STUDYING DIFFERENCES IN YOUTH GROUPS BY COMBINING STATISTICAL AND CASE-STUDY TECHNIQUES

by

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ABSTRACT

Where there are large differences in a population it is often useful to compare sub-groups in terms of factors which are known to influence the key variable under investigation. The key variable in this study was the decision to stay on or leave school at the senior secondary school level. In a longitudinal study of 494 students, Hemmings (1994) identified and demonstrated that 13 factors influence the decision to stay or leave. The standard scores on each of the measures of the 13 factors were compared for those who stayed and those who left. Complementary information was obtained through a series of case studies with a sub-sample (N=25). This procedure of comparing statistically the differences between sub-groups, and then exploring these differences in terms of a case-study analysis, proved to be fruitful and meaningful. In using this procedure the combination of statistical and case-study analyses avoided the pitfalls of relying solely on one method. This approach is commended to other researchers.

INTRODUCTION
This study began with an investigation of those factors which influenced students' decisions to stay on or leave school at the senior secondary school level. Measures of 13 factors were employed in a two year longitudinal study involving an initial sample of 494 students drawn from ten government secondary schools. Data were obtained through three questionnaires administered in Year 10 and early and late Year 11 respectively. A quantitative analysis was conducted to analyse these survey data. Both bivariate and multivariate statistical procedures were used and these results have been reported elsewhere (see e.g., Hemmings & Hill, 1995; Hemmings, Jin, & Low, 1996). By and large, the factors investigated were found to influence the decision to persist with or withdraw from senior secondary school studies. These factors are defined in Table 1 below.

Table 1 Definition of Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Age of the respondent at the date of Questionnaire #1</td>
</tr>
<tr>
<td>Gender</td>
<td>Male or female</td>
</tr>
<tr>
<td>Locus of Control</td>
<td>Perceived location of control over an individual's life</td>
</tr>
<tr>
<td>School Achievement</td>
<td>Statewide Year 10 Reference Test results in English, Science, and Mathematics</td>
</tr>
<tr>
<td>Family Background</td>
<td>Parental education and occupation level, parental supportiveness and financial security</td>
</tr>
<tr>
<td>Goal Commitment 1</td>
<td>Future aspirations and expectations</td>
</tr>
<tr>
<td>School Commitment 1</td>
<td>Schooling satisfaction, commitment to ideals and principles of the school</td>
</tr>
</tbody>
</table>
Academic Integration
Level to which the student perceives he/she fits into the academic programme and is developing intellectually

Social Integration
Degree of participation in non-academic activities in and out of school time

Needs Accommodation
Perception that academic and social needs are being met by the school

Expectation vs Reality
Extent to which a student's expectation of senior secondary schooling is being realised

Goal Commitment 2
Revision of Goal Commitment 1 at the end of Year 11

School Commitment 2
Revision of School Commitment 1 at the end of Year 11

In addition to the quantitative analyses, other information was gained through a series of interviews. Such an approach was adopted in order to complement, enrich, and illuminate the findings from an analysis of the questionnaire data. Cohen and Manion (1989) have argued that

strict reliance on one research method has the potential to distort the researcher's view and interpretation of the reality being explored. These authors further assert that

"... the use of contrasting methods considerably reduces the chances that any consistent findings are attributable to similarities of methods" (Cohen & Manion, 1989, p. 270).

Writers such as de Vaus (1985), Kember (1989a, 1989b), Lancy (1993), and Lenning (1982) have noted that qualitative methods can make a significant contribution to quantitative studies. One type of qualitative method, case-study interviewing, was used in this study because it can "... give the researcher insight into the meaning of behaviour and attitudes expressed in questionnaires ..." (de Vaus, 1985, p. 356), "... provide useful anecdotes or examples to illustrate more generalised statistical findings ..." (Isaac & Michael, 1985, p. 445), and "... contribute greatly to our view of the total picture ..." (Lenning, 1982, p. 335). The main purpose of this paper is to demonstrate the utility of combining both quantitative and qualitative procedures. The dual approach permitted a description of a student population and of
individuals within sub-groups of that population.

