
**Scottish Entrepreneurial Networks in the International Context**

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**Abstract**

The research note reports findings of a study into the personal contact networks of Scottish entrepreneurs, and compares these to results already published for other countries (Canada, Greece, Japan, Italy, Northern Ireland, Sweden and the United States). The findings show that generic behaviour across borders cannot be taken as a given, although similarities exist in the under-representation of women as network members, the average age of network contacts, the duration of relationships, and the average monthly meetings. Entrepreneurs from the North East of Scotland exhibit a tendency towards small, tightly-integrated networks.

**Introduction**

The relationship between networks and entrepreneurship has received a great deal of attention in recent years. Studies increasingly reflect a general agreement that entrepreneurs and new companies must engage in networks to survive (Huggins, 2000, p112). Some researchers have even argued that the entrepreneur must network (Szarka, 1990; Brüderl and Preisendörfer, 1998), whilst others have remarked that the success or failure of new firms depends on the networks developed and exploited by their founder (Arocena, 1984).
Essentially research has demonstrated the pervasion of networking (Birley, 1985; Johannisson et al, 1994; Bloodgood et al, 1995) and that relationships are important for entrepreneurial activity (Johannisson and Peterson, 1984; Aldrich and Zimmer, 1986; Carsrud and Johnson, 1989).

Although the network developed by each entrepreneur is *de facto* unique to that individual, it is reasonable to hypothesise that “proprietors in different countries may exhibit different networking styles” (Birley, Cromie and Myers, 1991, p61). Indeed, Curran et al (1993, p77) argued, “networks are best seen as primarily cultural phenomena, that is, as sets of meanings, norms and expectations”. Since networks are recognised to be embedded in local relations (Jack and Anderson, forthcoming), it is therefore likely that a degree of variance will be found in their nature and processes across cultural boundaries.

**International Differences and Similarities in Entrepreneurial Networking**

Empirical studies have considered the differences and similarities between the characteristics of entrepreneurial networks in different countries. For example, Aldrich et al (1989) examined the differences and similarities between samples of entrepreneurs from the USA (North Carolina Research Triangle) and Italy (Milan). Matched studies were carried out in Sweden (Johannisson and Nilsson, 1989), Northern Ireland (Birley, Cromie and Myers, 1991), Japan (Aldrich and Sakano, 1995), Canada (Staber and Aldrich, 1995) and Greece (Drakopoulou Dodd and Patra, 1998) \(^1\). The work of these various authors illustrates that these national samples exhibit a range of similarities, suggesting that: “at least some

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\(^1\) It should be noted that differences within the samples selected, (with some studies focusing on young entrepreneurs, some on women, some on urban and some on rural groups,) limits the confidence which we can place on these results. Equally, a range of sample construction and questionnaire administration techniques were utilised, which restricts conclusions based on direct comparisons to indications of overall trends.
aspects of business networking are generic, and that owners approach some tasks in similar ways in different environments” (Staber & Aldrich, 1995, p443).

Methodology

This research was designed to address the question, *are the network characteristics of Scottish entrepreneurs equivalent to those identified in other countries?* By addressing this question, the intention of the authors was to extend knowledge about the international differences in networking and identify if the networks of Scottish entrepreneurs were significantly different to those entrepreneurs in other countries. To address the research question, a telephone survey was carried out in the Grampian region of North East Scotland between May and June 2000 using a questionnaire previously developed and administered in the earlier international studies. The sample frame was derived from the 1997 edition of the Grampian Business Directory, a local government publication which provided a comprehensive listing of all firms in the region, detailing the size, sector, and providing some indication of ownership/legal status. From a total of 786 owner-managed firms initially identified, with between zero and 200 employees, 271 were contacted. Useable responses generated 68 respondents, equating to a 25% response rate for the sample.

Findings

The results of the survey are presented below. Given the variety of methods of sample construction and data collection utilised in the eight studies, no statistical tests have been performed on the data. Instead, the data is used to provide an indication of national trends and set the results from the Scottish telephone survey within an international context.

2 Special thanks to Professor Sue Birley
A key similarity with the international studies is that entrepreneurial networks appear to be male dominated, with an under-representation of women. However, although there are similarities, for most variables studied at least one country lies outside the “normal” tight response range. For example, the time expended on maintaining and developing contacts was found to be broadly similar internationally, except for Italy, Japan, and Greece. The proportion of family, friends and business ties within the networks were very alike in all samples, except for Canada and Greece. Network interconnectedness, reported as the proportion of alters who did not know each other, was almost identical for all nations studied (40-45%), except Greece (24%). Relationships with these strong-tie contacts had endured, on average, from 10-12 years for all country samples except Ireland (8 years), Japan (14 years), and Greece (16 years).

Our sample were found to be older, contained a high proportion of male entrepreneurs and owned larger businesses which had been established for longer periods of time than was the case for the other seven international studies. However, as Table 1 illustrates, the Scottish respondents reported contact behaviour close to the median international figure for the number of monthly meetings with contacts, 13 contacts per month in comparison with the international average of 12.6.

