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**A SURVEY ON SCOTTISH SECOND SIGHT**

by SHARI A. COHN

**ABSTRACT**

The Scottish tradition of 'second sight', a special psychic ability associated with the Highlands and Western Isles, was studied. A large-scale survey, which used a random sampling procedure, was conducted to find out the incidence of people reporting second sight in the Western Isles, Highland, Grampian and Lowland regions in Scotland. The survey also looked at whether people who reported second sight differed from people without it with regard to the following characteristics: highland descent, gender, family members reporting second sight and knowledge of people other than relatives reporting second sight. The frequency of reported second sight ranged from 10% to 16% with the exception of Grampian, which reported 33%. In general, neither highland descent nor gender seemed to be significantly related to people's reporting second sight, though this was not true for the Lowland region. People reporting second sight are more likely to know people other than relatives with second sight than those who do not report second sight, though this was not true for the Lowlands. Lastly, in all regions, people reporting second sight are significantly more likely to report second sight in blood-related family members. The implications of these findings for the traditional view of second sight are discussed.

**INTRODUCTION**

*When similarly rapid judgements as to probable events are formed and thrown on the screen of the external world in combination with physical forms which fancy weaves in association with those judgements, both eye and mind see, as it were, beyond the bounds of space and time into that state where all is One Eternal Now, and thus the Seer is wrapt, as he believes, into the future to behold things that are to come, and which people, for want of a better word, term the 'Second Sight'—though literally and in truth, as an old writer observed, the vision if really afterwards realised should rather be termed, not the second, but the first sight of that event.* (Macrae, 1908, p. 18)

*Rationale for Studying Second Sight*

From my own personal observation, I noticed that psychic experiences ran in my own family and that some of these experiences were suggestive of 'true' psychic communication. The relatives came from several cultural traditions in Britain, Germany, Russia and America. This raised the issue of whether there are both genetic and cultural contributions towards people's having psychic experiences. Thus I was interested in whether psychic experiences would run in other families besides my own. When I came to the University of Edinburgh to pursue my Ph.D., I became affiliated with the School of Scottish Studies. There I learned that there is a Scottish tradition called Second Sight and that these psychic experiences were believed to be hereditary and to run in particular families. The distinctive nature of second-sight experiences helps in the process of distinguishing people with Second Sight from those without it, thereby making the task of preparing genetic pedigrees of a particular type of psychic experience easier than with a more ambiguous type.

*What is Second Sight?*

Second Sight is the name of a special psychic ability believed to be a natural faculty of mind, regarded as an inborn gift by some and an affliction by others. *An Dà Shealladh* is a Gaelic term which means the Second Sight.<sup>1</sup> Second Sight implies that there are two forms of sight. One is the normal sight and the other is the ability to have prophetic visions which occur spontaneously and are rarely directed at will. The visions can sometimes be of sad events such as accidents and deaths. An example is literally seeing a funeral procession at night and, by recognizing the people carrying the coffin, knowing who has died. Shortly after the vision, the funeral actually occurs. In some cases, the person having the vision reports being knocked to the ground or pushed aside while the procession goes past. In other cases, the funeral procession is not seen but heard passing by.

Another example is literally seeing a death shroud on a person before that person dies; how much of the body is covered indicates how soon the person will die. Other precognitive visions can involve seeing the actual event before it occurs (e.g. seeing a huge wave engulfing a fisherman before he and his crew are drowned, or seeing a baby dead in the mother's arms shortly after the baby is born).

Second sight can include visions of people at the moment of death (e.g. a father unexpectedly sees his son when at the same time he has been killed in battle many miles away). Clairvoyant experiences (e.g. seeing a crew on a boat drown at a distance) and telepathic experiences (e.g. a mother knowing that her son has been killed in an accident) can also be considered instances of second sight.

Other examples of second sight include visions of people before they die, or shortly after they die (e.g. a woman seeing a neighbour in solid form might not realize that the person has died until she receives news that he died some miles away). The 'visions' need not be exclusively visual; they can be expressed through other sense modalities as well. For example, a fisherman, on hearing a woman crying by the shore, tried to find her but to no avail. Several weeks later, a boy was drowned and the mother was crying over the loss of her son at the very spot where the fisherman had heard her. Sometimes the visions can be of happy events (e.g. seeing a marriage procession before the couple have even met, or seeing someone prior to meeting them for the first time). Macrae (1908) may be right to say that the 'Second Sight' is a kind of 'first sight': the person has a prophetic vision of a death and to him it is the first time he has knowledge that the person has died. When he receives news of the loved one's death, it is a verification that the vision is true. Therefore what we call the normal sight may actually be to him the second sight.