METHOD

A cohort of students from government secondary schools in metropolitan, provincial, and remote rural settings responded to three questionnaires designed to tap the 13 factors defined earlier. These survey data were analysed to describe secondary school stayers and leavers in simple statistical terms (viz., means and standard deviations). All students who left in the period between the administration of Questionnaires #1 and #3 constituted the leavers group, and those who completed Questionnaire #3 formed the stayers group.

From the students who completed Questionnaire #1, a subsample of 25 was chosen for interview at the end of Year 10. Interviewees were identified using the following two criteria:

(i) about equal numbers of males and females; and,

(ii) intending stayers, intending leavers, and students unsure of their schooling future.

Twelve months later a second interview was carried out with those students who remained at school. As a consequence of attrition, school transfer, and a decision not to be interviewed a second time, the number of interviewees decreased from 25 to 15. All the interviews were audio-taped and lasted approximately twenty minutes. The audio-tapes were later transcribed to permit further analysis. These analyses were undertaken in accord with the common qualitative research practice of keeping the number of emerging issues to a manageable and meaningful amount of categories. The techniques of axial and selective coding were used in this process. Axial coding extends open coding by reviewing and exploring preliminary concepts. The axis of key concepts is then highlighted and the connections between concepts are sought. Selective coding involves a 'selective' examination for cases that illustrate major themes. This occurs once the researcher has organised the overall analysis around several core concepts or generalisations (Neuman, 1991).

It needs noting that the two interview schedules used were concentrated on the factors investigated in the three surveys. However, these schedules were designed not merely to duplicate the questions forming the survey instruments, but to elucidate the reasons behind students' responses to those questions.

RESULTS

Table 2 presents the means and standard deviations for school stayers and school leavers on the 13 factors investigated by survey. An inspection of the results reveals that there is a different pattern of responses for those who stay on at high school and for those who leave high school prematurely. Ignoring the three initial factors, school stayers have positive means and school leavers have negative means. For example, on goal commitment 1 the school stayers have a mean of
0.337, whereas the school leavers have a mean of -0.608. The standard deviations for the school leavers tend to be higher than those of the school stayers. This is mainly a reflection of the relative numbers in each group.

Table 2  Means and Standard Deviations for School Stayers and Leavers on Thirteen Factors

<table>
<thead>
<tr>
<th>Factors</th>
<th>Source</th>
<th>Stayers</th>
<th></th>
<th></th>
<th>Leavers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mths)</td>
<td>a</td>
<td>494</td>
<td>190.231</td>
<td>4.555</td>
<td>96</td>
<td>191.241</td>
</tr>
<tr>
<td>Gen (F=0; M=1)</td>
<td>a</td>
<td>494</td>
<td>0.605</td>
<td>0.489</td>
<td>96</td>
<td>0.521</td>
</tr>
<tr>
<td>Loc of Cont</td>
<td>a</td>
<td>486</td>
<td>62.131</td>
<td>5.486</td>
<td>96</td>
<td>60.042</td>
</tr>
<tr>
<td>Sch Achieve</td>
<td>a</td>
<td>493</td>
<td>0.314</td>
<td>0.921</td>
<td>96</td>
<td>-0.541</td>
</tr>
<tr>
<td>Fam Bground</td>
<td>a</td>
<td>452</td>
<td>0.289</td>
<td>2.117</td>
<td>87</td>
<td>-0.611</td>
</tr>
<tr>
<td>Goal Comm 1</td>
<td>a</td>
<td>467</td>
<td>0.337</td>
<td>1.348</td>
<td>81</td>
<td>-0.608</td>
</tr>
<tr>
<td>Sch Comm 1</td>
<td>a</td>
<td>480</td>
<td>0.204</td>
<td>1.368</td>
<td>95</td>
<td>-0.232</td>
</tr>
<tr>
<td>Aca Integ</td>
<td>a</td>
<td>482</td>
<td>0.387</td>
<td>2.118</td>
<td>94</td>
<td>-0.717</td>
</tr>
<tr>
<td>Soc integ</td>
<td>a</td>
<td>484</td>
<td>0.271</td>
<td>1.973</td>
<td>95</td>
<td>-0.307</td>
</tr>
<tr>
<td>Needs Accom</td>
<td>b</td>
<td>492</td>
<td>0.045</td>
<td>0.969</td>
<td>70</td>
<td>-0.315</td>
</tr>
<tr>
<td>Exp vs Real</td>
<td>b</td>
<td>493</td>
<td>0.034</td>
<td>1.392</td>
<td>70</td>
<td>-0.202</td>
</tr>
<tr>
<td>Goal Comm 2</td>
<td>c</td>
<td>449</td>
<td>0.083</td>
<td>0.931</td>
<td>30</td>
<td>-1.266</td>
</tr>
<tr>
<td>Sch Commit 2</td>
<td>c</td>
<td>449</td>
<td>0.057</td>
<td>1.381</td>
<td>30</td>
<td>-0.892</td>
</tr>
</tbody>
</table>

