

Chapter 5: Results

This chapter presents the results from the research methods developed for this programme in Chapter 4.

5.1 Survey Validity

Table 5.1 compares the South Bank results with their managers assessment. Reasonable correlation is seen for all the factors, except:-

Possible to get thing done (personally) in School
Cooperation/working together in School

These appear to be over estimations from the managers perspective, and so have been followed up with the manager concerned. The questionnaire questions contributing to these results are in some ways the most straight forward/ least likely to be miss interpreted, but further analysis to their sensitivity /discrimination was considered. In the light of this, changes were made to the contributing questions:-

Possible to get thing done (personally) in School (questions 5 & 9)
Cooperation/working together in School (questions 4, 17 & 21)

where the underlined questions are different to those used to summarize the data to the PMC (Appendix A5). These changes are incorporated into the following tables (5.1 and 5.2) and are displayed in full in Appendix A9.

Incorporating these modifications gives rise to the 'cooperation' score increasing to 0.55 (closer to the managers assessment), though the 'possible to get things done' score remains unaffected. Following up the discrepancies between the scores and the manager's assessment, found that the manager was happy with this assessment (i.e., 'things do get done in the department'). Talking this up with his staff, showed a different attitude i.e., 'things do get done', but 'its so hard to get there', and 'its like climbing a mountain'. This perspective leaves the scores appearing to give a true reflection of the situation.

A comparison of the results from South Bank and the department are shown in table 5.2. What would be expected is that the South Bank results should show greater readiness for change, as this department has experienced a change programme over the last three years. The results tend to confirm this as the results show South Bank are more positive in the majority of factors.

From these considerations, it is felt in summary, that the survey results reflect the issues being investigated.

5.2 Survey Results

Section 4.3 discusses how the replies received prior to the Awayday can be used as a baseline for investigating the effect of the Awayday. The results from the issues identified in section 4.3 are compared in table 5.3 (further information on the group composition is to be found in table 4.2).

<i>Issue</i>	South Bank	Manager assessment	Percentage difference
Personal readiness for change	0.8	1.0	5%
Personal motivation (allowing for change)	0.0	1.0	25%
<i>Properly rewarded (in some form) & supported</i>	<i>-0.1</i>	<i>1.0</i>	<i>28%</i>
<i>Feel involved in School</i>	<i>0.1</i>	<i>1.0</i>	<i>23%</i>
School's capacity for change	0.1	1.0	23%
<i>Possible to get thing done (personally) in School</i>	<i>-0.04/ (0.0)</i>	<i>2.0</i>	<i>50%</i>
<i>Within Faculty context</i>	<i>0.1</i>	<i>1.0</i>	<i>23%</i>
<i>Cooperation/working together in School</i>	<i>0.55/ (0.0)</i>	<i>2.0</i>	<i>36%/ (50%)</i>
<i>Communication within School</i>	<i>-0.4</i>	<i>-1.0</i>	<i>-15%</i>
<i>Awayday effectiveness</i>	<i>0.5</i>	<i>1.0</i>	<i>13%</i>
<i>Leadership in School</i>	<i>0.4</i>	<i>1.0</i>	<i>15%</i>
<i>Reported stress level</i>	<i>-1.2</i>	<i>-2.0</i>	<i>-20%</i>

Table 5.1: Comparison of South Bank data (scale: +2=very positive to -2= very negative) with the managers assessment (data in brackets is that unmodified by altering the contributory questions - see text).

As can be seen, a very positive trend emerges as a result of the Awayday. What is of concern is the underlying data values suggesting that for most issues a null or slightly negative attitude still remains. Large standard deviations are also indicative of a wide range of attitudes within the staff body. To briefly investigate whether certain individuals had strong attitudes (e.g., indicative of strong resistance to change etc.), the post Awayday data was briefly analysed for individuals. Table 5.4 shows staff attitudes. Interestingly some staff have low motivation but high readiness for change and vice versa (see table 5.5). This has potential for further research (see section 5.7).