There is a long Celtic tradition of people having second-sight experiences, especially in the Highlands and Western Isles of Scotland (Kirk, 1691; Campbell, 1902), though it is known to be experienced in other cultural traditions as well. For example, Schmeing (1937; 1950; 1954) interviewed people with second sight in northern Germany and Bender (1964) discusses a survey done in 1958 on beliefs in second sight in West Germany. Grober-Glück (1977)

<sup>1</sup> Gaelic is a language that is still being spoken in Scotland, especially in the Western Isles.

summarizes information gathered in the early 1930s from questionnaires about second sight in Germany and also notes, from collections of legends and reports, that second-sight experiences, besides being reported in Scotland and Germany, are also reported in the Netherlands, Denmark, Norway, Sweden and Iceland. Virtanen (1977) has collected accounts of psychic experiences in Finland, some of which were illustrative of second-sight experiences. In addition to the places mentioned by Grober-Glück, Virtanen says that people from the Faroes, parts of Ireland, Brittany and New Zealand also report having second-sight experiences.

*Rationale for Survey*

I am applying a phenomenological approach to the study of second sight through questionnaire and interview methods. The School of Scottish Studies referred me to people who, through word of mouth, referred me to others. Appeals were made in some Highland and Western Isles newspapers. After building a rapport and trust with people throughout Scotland, I was able to record some of their second-sight experiences and learn whether family members have had experiences. This has provided rich descriptive accounts of these sensitive experiences as well as family histories of second sight from a limited number of people. Details about this aspect of the research will be given in my Ph.D. thesis (Cohn, in preparation).

There are, however, several issues which such methods—as they were used in a pre-selected group—cannot adequately address; for example, what is the incidence of reported second sight in the general population, and does it run in families? To address these types of questions required a survey approach.

Although community mail surveys on psychic experiences using random sampling procedures have been done before, none looked specifically at second sight. In America, Palmer and Dennis (1975) and Palmer (1979) sent a survey to both students and townspeople in Charlottesville, Virginia, asking about whether they had had different types of psychic experiences and about their beliefs and practices. In England, Blackmore (1984) conducted a survey on out-of-body experiences and other experiences with residents in Bristol.

Surveys of psychic experiences and beliefs have also been carried out at a national level (Haraldsson, 1985; 1991). Haraldsson (1985) presents results of a national survey of Iceland (Haraldsson, 1977) and compares his findings with national surveys conducted in the U.S.A., Great Britain, Sweden and other European countries. In the British survey discussed by Haraldsson, people were asked questions about psychic experiences (e.g. telepathy, dreams, contact with the dead, hauntings, poltergeists) and participation in occult practices. However, there were no questions specifically concerning second-sight experiences, nor were there any data about the Scottish respondents in the British sample. Thus none of the surveys conducted so far can provide information about the incidence of second sight, let alone whether it runs in families. Therefore this study is the first representative survey in Scotland on reported second sight and the first to examine whether it runs in families.<sup>2</sup>

<sup>2</sup> Although a questionnaire method has been used before: the earliest one was prepared by Sir John Aubrey (1696, chapter XXI, pp. 151-177).



Figure 1. Map of Scotland showing the regions sampled in the survey.

**SURVEY METHODS**

*Population of Contributors*

The surveys were sent to the Western Isles, Highland, Grampian and Lothian regions in Scotland because these were the areas in which I interviewed my contributors. See the map in Figure 1. Lothian region was selected as being representative of the Lowlands areas. Thus all future references to the Lowlands will refer to the Lothian region. Each of these regions serves as a unit in the local government structure of Scotland. As such, each region maintains a Register of Electors, listing all people of voting age. This data resource provided the opportunity to draw random samples from the total adult population in each region. See Table 1 for the list of areas within each region. The Scottish tradition of Second Sight is associated with the Highlands and Western Isles. A sample from the Lowland region was therefore regarded as a comparison group for those samples from the Highland and Western Isles regions as well as the Grampian region (which abuts the Highland region).

Another reason why regions defined by political rather than historical/cultural boundaries were used is that there are differing opinions as to where the historical/cultural boundaries between the Highland and Lowland regions would lie. Furthermore, any such line which did not follow Regional or Ward boundaries would make the task of doing a survey using a random sampling procedure that much harder. Therefore I chose to avoid these methodological difficulties and work with the political boundaries.

