Resources for Chapter 14

Examples of research using participant observation (p.331)


O'Reilly, C. C. (2006). From drifter to gap year tourist: Mainstreaming backpacker travel. *Annals of Tourism Research, 33*(4), 998-1017. doi:10.1016/j.annals.2006.04.002 Long-haul, long-term independent travel (backpacking) has become increasingly common over the last few decades. Based on interview and internet material and ethnographic field research using participant observation, this article considers where this growth in interest has come from, and how transformations in the perception of backpacking have taken place.
Stevens, C. A. (2006). Being healthy: Voices of adolescent women who are parenting. *Journal for Specialists in Pediatric Nursing, 11*(1), 28-40. The purpose of this ethnography was to explore how adolescent women who are parenting describe what 'being healthy' means to them and how they define their health needs. Traditional ethnographic methods of interviewing and participant observation were supplemented by 'photovoice' where participants represented their point of view by taking photographs.

Ussher, J., Kirstena, L., Butow, P., & Sandoval, M. (2006) What do cancer support groups provide which other supportive relationships do not? The experience of peer support groups for people with cancer. *Social Science and Medicine, 62*(10), 2565-2576. doi: 10.1016/j.socscimed.2005.10.034 This qualitative study examined the questions of what cancer support groups provide that other supportive relationships do not, and what the self-perceived consequences are of support group attendance. Nine representative Australian cancer peer support groups took part in participant observation and focus group interviews.
Examples of research using structured observation schedules (p.338)

Barnes, S. (2006). Space, choice and control, and quality of life in care settings for older people. *Environment and Behavior, 38*(5), 589-604. doi:10.1177/0013916505281578 This cross-sectional study aims to establish whether gradation of space and daytime location are associated with quality of life in care home residents. A well-validated and reliable observation schedule (Dementia Care Mapping) was used to measure the proportion of time residents spent in activity and their well-being or ill-being.


1 Draw up the ‘confusion matrix’ Suppose that the coding schedule has five different categories (A, B, C, D and E) and that there are 100 occasions when coding has taken place. With two observers, an agreement takes place when they both use the same code for the occasion. If they use different codes then that is a disagreement. The pattern of agreements and disagreements can be shown on a two-dimensional matrix (often referred to as a ‘confusion’ matrix).

<table>
<thead>
<tr>
<th>Observer one</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>B</td>
<td>2</td>
<td>21</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>0</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>D</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>E</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>21</td>
<td>19</td>
<td>27</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

Note that scores on the diagonal from top left to bottom right indicate agreement between the two observers; scores off this diagonal indicate their disagreement.

2 Calculate the proportion of agreement ($P_o$) This is given by

\[
\frac{\text{(number of agreements)}}{\text{(number of agreements + number of disagreements)}}
\]

which in this case is

\[
\frac{8+21+18+24+14}{100} = 0.85
\]

NB The index of agreement (or concordance) is simply this proportion expressed as a percentage (i.e. in this case, 85 per cent).
3 Calculate the proportion expected by chance \((P_c)\) Probability theory shows that if the probability of the first observer using, say, code A is \(P_{1A}\); and the probability of the second observer using the same code is \(P_{2A}\), then the probability of them both using the same code by chance is simply the product of these two separate probabilities (i.e. \(P_{1A} \times P_{2A}\) or 0.08 \(\times\) 0.12). Hence the total chance proportion for all five codes is

\[
P_c = (0.08 \times 0.12) + (0.24 \times 0.21) + (0.22 \times 0.19) + (0.30 \times 0.27) + (0.16 \times 0.21)
\]

\[
= 0.216.
\]

4 Calculate Cohen's Kappa \((K)\) This is given by the formula

\[
K = \frac{P_0 - P_c}{1 - P_c}
\]

In the example,

\[
K = \frac{0.850 - 0.262}{1 - 0.262} = 0.797
\]

The value of Kappa, while still quite high, is noticeably smaller than the uncorrected proportion of agreement.

There are ways of assessing the significance of Kappa (see Bakeman and Gottman, 1997). However, as with other statistics, statistical significance is not everything and, particularly with large samples, it is possible to achieve statistical significance with proportions which show little agreement between the observers. Fliess, Levin and Paik (2003) have suggested the following 'rules of thumb':

Kappa of 0.40 to 0.60: ‘fair’;
Kappa of 0.60 to 0.75: ‘good’;
Kappa of above 0.75: ‘excellent’. check

Note The software package ‘analyse-it’ includes a simple routine for calculating Kappa – see appendix A.
References
Annotated references to further reading for chapter 14 (p.345)

There is little overlap between the participant observation and structured observation literatures, and hence this further reading is presented in two sections.

**Structured observation**


Kerig, P. K., & Lindahl, K. M. (Eds.) (2001). *Family observational coding systems: Resources for systemic research*. Mahwah, NJ: Laurence Erlbaum. Comprehensive edited texts discussing the coding systems that have been developed, as well as the conceptual and methodological issues involved in systematic observational research with couples and families.


**Participant observation**


