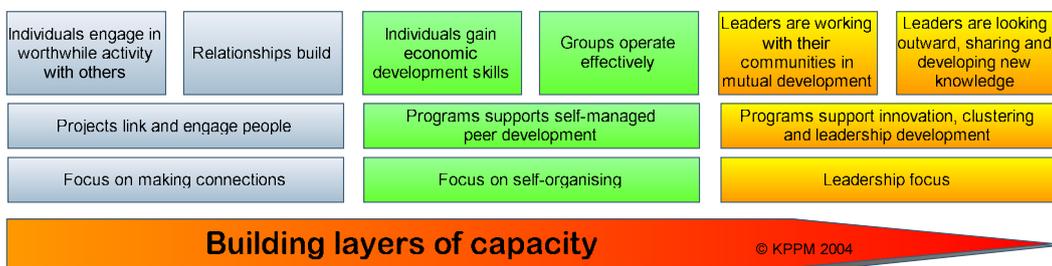


Figure 5: Layers of Capacity

which connects social capital at a micro level to a vibrant small business economy and outward-looking regional leadership, and reinforces the main processes of endogenous growth from a 'grass roots' base:

1. Connecting people to develop basic organisational skills;
2. Supporting the 'professionalisation' of small business - positioning for growth; and

3. Encouraging regional leadership that connects local businesses to the global economy, thus keeping the region on the 'front foot' of change

The implementation of this model delivers skilled individuals and effective groups (which may include precinct groups, business associations or industry clusters).

The role of Regional Development agencies is to make the initial connection, facilitate leadership development opportunities, and provide links to new knowledge that will support the development of capability within the group.

The application of the *Layers of Capacity* model generates institutional thickness (Amin, 1994: the web of associations, voluntary groups and agency networks that contribute to strength and diversity in intra-organisational networks), providing swift and effective communication mechanisms that support the rapid dissemination and adoption of new ideas and practices.

The research presented in this paper has helped to build a better understanding of the centrality of learning in social capital theory, identifying a three-way interaction between social capital, learning and leadership.

Further research

The research suggests an important link between social capital, learning and environmental behaviour change.

The small business sector makes a sizeable contribution to greenhouse gas emissions, but has made few changes to greenhouse gas emission practices (Bradford & Fraser, 2008: 157). Further research into the practical application of the behaviour change model described in this paper would provide insights into its effectiveness as a tool to deliver environmental behaviour change that 'sticks'.

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