Table 1  
List of areas within each region specified in the 1992-93 Register of Electors  
As noted on p. 388, Lothian Region represents the Lowlands.

| Western Isles  | Highland        | Grampian       | Lowlands              |
|----------------|-----------------|----------------|-----------------------|
| Isle of Lewis  | Lochaber        | Aberdeen North | Edinburgh District I  |
| Isle of Harris | Nairn           | Aberdeen South | Edinburgh District II |
| Benbecula      | Badenoch        | Banff          | Mid Lothian           |
| South Uist     | Strathspey      | Buchan         | East Lothian          |
| North Uist     | Inverness       | Gordon         | West Lothian          |
| Isle of Barra  | Skye & Lochalsh | Kincardine     |                       |
|                | Ross & Cromarty | Deeside        |                       |
|                | Caithness       | Moray          |                       |
|                | Sutherland      |                |                       |

*Sampling Procedure*

A systematic sampling procedure was used to draw a random sample from each region. Every *m*th person on the Register of Electors list was chosen, *m* being the total number of electors in the region divided by the number of people in the sample. This was done for the Western Isles, Highland, Grampian and Lowland regions.

*Survey Response*

In July 1992, 615 survey questionnaires were sent to people selected at random from the 1992-93 Register of Electors in Scotland; 205 in the Western Isles, 103 in the Highlands, 102 in the Grampian and 205 in the Lothian regions. By October 1992, 198 questionnaires had been returned. After a second mailing, 241 had been received by January 1993. For a detailed breakdown of the response rates per region, see Table 2.

*Construction of Survey*

The survey questionnaire items are shown in Figure 2. A covering letter was sent with the questionnaire, explaining its purpose to the resident. To prevent people from confusing second sight with other psychic experiences such as OBEs or *déjà vu*, second sight was defined by giving examples of general cases

- 2 Are people of highland descent more likely to report having second sight themselves?<sup>3</sup>
- 3 Is there a difference in the proportions of males and females reporting second sight?
- 4 Are people who know people other than relatives who report second sight more likely to report having second sight themselves?
- 5 Are people reporting family members with second sight more likely to report having second sight themselves; i.e. is there any evidence that second sight does cluster in families?
- 6 Are people reporting blood relatives with second sight more likely to report having second sight themselves?

RESULTS OF SURVEY

General Remarks

From a total of 615 survey questionnaires that were sent out, 241 were returned. Of these, one person did not indicate area of residence and six people did not indicate their gender. This explains why the whole-sample totals in Tables 2 & 3 exceed the sum of the regional totals in those tables. In those tables, where *Yes* and *No* responses are indicated, *Yes* refers to an affirmative response to the questionnaire item, while the answer *No* groups together *No*, *Not Sure* and *Missing*.

Statistical tests on 2 x 2 tables were used to determine whether highland descent, gender, knowing other people with second sight and having family members with second sight are significantly related to reporting personal second sight. The Fisher exact test (two-tailed) was used when the expected cell values are small, otherwise the chi-square test with continuity correction was used. The effect-size values ( $\phi$ ) were derived from the chi-squared statistic ( $\chi^2$ ) by  $\phi = \sqrt{(\chi^2/N)}$ , where  $N$  is the size of the total sample. The  $\phi$  value measures the strength of the association between the variables in the 2 x 2 tables.

Response Rates

Table 2 gives the response rates for each region. They are fairly uniform for the different regions, though the Highland region had a slightly higher response rate. Considering the sensitive nature of second sight, the response rate is regarded as reasonably good.

Frequency of Second Sight

Table 3 shows the frequency of reported second sight for each region. The Highlands and Western Isles are traditionally believed to be those areas where second sight is most prevalent. Surprisingly, the Grampian region reported the highest incidence of second sight (33%  $\pm$  15%), followed by the Highlands (16%  $\pm$  10%), Lowlands (16%  $\pm$  8%) and Western Isles (10%  $\pm$  7%), where the  $\pm$  figures indicate the margins of error. Possible explanations as to why Grampian reported the highest incidence can be found in the Discussion section.

<sup>3</sup> People from Scotland understand the term 'highland descent' to mean being of Highland and/or Western Isles descent.

Male

Female

Area of residence (e.g. South Uist, Stirling, etc.) .....

- 1 Are you of Highland descent?    Yes     No     Not sure
- 2 Have you ever had a second sight experience?    Yes     No     Not sure
- 3 Have others in your family had second sight experiences?    Yes     No     Not sure

If so, how many? (e.g. 2, or 7, etc.) .....

How many of these are related to you through blood? .....