a. Data obtained from Questionnaire #1, administered late Year 10
b. Data obtained from Questionnaire #2, administered early Year 11
c. Data obtained from Questionnaire #3, administered late Year 11

An analysis of the interview transcripts, using the coding techniques described previously, yielded two categories. Only one of these categories will be discussed in this paper, the other has been reported elsewhere (see Hemmings et al., 1996). The category which covered student decision-making dynamics across the Year 10 and Year 11 transition period and late Year 11 is now presented. This presentation will reveal how the relative importance of the various factors investigated changed during the two year study for selected interviewees.

From the data used to prepare Table 1, standard scores on each factor were calculated for individual interviewees. Case studies of three interviewees (a stayer, a student with an ambivalent attitude towards staying at school, and a school leaver) are introduced below. The case studies incorporate both interview data and quantitative comparisons of the individual interviewee with group means for stayers and leavers on relevant factors.

Case Study A: A Stayer (Interviewee 11)
Interviewee 11 planned to continue her studies to the end of Year 12. This student revealed through her initial interview the relationship among four factors (viz., goal commitment 1, school commitment 1, academic integration, and social integration).
Interviewer: Do you think you'd prefer to be in the workplace ... or you don't mind coming back to school?

Interviewee: No, I'd rather go back to school ... It was either I go on or I don't be what I want to be because I want to be a policewoman and you have to have Year 12 in NSW.

Interviewer: How important are your school friends to you?

Interviewee: Really important because most of them are my closest friends, so they are really important to me.

Interviewer: Imagine a friend has asked you what are the best features of this school. What would you say?

Interviewee: The teachers. They help you a lot ... you can go to them outside class lessons and they help you with whatever you ask for.

This portion of the interview transcript is related to goal commitment 1, school commitment 1, academic integration, and social integration. The standard scores obtained from an analysis of this student's Questionnaire #1 (completed in Year 10) with respect to the four identified factors, are compared with the means for school stayers and leavers; and are presented in Table 3 below.

Table 3 Standard Scores on Four Factors for School Stayers/Leavers and Interviewee 11 (Year 10)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stayers (Mean)</th>
<th>Leavers (Mean)</th>
<th>Interviewee No. 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal Commitment</td>
<td>10.238</td>
<td>-0.430</td>
<td>0.144</td>
</tr>
<tr>
<td>School Commitment</td>
<td>10.118</td>
<td>-0.134</td>
<td>0.537</td>
</tr>
<tr>
<td>Academic Integration</td>
<td>0.173</td>
<td>-0.320</td>
<td>0.538</td>
</tr>
<tr>
<td>Social Integration</td>
<td>0.135</td>
<td>-0.154</td>
<td>0.880</td>
</tr>
</tbody>
</table>

Although the standard scores for Interviewee 11 and the stayers group are not identical on the four factors, this student appears to fit the general pattern for stayers when both quantitative and qualitative results are combined. A second interview towards the end of Year 11 indicated a strong relationship among the accommodation of this student's needs by the high school, the student's increased commitment to future goals, the level of school commitment 2, and, ultimately, the decision to stay on at school.

Interviewee: ... You find in Year 8 and Year 9 you don't really get a lot from the teachers because I used to give them a hard time ... After
you get to the senior school in Year 11 and 12 you develop a relationship with them.

Interviewer: What are the best things about being at this school?