(Insert Table 1 about here),

In terms of the number of hours expended on networking per week, Table 2 demonstrates some marked international differences. If we look the total time spent with all contacts, Scots spent much less time networking than Greeks, but much more than those from the USA. Existing customers took up much of the Scots networking time, but little time was spent on developing new customers through networks. Interestingly, with the exception of new customer contacts the Scots profile is very similar to the Northern Irish. This does seem to suggest, as one might expect, a cultural similarity.
In describing the nature of ties, Table 3, we can see two clusters of family ties. The Scots, the Greeks, the Italians and the Swedish respondents all have a strong tie family network. Rather unexpectedly, the Irish, the Canadians, the Japanese and the Americans have a much weaker family network. Friends are much less important ties for the Scots, since they have less than fifty percent of the rest of the international sample. Business ties are as important to the Scots as the rest of the world, though we should note that the Northern Irish report many fewer business links.

For the number of strangers in the network (Table 4) we see that the Scots are markedly different from all others, except the Greeks. Scots respondents reported only an average of 17.3 strangers in the network, the Greeks had 24, but all others ranges from 42 to 45.4 strangers.

To summarise; the proportion of time allocated to new versus existing contacts (33:67), differed from other international samples (50:50). The Scottish respondents also reported a comparatively high proportion of kin within their social ties (24%), at the expense of friends (15%). A notable divergence from established international patterns of entrepreneurial networking was the finding that only 17% of possible alter to alter relationships were described as being that of strangers. With the exception of the Greek sample (24%), the percentage of stranger-relationships between alters has consistently been reported at around the 40% mark.

Conclusion
This research raises a number of interesting issues to be taken into account when studying the network characteristics and activities of entrepreneurs. The findings from this research demonstrate that whilst the general picture of a degree of broad international homogeneity in networking, offset by specific areas of national idiosyncrasy, continues to hold true, the network characteristics and activities of Scottish entrepreneurs display some interesting differences. The networks in which these entrepreneurs are embedded are interconnected strong tie networks when compared to their international counterparts. This is probably a function of the substantial number of kin counted as entrepreneurial strong ties. Both the number of strong and weak tie contacts within these networks are comparatively small. This may be a function of the geographic isolation of the region used for the study. A further key finding is that although total reported time dedicated to networking remains within “normal” international parameters, the Scottish entrepreneurs spent less time developing new contacts, than on maintaining the tight relationships that already existed within the network.

References:


Table 1 - Monthly Discussions with Key Contacts

<table>
<thead>
<tr>
<th>Mean of contacts per month</th>
<th>Scotland</th>
<th>Japan</th>
<th>Canada</th>
<th>Ireland</th>
<th>USA</th>
<th>Italy</th>
<th>Sweden</th>
<th>Greece</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>3.5</td>
<td>16</td>
<td>11</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>17</td>
<td>12.6</td>
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</tr>
</tbody>
</table>

Table 2 - Average Hours per Week expended on Network Maintenance and Development

<table>
<thead>
<tr>
<th>Scotland</th>
<th>Northern Ireland</th>
<th>Greece</th>
<th>USA</th>
<th>Japan</th>
<th>Italy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cust Other Total</td>
<td>Cust Other Total</td>
<td>Cust Other Total</td>
<td>Cust Other Total</td>
<td>Cust Other Total</td>
<td>Cust Other Total</td>
</tr>
<tr>
<td>Existing Contacts</td>
<td>12.9 2.6 15.5</td>
<td>10.4 6.0 16.4</td>
<td>15.7 8.9 24.6</td>
<td>5.8 4.3 12.0</td>
<td></td>
</tr>
<tr>
<td>New Contacts</td>
<td>2.9 5.2 8.1</td>
<td>8.3 4.7 13</td>
<td>9.2 98 19</td>
<td>5.6 3.6 11.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.8 7.8 23.6</td>
<td>18.7 10.7 29.4</td>
<td>24.9 18.7 43.6</td>
<td>11.4 7.9 23.5</td>
<td></td>
</tr>
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</table>

Table 3 – The Types of Ties

<table>
<thead>
<tr>
<th>Scotland</th>
<th>Ireland</th>
<th>Greece</th>
<th>Canada</th>
<th>Japan</th>
<th>USA</th>
<th>Italy</th>
<th>Sweden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>24</td>
<td>13</td>
<td>31</td>
<td>18</td>
<td>13</td>
<td>14</td>
<td>24</td>
</tr>
<tr>
<td>Friends</td>
<td>15</td>
<td>32</td>
<td>35</td>
<td>45</td>
<td>45</td>
<td>50</td>
<td>28</td>
</tr>
<tr>
<td>Business Ties</td>
<td>61</td>
<td>55</td>
<td>34</td>
<td>14</td>
<td>60</td>
<td>65</td>
<td>54</td>
</tr>
<tr>
<td>Other</td>
<td>N/a</td>
<td>0</td>
<td>N/a</td>
<td>N/a</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>77</td>
<td>122</td>
<td>135</td>
<td>108</td>
</tr>
<tr>
<td>N</td>
<td>196</td>
<td>785</td>
<td>608</td>
<td>571</td>
<td>615</td>
<td>235</td>
<td>799</td>
</tr>
</tbody>
</table>

Table 4 - Percentage of Strangers

<table>
<thead>
<tr>
<th>Scotland</th>
<th>Canada</th>
<th>Ireland</th>
<th>USA</th>
<th>Italy</th>
<th>Sweden</th>
<th>Greece</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Strangers</td>
<td>17.3</td>
<td>42</td>
<td>40.6</td>
<td>42.6</td>
<td>45.4</td>
<td>42</td>
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