- 4 Have you personally known other people (apart from relatives) who have had second sight experiences?    Yes     No     Not sure
- If so, roughly how many? .....

Optional - If you wish to provide details of any such experiences, please enclose them on a separate sheet.

Figure 2. Survey Questionnaire Items.

from my fieldwork relating to the ability to have prophetic visions (e.g. seeing someone covered in a death shroud, or seeing a funeral procession at night before the death of a person, or an accident before it occurs), clairvoyance (e.g. locating lost, drowned or injured people) or crisis telepathy (e.g. knowing that someone has been hurt or is seriously ill, even though they are many miles away).

To encourage a response, the questionnaire was short and designed to be anonymous, though people were invited to send me examples of their experiences if they so wished. It was emphasized that even if they had had no experiences it was still important to respond.

OBJECTIVES OF SURVEY

The survey addressed the following questions:—

- 1 What is the frequency of people reporting second sight in the Western Isles, Highland, Grampian and Lowland regions? Will the frequency of reported second sight be higher in the Highlands and the Western Isles than in the other regions?

Table 2

## Response rates for each region

| Region        | Surveys Sent Out | Surveys Returned | % Return rate |
|---------------|------------------|------------------|---------------|
| Western Isles | 205              | 79               | 39%           |
| Highlands     | 103              | 50               | 49%           |
| Grampian      | 102              | 36               | 35%           |
| Lowlands      | 205              | 75               | 37%           |
| Whole Sample  | 615              | 241              | 39%           |

Table 3

## Frequency of reported second sight for each region with the margin of error associated with the 95% confidence interval

| Region        | Surveys Returned | Number Reporting Second Sight | % Second Sight Frequency | Margin of Error |
|---------------|------------------|-------------------------------|--------------------------|-----------------|
| Western Isles | 79               | 8                             | 10%                      | ±7%             |
| Highlands     | 50               | 8                             | 16%                      | ±10%            |
| Grampian      | 36               | 12                            | 33%                      | ±15%            |
| Lowlands      | 75               | 12                            | 16%                      | ±8%             |
| Whole Sample  | 241              | 40                            | 17%                      |                 |

## Personal Second Sight and Highland Descent

Traditionally, it is believed that people of highland descent are more likely to report second sight. Interestingly, as shown in Table 4, people who are of highland descent living in the Western Isles, Highlands and Grampian regions are not significantly more likely to report having second sight themselves than people who are not of highland descent. However, this was not the case for the Lowlands, where there is a significant relationship between highland descent and reported personal second sight ( $p = 0.006$ ). The effect size,  $\phi$ , is 0.35.

## Personal Second Sight and Gender

From Table 5, there does not seem to be a significant difference between the proportions of males and females reporting second sight in the Western

Table 4

## Summary of the data on reported personal second sight broken down by highland descent by region

The second and third columns show the percentage of people reporting second sight in that group. The fourth column gives the significance levels of the associated 2 x 2 tables, obtained using the Fisher exact test. The effect sizes  $\phi$  are given in the fifth column.

| Region        | Highland Descent  |                   | p value | $\phi$ |
|---------------|-------------------|-------------------|---------|--------|
|               | Yes               | No                |         |        |
| Western Isles | 9% (6 out of 70)  | 22% (2 out of 9)  | .22     | 0.14   |
| Highlands     | 15% (4 out of 27) | 17% (4 out of 23) | 1.00    | 0.04   |
| Grampian      | 50% (5 out of 10) | 27% (7 out of 26) | .25     | 0.22   |
| Lowlands      | 39% (7 out of 18) | 9% (5 out of 57)  | .006    | 0.35   |

Table 5

Summary of the data on reported personal second sight broken down by gender by region. The layout of the table is similar to that of Table 4. The significance levels of the associated 2 x 2 tables were derived using the Fisher exact test where feasible and the chi-square test otherwise (indicated by \*). The effect sizes  $\phi$  are also given.

| Region        | Gender            |                    | p value | $\phi$ |
|---------------|-------------------|--------------------|---------|--------|
|               | Male              | Female             |         |        |
| Western Isles | 12% (5 out of 43) | 9% (3 out of 34)   | 1.00    | 0.05   |
| Highlands     | 6% (1 out of 16)  | 19% (6 out of 31)  | .40     | 0.17   |
| Grampian      | 29% (5 out of 17) | 37% (7 out of 19)  | .91*    | 0.08   |
| Lowlands      | 3% (1 out of 34)  | 27% (11 out of 41) | .013*   | 0.32   |

Isles, Highland and Grampian regions. However, this was not true for the Lowlands, where a significantly higher number of females than males report second sight ( $p = 0.013$ ). The effect size,  $\phi$ , is 0.32.