Interviewee: I think the teachers are really cool. They help you a lot; they don't have strict rules and regulations ... Everything it has and offers is really good.

Interviewer: How certain are you that you are going to return to school next year?

Interviewee: Very certain. I am really sure I am going to come back ... I have woken up a bit and I know I have to study to get a good mark in my HSC ... I will probably have less of a social life during the week; that's probably about all and work harder in class.

This section of the interview transcript gives an indication of the status of the factors: needs accommodation, goal commitment 2 and school commitment 2. Standard scores for Interviewee 11 on these factors are included in Table 4 below, together with respective mean standard scores for school stayers and leavers obtained from Questionnaire #2 and Questionnaire #3 administered during Year 11.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stayers Mean (0.045-0.315)</th>
<th>Leavers Mean (1.2660.215)</th>
<th>Interviewee Mean (1.611)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs Accommodation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal Commitment 2</td>
<td>0.083</td>
<td>-1.266</td>
<td>0.215</td>
</tr>
<tr>
<td>School Commitment 2</td>
<td>0.041</td>
<td>-0.631</td>
<td>0.406</td>
</tr>
</tbody>
</table>

The pattern of qualitative and quantitative data is consistent with the student being very positive about recent school experience and her intention to continue Year 12 study.

Case Study B: A Stayer or Leaver? (Interviewee 25)
This interviewee also stayed on at school. His first interview demonstrated the influence that family background and goal commitment 1 factors have on the academic integration and social integration factors during the late Year 10 point in time.

Interviewer: Are you going on to Year 11 next year?

Interviewee: Probably yes.
Interviewer: How certain are you?

Interviewee: Oh, more than say 70/30.

Interviewer: Why are you going on?

Interviewee: Further my education. We've got a caravan park at home so they said keep going, get the brains going for a couple more years.

This portion of the interview relates to the family background and goal commitment 1 factors. The standard scores on these two factors for Interviewee 25 are compared with the respective mean standard scores for school stayers and leavers, and are presented in Table 5 below.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stayers (Mean)</th>
<th>Leavers (Mean)</th>
<th>Interviewee No. 25</th>
<th>Interviewee 10 (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Background</td>
<td>0.129</td>
<td>-0.273</td>
<td>1.200</td>
<td>0.129</td>
</tr>
<tr>
<td>Goal Commitment 1</td>
<td>0.238</td>
<td>-0.430</td>
<td>-0.306</td>
<td>0.238</td>
</tr>
</tbody>
</table>

This student comes from a very supportive family, but, he had low goal commitment at the time of administering Questionnaire #1. By the end of the year, this student had changed his commitment, as revealed in his first interview.

Interviewer: Have you enjoyed school this year?

Interviewee: Pretty good.

Interviewer: What have you enjoyed the most?
Interviewee: Probably English and the class work.

Interviewer: Why's that?

Interviewee: I can relate to my teacher pretty good.

Interviewer: How have your friends influenced your plans for next year?

Interviewee: Well, most of them are coming back so that's another edge like if I come back I'll know there will be somebody there that I'm friends with.

This interview extract relates to two factors: academic integration and social integration. Standard scores on these two factors for this student, and for the school stayer and leaver groups in this study, are
reported below in Table 6.

Table 6 Standard Scores for School Stayers/Leavers and Interviewee 25 (Year 10) on Academic Integration and Social Integration

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stayers (Mean)</th>
<th>Leavers (Mean)</th>
<th>Interviewee No. 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Integ</td>
<td>0.173</td>
<td>-0.321</td>
<td>0.069</td>
</tr>
<tr>
<td>Social Integration</td>
<td>0.135</td>
<td>-0.154</td>
<td>0.317</td>
</tr>
</tbody>
</table>

The pattern revealed in both the interview extract above and the data in Table 6 is similar. The subsequent interview at the end of Year 11 revealed a relationship among needs accommodation, an increase in both the commitment to the school (school commitment 2) and to future goals (goal commitment 2), and an outweighing of expectations of senior studies by the reality of the senior school environment (expectation versus reality). These four factors had an important bearing on this student's decision to stay on at school.

Interviewer: Has it been difficult relating to the teachers now in the senior years?