<i>Issue</i>	South Bank	Dept. score	Percentage difference
Personal readiness for change	0.8	1.00	-5%
Personal motivation (allowing for change)	0.0	-0.31	8%
<i>Properly rewarded (in some form) & supported</i>	<i>-0.1</i>	<i>-0.40</i>	8%
<i>Feel involved in School</i>	<i>0.1</i>	<i>-0.09</i>	5%
School's capacity for change	0.1	-0.19	7%
<i>Possible to get thing done (personally) in School</i>	<i>0.0</i>	<i>-0.13</i>	3%
<i>Within Faculty context</i>	<i>0.1</i>	<i>-0.40</i>	13%
<i>Cooperation/working together in School</i>	<i>0.55</i>	<i>0.02</i>	13%
<i>Communication within School</i>	<i>-0.4</i>	<i>-0.58</i>	5%
<i>Awayday effectiveness</i>	<i>0.5</i>	<i>0.22</i>	7%
<i>Leadership in School</i>	<i>0.4</i>	<i>0.19</i>	5%
<i>Reported stress level</i>	<i>-1.2</i>	<i>-1.00</i>	-5%

Table 5.2: Comparison of data (scale: +2=very positive to -2= very negative) between South Bank and the department (all post Awayday replies).

5.2.1 Comparison of Questionnaire with International Engineering

As mentioned in section 4.4, the questionnaire design was strongly influenced by Carnall (1990). Carnall published the average results he gathered from International Engineering. Since some of the questions used were the same as in the department questionnaire, a comparison with the results from the department would be of interest. Figure 5.6 shows the attitude scales used in both questionnaire and the appropriate mapping. To convert the Carnall scores to those of the department, the following expression was used:-

$$\text{Department score} = (4 - \text{Carnall score}) / 1.5$$

The immediate notable difference between the organisations is that all the International Engineering statements are answered positively (or only very slightly

negative), where as many of the department statements are negative. Table 5.7 compares the results of the questions that are similarly worded. Large discrepancies are shown with reward, co-operation and working with other departments. These results are also born out by an interview with an academic who has recently moved from industry (i.e., as part of the focus group process). Though the organisations are not directly comparable i.e. International Engineering’s average scores are from ninety-two managers, whereas the departments average score (Awayday attendees) is from academics and administrative or technical managers, the difference is dramatic and of concern. International Engineering identified ‘management leadership’ as an area of weakness (i.e. questions 6 and 30) where the questions were only answered slightly positively (i.e. slightly greater than zero). On this scale, all areas are of concern in the department (but lie outside the immediate scope of this project)!

<i>Issue</i>	Group 2	Group 3	Data (All)	Av. S.Dev.
Personal readiness for change	-1%	7%	1.00	0.81
Personal motivation (allowing for change)	11%	8%	-0.31	1.07
<i>Properly rewarded (in some form) & supported</i>	<i>11%</i>	<i>-11%</i>	<i>-0.40</i>	<i>1.17</i>
<i>Feel involved in School</i>	<i>10%</i>	<i>20%</i>	<i>-0.09</i>	<i>1.05</i>
School's capacity for change	16%	19%	-0.19	0.95
<i>Possible to get thing done (personally) in School</i>	<i>1%</i>	<i>0%</i>	<i>-0.13</i>	<i>0.94</i>
<i>Within Faculty context</i>	<i>15%</i>	<i>14%</i>	<i>-0.40</i>	<i>1.11</i>
<i>Cooperation/working together in School</i>	<i>15%</i>	<i>24%</i>	<i>0.02</i>	<i>1.03</i>
<i>Communication within School</i>	<i>13%</i>	<i>23%</i>	<i>-0.58</i>	<i>1.20</i>
<i>Awayday effectiveness</i>	<i>55%</i>	<i>60%</i>	<i>0.22</i>	<i>0.63</i>
<i>Leadership in School</i>	<i>26%</i>	<i>15%</i>	<i>0.19</i>	<i>1.07</i>
<i>Reported stress level</i>	<i>46%</i>	<i>21%</i>	<i>-1.00</i>	<i>1.26</i>

Table 5.3: Showing the percentage positive improvement over the pre Awayday (Group 1) respondents, the actual data (all post Awayday replies), and the average standard deviation of the data.