## Personal Second Sight and Knowing Other People with Second Sight

As shown in Table 6, people are more likely to know people other than relatives with reported second sight if they also report having second sight. This was true for the following regions: Western Isles ( $p = 0.0002$ ), Highland

( $p = 0.0085$ ) and Grampian ( $p = 0.0001$ ). The effect size,  $\phi$ , ranges from medium to high. However, no such relationship was found in the Lowlands.

Table 6

Summary of the data on reported personal second sight broken down by knowing others with second sight (apart from relatives) by region

The layout of the table is similar to that of Table 4. The significance levels of the associated 2 x 2 tables were derived using the Fisher exact test. The effect sizes  $\phi$  are also given.

| Region        | Others With Second Sight |                   | p value | $\phi$ |
|---------------|--------------------------|-------------------|---------|--------|
|               | Yes                      | No                |         |        |
| Western Isles | 35% (7 out of 20)        | 2% (1 out of 59)  | .0002   | 0.48   |
| Highlands     | 45% (5 out of 11)        | 8% (3 out of 39)  | .0085   | 0.43   |
| Grampian      | 82% (9 out of 11)        | 12% (3 out of 25) | .0001   | 0.68   |
| Lowlands      | 31% (4 out of 13)        | 13% (8 out of 62) | .20     | 0.18   |

Table 7

Summary of the data on reported personal second sight broken down by reporting family members with second sight and by region

The layout of the table is similar to that of Table 4. The significance levels of the associated 2 x 2 tables were derived using the Fisher exact test. The effect sizes  $\phi$  are also given.

| Region        | Family Members With Second Sight |                   | p value | $\phi$ |
|---------------|----------------------------------|-------------------|---------|--------|
|               | Yes                              | No                |         |        |
| Western Isles | 54% (7 out of 13)                | 2% (1 out of 66)  | <.0001  | 0.64   |
| Highlands     | 40% (4 out of 10)                | 10% (4 out of 40) | .041    | 0.33   |
| Grampian      | 86% (6 out of 7)                 | 21% (6 out of 29) | .0027   | 0.55   |
| Lowlands      | 50% (7 out of 14)                | 8% (5 out of 61)  | .0008   | 0.44   |

Personal Second Sight and Family Members with Second Sight

The data in Table 7 strongly support the claim that second sight runs in families. People who report family members as having second sight are significantly more likely to report having second sight themselves. This was observed for all the regions sampled: Western Isles ( $p < 0.0001$ ), Highland ( $p = 0.041$ ), Grampian ( $p = 0.0027$ ) and the Lowlands ( $p = 0.0008$ ). The effect size,  $\phi$ , ranges from medium to large.

Table 8

Summary of the data on reported personal second sight broken down by reporting relatives by blood with second sight for each region

The layout of the table is similar to that of Table 4. The significance levels of the associated 2 x 2 tables were derived using the Fisher exact test. The effect sizes  $\phi$  are given.

| Region        | Blood Relatives With Second Sight |                   | p value | $\phi$ |
|---------------|-----------------------------------|-------------------|---------|--------|
|               | Yes                               | No                |         |        |
| Western Isles | 54% (7 out of 13)                 | 2% (1 out of 66)  | <.0001  | 0.64   |
| Highlands     | 40% (4 out of 10)                 | 10% (4 out of 40) | .041    | 0.33   |
| Grampian      | 100% (6 out of 6)                 | 20% (6 out of 30) | .0005   | 0.63   |
| Lowlands      | 58% (7 out of 12)                 | 8% (5 out of 63)  | .0002   | 0.50   |

Personal Second Sight and Blood Relations with Second Sight

Table 8 shows that the trends found in Table 7 for general families still hold when the relatives are restricted to blood relations. This was true for all the regions sampled: Western Isles ( $p < 0.0001$ ), Highland ( $p = 0.041$ ), Grampian ( $p = 0.0005$ ) and the Lowlands ( $p = 0.0002$ ). Again, the effect size,  $\phi$ , ranges from medium to large.

Regional Differences: Profiles Affecting Second Sight

To summarize, a common finding for all the regions was that people reporting second-sight experiences were significantly more likely than people without second sight to report having family members with second sight, and these family members were related by blood. In the Western Isles, Highland and Grampian, people who knew others with reported second sight were significantly more likely to report second sight themselves than people who did not know others with second sight.