Interviewee: There has been a change but I think it is a lot better now, you can easier communicate and sort of, it is a more friendly atmosphere among the seniors ... you have left your ratbag years behind now you have come back from Year 10 ...

Interviewer: What are the things you like most about being in Year 11?

Interviewee: All the bitching has gone out of the junior school, like you are on level peg with everybody ... the teachers are a lot more, sort of communicate with you a lot easier ... In the junior school you are watched upon a lot, in senior school you are not so restricted, there is a lot more freedom there but you still have to have your ground rules which is fair enough ... the atmosphere is really good ... it is not like a prison camp, it is a more relaxed atmosphere which is good ... I really think this school is number one.

Interviewer: What about your career? What are you thinking of doing?

Interviewee: ... I am trying to get a bit more of a business background because I would like to work for myself and become successful that way ... if you are going to work manually; get your fingers dirty ... you can drop out after Year 10 and go for it but you can only go so far, I want to go to the top ...
Interviewer: How certain are you that you are going to return to school next year?

Interviewee: I will be back. The HSC I would like to have that in my hands to say yes you have done, so that is sort of a big plus. No-one can take your schooling away from you when you have got so that is what I really want to have. I have got my Year 10 certificate that's pretty big but now I know there are further goals there I will go for them, so I will definitely be coming back.

The Year 11 passage reflects the factors: needs accommodation, expectation versus reality, goal commitment 2, and school commitment 2. Table 7 contrasts the standard score values for this student with those of school stayers and leavers in this study on the above-mentioned factors.

Table 7 Standard Scores on Four Factors for School Stayers/Leavers and Interviewee 25 (Year 11)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stayers (Mean)</th>
<th>Leavers (Mean)</th>
<th>Interviewee No. 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needs Accommodation</td>
<td>0.045</td>
<td>-0.315</td>
<td>-0.425</td>
</tr>
<tr>
<td>Expectation v Reality</td>
<td>0.024</td>
<td>-0.143</td>
<td>-0.306</td>
</tr>
<tr>
<td>Goal Commitment 2</td>
<td>0.083</td>
<td>1.266</td>
<td>0.381</td>
</tr>
<tr>
<td>School Commitment 2</td>
<td>0.041</td>
<td>-0.631</td>
<td>-1.057</td>
</tr>
</tbody>
</table>

Whilst this student was initially keen to pursue his secondary education he had some reservations. Early in Year 11 he was uncertain whether or not to remain on at school. He questioned his own commitment to school and the degree to which school addressed his needs. His second interview revealed that this was no longer true several months later when he was asked to review his responses to Questionnaires #2 and #3. It should be noted that this student was born with a major physical disability, and although able to engage successfully in some sporting activities, he began to realise that his future could not lie in manual activity. On becoming more satisfied with the senior school environment and the teachers' treatment of students; the strength of his desire to achieve future success; and, realising that completion of the HSC would be the means to this goal; the student's intention to stay on at school changed considerably. He resolved to pursue a career which required further study rather than work in the family business. Interviewee 25 thus displayed characteristics of school stayers and school leavers at different times.

Case Study C: A Leaver (Interviewee 7)
This interviewee was chosen mainly because he did not continue his senior school studies to Year 12. Unlike the previous two interviewees, this student voiced some concerns about further
schooling, particularly difficulties in coping with the demands of study (academic integration) and dissatisfaction with the performance of some of his teachers (school commitment 1/academic integration). Nevertheless, he saw senior school study as an opportunity to grow personally (goal commitment 1).

Interviewer: If you wanted to be a better student, what things would you need to change?

Interviewee: Need to study more I think. I find it hard to study.

Interviewer: Would that be difficult for you to change?

Interviewee: No, not really. I suppose if I put time into it.

Interviewer: Are you looking forward to next year?

Interviewee: Yes.

Interviewer: Why's that?

Interviewee: Just another step further on. It'll be good.
[goal commitment 1 and academic integration]

Interviewee: What about your teachers, have they influenced you in your decision [to return]?

Interviewee: Some, yes ... Some just come in class and teach you ... and say, 'Right, let's do some work', and that's it.