Personal motivation	Personal readiness for change	School's capacity for change
-1.00	0.50	-0.56
-0.89	1.75	-0.89
-0.89	0.75	-0.56
-0.78	1.00	-0.67
-0.78	0.75	-0.56
-0.56	1.75	-0.44
-0.44	0.75	-0.67
-0.44	1.00	-0.11
-0.22	1.50	0.22
-0.11	0.50	0.00
-0.11	1.00	0.00
-0.11	1.00	0.11
0.11	1.25	0.00
0.22	1.00	0.11
0.33	0.75	0.11
0.67	0.75	0.78

Table 5.4: Respondent data from all post Awayday replies (sorted by motivation), showing the variation in individuals attitudes.

High Motivation/low readiness =1	High Motivation & high Readiness =0
Low motivation & low readiness =3	Low motivation & high readiness =3

Table 5.5: Comparing Personal Motivation and Personal Readiness for Change factors for all Awayday replies (Scale:- motivation: high > 0.5, low < -0.6; readiness: high ≥ 1.0, low ≤ 0.5).

Department Scale		Carnall Scale	
Definitely agree	2	1	Agree strongly
		1.5	
		2	Agree
Agree with reservations	1	2.5	
		3	Agree slightly
		3.5	
Doesn't apply to you, or you find it impossible to give a definitive answer	0	4	Neutral
		4.5	
		5	Disagree slightly
Disagree with reservations	-1	5.5	
		6	Disagree
		6.5	
Definitely disagree	-2	7	Disagree strongly

Table 5.6: A comparison of the Department and Carnall Attitude Scales.

5.3 Readiness Analysis and Development

As the Armenakis, Harris, Mossholder model (section 3.2) appears substantive, it was decided to see what could be learnt from the author's organisational situation. To aid identification of the areas that need attention, a table was constructed where the model's factors are assessed in terms of readiness (see Table 5.8).

Department Question {International Engineering Question}	Average Awayday Department score	International Engineering Average Score	Relative percentage difference
Q.21 My immediate boss is helpful and supportive {Q.5 My immediate boss has ideas that are helpful to me and my work group Q.6 My immediate boss is supportive and helps me in my work}	0.7	0.73 0.15	1% 14%
Q.15 I am rewarded properly (financially) for my work {Q.12 The salary that I receive is commensurate with the job that I perform}	-0.8	1.31	53%
Q.17 In the School, we co-operate effectively to get things done {Q.27 We co-operate effectively in order to get things done}	-1.0	0.33	33%
Q.16 I am rewarded properly (recognition) for my work {Q.28 Encouragement and recognition is given for all jobs and tasks in this organisation}	-1.0	0.99	50%
Q.22 We work together well with other schools in the Faculty {Q.29 Departments work well together to achieve good performance}	-0.6	1.03	41%
Q.19 The schools management team provides effective leadership Q.30 The organisation's management team provides effective and inspiring leadership}	-0.4	-0.19	5%

Table 5.7 Comparing the average scores between International Engineering and the Department (using the Department Scale).

Factors	Readiness	Comments
Message: Discrepancy	Ambiguous	School Manager: income (student numbers) are looking bad Admissions Co-ordinator: numbers have increased more than elsewhere in Faculty Dean: large projected deficit but Vice Chancellor will give money to help through this period
Message: Efficacy	medium	School can increase further its own income (numbers) No control/ influence over Faculty developments
System Readiness	high/low	School is in a position through PMC/ Manager to make changes, but Faculty Review (structure and admin.) make this difficult
Interpersonal & Social Dynamics	medium	Collectively: a reasonable level of support Individually: varied reaction Psychological barriers: little been done to address fears of technical/ admin. staff Opinion leaders: been explicitly brought into the process
Active Participation	low	Positively used in Jan. Awayday Expectation that all staff would be involved in at least one working part (audit needed) Little use of working party chairs as active change agents etc.
Persuasive Communication	low/ medium	School staff meetings have been effective Faculty meetings have been a disaster Little further communication
Management of External Information	low/ medium	Some use e.g., other similar Schools programme developments, SARTOR
Change Agent Attributes	high	Working party chairs chosen to be trustworthy, credible, and sincere. Expertise is variable.
Readiness Assessment	medium, but falling	Questionnaire/Awayday - medium, but no further communication to all staff

Table 5.8: An audit of current (mid April) readiness for change using Armenakis et al model(1993). NB The contextual factor of Faculty developments, has been included as it has such a strong impact.