Table 9

Summary of key variables influencing second sight from Tables 4-8

sig. indicates a significant relationship ( $p < 0.05$ ) with second sight; n.s. indicates a non-significant relationship.

|           | Highland | Gender | Blood Relatives | Knowing Others |
|-----------|----------|--------|-----------------|----------------|
| Descent   |          |        | With SS         | With SS        |
| WI, H & G | n.s.     | n.s.   | sig.            | sig.           |
| Lowlands  | sig.     | sig.   | sig.            | n.s.           |

In the Lowlands, a different picture emerges. Knowing others who report second sight does not seem to be a significant factor with those who report second sight. The important factors, besides reporting blood relatives with second sight, are highland descent and gender. Therefore the Lowlands are different from the Western Isles, Highland and Grampian regions (WI, H & G), which show a different set of key variables, as illustrated in Table 9.

Are there any interactions between these key variables that would shed light on why the Lowlands appears to be distinct? Loglinear analysis is a method for searching for such interactions between variables. A Logit model, a special form of Loglinear analysis, using the 'risk' of personal second sight, was applied in the current work.<sup>4</sup> Interactions between highland descent, gender, knowing others reported to have second sight and blood relatives reported to have second sight were examined in their relationship to people reporting personal second sight.

The Lowlands were modelled separately from the other regions since the picture there was so clearly different. Modelling the three regions, Western Isles, Highland and Grampian, together showed up three important elements:—

1 There is a higher incidence of second sight reported in the Grampian region.  
2 There is a higher level of second sight reported by people who know others reported to have second sight.

3 There is a higher level of second sight reported by people who have blood relatives reported to have second sight.

None of the factors seemed to interact with any other. Highland descent did not seem to have any effect on reported personal second sight in these regions. As shown in Table 8, the percentage of people reporting second sight was significantly greater for those claiming blood relations with second sight in the Western Isles, Highland and Grampian regions. Table 10 shows that this

Table 10

*Summary of the data on reported personal second sight broken down by reporting blood relations with second sight and highland descent*

The percentages give the proportion of people reporting personal second sight in the Western Isles, Highland, Grampian and Lowland regions. The significance levels were based on the Fisher exact test.

| Region    | Highland Descent               |    | Not Highland Descent           |     | <i>p</i> value |
|-----------|--------------------------------|----|--------------------------------|-----|----------------|
|           | <i>Blood Relatives with SS</i> |    | <i>Blood Relatives with SS</i> |     |                |
|           | Yes                            | No | Yes                            | No  |                |
| WI, H & G | 47%                            | 7% | 80%                            | 10% | <.0001         |
| Lowlands  | 100%                           | 8% | 17%                            | 8%  | .44            |

<sup>4</sup> Analyses done by Frances Provan, Edinburgh University Computing Service.

is true whether they had highland descent or not. Thus in these regions there is no interaction between having blood relatives with reported second sight or being of highland descent affecting the reporting of personal second sight.

For the Lowlands, these elements emerged as important:—

1 Having blood relations with reported second sight and highland descent together make the reporting of personal second sight more likely.  
2 Women in the Lowland sample were more likely to report second sight than men.

As shown in Table 8, the percentage of people reporting second sight was significantly greater for people claiming to have blood relatives with second sight. Table 10 shows that this is especially true if they are of highland descent. Thus, in the Lowlands, there is an interaction between having blood relatives with reported second sight and being of highland descent affecting the reporting of personal second sight. Both variables, highland descent and blood relatives with reported second sight, seem to increase the chance of reporting personal second sight. A possible explanation for this finding is discussed in the next section.

#### DISCUSSION

From my fieldwork experience, my concern was that a survey approach on such a sensitive subject as second sight might appear too impersonal and people would not respond to such a survey. This proved not to be the case. People did take part. Although it was optional for people to send me accounts of their second-sight experiences, I received sixteen letters, seven from people who described mostly their family members' experiences; the remainder were accounts of either their own psychic experiences or those of friends or acquaintances. Also, I received additional letters from people wanting to be contacted further and also referring me to other people. I am grateful to all the people who returned the survey and to those who also sent me accounts of their experiences.

Because this is the first representative survey on reported second sight in Scotland, comparisons with other surveys on second sight cannot be made. When appropriate I shall contrast my findings with representative surveys of reported psychic experiences in other countries.