School commitment 1 and academic integration are the factors most closely aligned with the above interview material. This student's standard scores on these two variable sets are reported in Table 8. This table also presents the mean standard scores on the same factors for all students who stayed on at school or who left during the study.

Table 8: Standard Scores on School Commitment 1 and Academic Integration for School Stayers/Leavers and Interviewee 7 (Year 10)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stayers</th>
<th>Leavers</th>
<th>Interviewee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Mean)</td>
<td>(Mean)</td>
<td>No. 7</td>
</tr>
<tr>
<td>School Commitment</td>
<td>10.118</td>
<td>-0.134</td>
<td>-0.945</td>
</tr>
<tr>
<td>Academic Integration</td>
<td>0.173</td>
<td>-0.321</td>
<td>-0.044</td>
</tr>
</tbody>
</table>

The student's interview responses and standard scores in Table 8 are consistent with the common pattern for school leavers. He showed low commitment to high school and was not integrating well into the
academic aspects of his school life. Despite anticipation that senior school study would be rewarding, the student revealed in his second interview that the reality of Year 11 study did not fully meet his expectations (expectation versus reality) and his motivation and commitment to school (school commitment 2) decreased. Moreover, his commitment to a career which did not require a Year 12 credential remained (goal commitment 2), and consequently, led to a decision to withdraw from school at the end of Year 11.

Interviewee: It was pretty easy at the start but it has sort of changed a bit now ... like assessment tasks and that being put on you ... last year they sort of let you talk and that but this time they sort of crack down and make it more harder, stricter ... too possessive with their uniform. You can even lose your whole school career over it by wearing black and white socks or something. They come down really bad on you.

Interviewer: Have the subjects been motivating?

Interviewee: Yes, some of them ... You learn things about life. I don't like doing all these weird maths and not use it. It puts a lot of stress on you.

Interviewer: Has part-time work or other activities outside school affected your performance in Year 11?

Interviewee: Sometimes. Instead of study you go for a surf or something, on a Sunday if it is a nice day.

Interviewer: What career do you think you will follow through? What are you going to take up as a career? You mentioned signwriting ...

Interviewee: Yes, and they will take me after Year 11 ...

Interviewer: If this hadn't come up, would you have gone onto Year 12 next year?

Interviewee: Yes.

Interviewer: And what do you think you would have done then? Did you have a job and career in mind?

Interviewee: No, I would probably have went for the same sort of thing or spray painting or panel beating job or something.

This first part of this interview extract relates to expectation versus reality and school commitment 2; and the second portion to goal
commitment 2. The mean standard scores on these three factors for school stayers and leavers in this study are presented below in Table 9 and are contrasted with the respective standard scores for Interviewee 7.

Table 9 Standard Scores on Three Factors for School Stayers/Leavers and Interviewee 7 (Year 11)

<table>
<thead>
<tr>
<th>Factors</th>
<th>Stayers (Mean)</th>
<th>Leavers (Mean)</th>
<th>Interviewee No. 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expectation v Reality</td>
<td>0.024</td>
<td>-0.143</td>
<td>0.456</td>
</tr>
<tr>
<td>School Commitment 2</td>
<td>0.041</td>
<td>-0.631</td>
<td>-1.175</td>
</tr>
<tr>
<td>Goal Commitment 2</td>
<td>0.083</td>
<td>-1.266</td>
<td>-1.204</td>
</tr>
</tbody>
</table>

The situation revealed by the second interview and the results in Table 9 are consistent in terms of school commitment 2 and goal commitment 2. However, the standard score for expectation versus reality is positive rather than negative as would be expected for a school leaver. Early in the year he perceived that his needs were being met but by the time the interview was held this was no longer the case.

CONCLUSION

In general, statistical analyses can be applied to populations but are difficult to apply to any individual. On the other hand, interview data from individuals are difficult to generalise to groups. The combination of quantitative and qualitative methods used in this study proved to be powerful in highlighting the differences between groups and relating these differences to particular individuals. The researchers commend the combined approaches adopted in this study to others who are concerned with investigating factors which link to groups and individuals.

REFERENCES


1. Data are assigned codes for the purpose of collapsing data into categories and identifying preliminary concepts (Sarantakos, 1993).