The frequency of reported second sight ranged from 10% to 16% for the Western Isles, Highland and Lowland areas, while Grampian reported the highest incidence at 39% ± 15%. As the sample size in Grampian was smaller than in the other regions, it is possible that the high incidence figure may reflect a sample unrepresentative of the Grampian population. A further explanation for the apparently higher incidence in Grampian may be found in the letters which some people sent me about their experiences. When examining the four such letters, I noticed that they did not describe second-sight experiences but psychic experiences (e.g. a precognitive dream, attending a séance, etc.). Therefore a higher number of psychic experiences as well as second-sight experiences might account for the unusually high incidence of 'second sight' being reported in the Grampian region. This contrasts with the letters from people living in the Western Isles and Highland regions: out of the ten such letters, seven gave examples of classical second-sight experiences (i.e.

funeral processions, precognitive visions of death). Lastly, as pointed out by Fernandez (1993), since the survey used a political definition of Regional boundaries, it is possible that some people who are culturally 'Highland' may indeed reside outside Highland Region. So the Grampian region may have included areas that are considered culturally highland, thus generating a higher incidence of second sight than would be found in a 'genuine' Grampian sample if one assumes that people who are culturally 'Highland' are more likely to have second sight. However, such a phenomenon seems unlikely to be solely responsible for elevating Grampian's frequency *above* that found in the Highland region. Possibly this factor in combination with people's including a wider range of psi experiences may account for Grampian's elevated frequency of reported second sight.

Possibly the lower frequency of reported second sight in the Western Isles could be attributed to the different religious attitudes towards second sight. Unfortunately, this survey did not address this. However, it will be looked at in greater detail in a more extensive questionnaire on second sight (Cohn, in preparation).

Haraldsson (1985) provides interesting cross-cultural data of the percentages of people reporting different types of psychic experiences, from surveys done in Iceland, Great Britain, Sweden and the U.S.A. The percentages of people reporting second sight in the Western Isles (10%), Highlands (16%) and Lothian regions (17%) in the current survey were smaller than the percentages of people reporting psychic experiences such as telepathy (29%) and psychic dreams (26%) in Great Britain as reported by Haraldsson. This trend was also true for the other countries. Haraldsson (1985; 1991) presents cross-cultural data from the European Human Values Survey, which gives the percentages of people reporting psychic experiences such as telepathy, clairvoyance and contact with the dead from most countries in Western Europe and the U.S.A. Here again we see a similar trend: the reported incidence of Scottish second sight is smaller than that for psychic experiences such as telepathy (36%) and contact with the dead (26%) in Great Britain, though not clairvoyance (14%).

Interestingly, when comparing the incidence of reported Scottish second sight with that of reported second-sight-like experiences in the Icelandic and Swedish surveys—apparitions of a living person (11%) and precognitive visions in a waking state (18%) respectively—reported by Haraldsson (1985), we can observe that the percentages are similar. Thus reported second-sight experiences may be rarer than other types of reported psychic experiences.

For all the regions sampled in this survey, people who reported having personal second sight tended also to report having blood relatives with second sight. At the present, there are no other surveys either at a community or a national level that have looked at whether reported psychic experiences run to second-sight experiences or whether it is true for other types of psychic experiences as well.

The pattern of additional variables associated with reporting personal second sight suggests that there are differences between the Lowlands and the Western Isles, Highland and Grampian regions. For the Lowlands, the additional variables were gender and highland descent. Whereas for the other regions

knowing others reported to have second sight was the only additional single factor in reporting personal second sight.

A possible reason is that both cultural and genetic factors may contribute to people's reporting personal second sight. For people living in the Western Isles, Highland and Grampian regions, which are predominantly rural areas, being of highland descent may not be as important as living in a close-knit community where there is an awareness and acceptance of second sight. Hence, as the survey has shown, people reporting second sight living in these regions significantly know other people who report second sight. They also significantly report having blood relatives with second sight.

The majority of people in the Lothian region—which I have used as being representative of the Lowlands—live in the area of Edinburgh, a cosmopolitan city where they are less likely to live in a close-knit community. While people in my Lowland sample may know others who report second sight, this does not appear to be a significant factor to their reporting personal second sight. What is important is being female, being of highland descent and having blood relatives reported to have second sight. The Lowlands are more removed from a cultural tradition of second sight than the other areas. Thus they may have interpreted second sight in a broader sense, which may have included other types of psychic experiences. The two letters from people describing their experiences seem to support this view. Regarding the gender difference, it might be attributable to a slight reporting bias towards women. Haraldsson (1991), when comparing data from the U.S.A. and countries in Western Europe, with the exception of Holland, found more females than males reporting some psychic experiences.

Using a loglinear analysis, we found that there was a significant interaction in the Lowlands between reporting blood relatives with second sight and being of highland descent, with regard to the likelihood of reporting personal second sight. So, for the Lowlands, either being of highland descent or having blood relatives with reported second sight is on its own associated with reporting second sight; though when they are together there is a stronger association with reporting personal second sight. Why this should be so is not immediately apparent. There may be an interaction between cultural and genetic factors, though the survey cannot adequately test this hypothesis. Nevertheless, the survey provides the first quantitative evidence to support the traditional belief that second sight runs in families. This trend could be attributed to cultural factors, genetic factors, or a combination of the two. Current research is being done to examine family histories of reported second sight to see if there are any possible genetic inheritance patterns (Cohn, in preparation).

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such strong effect may have drowned out others. Some respondents' comments suggested that there may also be an association between being a 'goat' (and perhaps, in particular, being a 'goat' according to a sheep-goat question concerning belief that the participant can *personally* demonstrate ESP under the conditions of the experiment, a measure not used here) and using a guessing strategy in which the participant is merely concerned with generating a sequence of digits, rather than generating the right digits.

There was no evidence in the present study that guessing strategies or confidence-call criteria bear any relationship to ESP scoring, but the non-significant overall scoring, the lack of variation in participants' choice of most aspects of guessing strategy and the small number of participants using confidence calls prevented this study from providing a strong basis for observing any effects. The results of this study, although carried out with a population that may not be typical of most ESP studies, suggest that it will be necessary, in further research on the relationship of ESP performance to cognitive strategies and confidence-call criteria, to manipulate participants' cognitive strategies directly by means of instruction, and actively to encourage more introspection on the part of subjects in order to identify the characteristics of successful trials. It is surprising how seldom such methods have been explored in forced-choice studies: their potential for success should not continue to be overlooked.

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#### REFERENCES

- Baddeley, A. D. (1966) The capacity for generating information by randomization. *Quarterly Journal of Experimental Psychology* 18, 119-129.
- Budescu, D. V. (1987) A Markov model for generation of random binary sequences. *Journal of Experimental Psychology: Human Perception and Performance* 13, 25-39.
- Honorton, C. (1977) Psi and internal attention states. In Wolman, B. B. (ed.) *Handbook of Parapsychology*, 435-472. New York: Van Nostrand Reinhold.
- Honorton, C. and Ferrari, D. C. (1989) Meta-analysis of forced-choice precognition experiments. *JP* 53, 281-308.
- Milton, J. (1990) A survey of free-response judging practices. *JASPR* 84, 189-225.
- McCallam, E. and Honorton, C. (1973) Effects of feedback on discrimination between correct and incorrect ESP responses: a further replication and extension. *JASPR* 67, 77-85.
- RAND Corporation (1955) *A Million Random Digits and 100,000 Normal Deviates*. New York: Free Press.
- White, R. A. (1964) A comparison of old and new methods of response to targets in ESP experiments. *JASPR* 58, 21-56.

#### APPENDIX

##### COGNITIVE STRATEGY QUESTIONNAIRE

- (1) First, I'd like you to describe how you made your guesses. Did you use a particular 'mental strategy' or special way of thinking to help you make correct guesses? What else did you do? Imagine that you are giving me instructions about how to make guesses in exactly the same way that you did; please give me as full a description as you can. Attach extra sheets of paper if you wish.
- (2) Here are some specific questions about how you made your guesses. Please answer each one. There are no 'right' or 'wrong' answers to these questions; the idea is to get an accurate picture of how you personally went about making your guesses.
- (a) Did you make your guesses  
 ..... at a medium speed at which you paid brief but individual attention to each guess?  
 ..... fast enough so that you didn't have to think about each guess individually?  
 ..... slow enough that you thought carefully about each guess?
- (b) Roughly how much time did you take altogether on making all your guesses?  
 .....
- (c) Did you make your guesses all in one sitting or did you ever stop and take a break?  
 ..... I made all my guesses in one sitting  
 ..... I took one or more breaks
- (d) If you took one or more breaks, how many breaks did you take? .....  
 on average, how long were the breaks? .....
- (e) Which statement best describes the approach you took most of the time?  
 ..... I allowed guesses to come into my mind, rather than trying to produce them myself  
 ..... I actively tried to think of what guess to make, rather than waiting for guesses to occur to me
- (f) Did you  
 ..... try to concentrate fully on the ESP task while you were doing it?  
 ..... try to distract yourself from the ESP task while you were doing it?  
 ..... neither particularly concentrate nor distract yourself
- (g) Did you on the whole  
 ..... will yourself hard to make the correct guesses?  
 ..... make the guesses in a relaxed way?