5.3.1 Conclusions from analysis

The use of the model identified a number of factors that may otherwise have been missed. In particular, the author felt that his use of a table where a readiness factor is assigned, helps to prioritise those areas needing greatest attention. These identified were then translated into actionable steps. Specifically the following points were considered in need of implementation for the period up to the May Awayday:-

Priority

- Unambiguous message communicating the need for change, from the facts i.e., on student numbers (Manager, Admissions Co-ordinator and PMC - agreed 'statement).
- Message to separate School from Faculty changes, and promoting (increasing confidence) in the Schools ability to take undertake these changes e.g., 'they will be implemented, they will bring benefit, they will be promoted by the manager as examples of good practice if the Faculty undergoes change'.
- Meeting(s) with Working party chairs to:
 - identify staff involvement
 - increase staff involvement
 - introduce their role for promoting change
 - increase communication with all staff (e.g., circulation of drafts for comment)
 - increase use of external information e.g. other departments/ Universities
- Staff meeting with all staff:
 - the manager to be persuasive and underpin message
 - increase expectation of Awayday

Lower priority

- PMC and Working Party Chairs meeting, to see early drafts and consider strategy implementation (i.e., bolster Working Party Chairs 'expertise', influencing opinion leaders and mobilise popular support)
- Assess readiness through interview etc.

These points were agreed with the author's manager (20/4/98), including an implementation plan. Specifically, the author wrote a memo for all staff (Appendix A16) which the manager agreed and signed (NB it was considered to carry more authority and hence be more effective, if from the School's manager). Williams, Dobson and Walters (1989) emphasis the importance of having high level support for such initiatives.

5.4 Focus Groups

The approach discussed in section 4.7.3 was followed. Table 4.9 summaries the issues relating to concerns, by frequency. Positive issues relating to people (i.e., colleagues), the job, technical and administrative support, were also recorded. From the table of issues, the areas of surprise were:- level of concern about our systems and role definition.

Issues related to:-	Frequency	Comments
Team working/ collaboration	10	
Communication	8	
Faculty issues	8	Related to leadership, vision, structure, systems & communication
Quality issues	8	Wide ranging but mostly focused on teaching
Organisation/ systems	7	
Vision	5	
Objectives/ goals	4	
Leadership	4	
Department structure	4	
Frustration	4	Related to decision making, feeling involved etc.
Work load/ stress	4	
Role definition	4	
Other issues: stability(3), work environment(3), self centred/ self interest(3), being valued/ praised(3), professionalism(2), external change, bureaucracy, time to update, involvement, decision making process, social environment, information planning		

Table 5:9: The Focus Group analysis: summarising issues relating to concerns, by frequency.

5.5 Comparison of Survey and Focus Group Results

The focus groups and individual interviews took place well after the first Awayday and a few weeks before the second Awayday. To relate the results from the survey and the focus groups/ interviews, the January results are used as it was felt that attitudes would be closer (i.e., the success of the second Awayday which showed that change was possible by staff, may have led to changes in staff beliefs). Referring to tables 5.3 and 5.9, it can be seen that the survey focused on the major issues i.e., team working, communication, Faculty and department issues (which are related to organisation/ systems). Stress, which has the highest absolute value, has interestingly a low frequency of occurrence from the group work. This may be due to stress not coming from the job directly (a number of responses placed 'the job' in a positive light), but from the associated frustrations, poor vision/ objectives/ goals and communication i.e., environment.

Two issues that the survey does not address are role definition i.e., whether one can prioritise effectively to work most effectively and arguably linked, are vision/ objectives and goals i.e., whether one knows what these are or feels confident that someone else is following a 'plan' etc. These would form the basis for two more questions to contribute to 'personal motivation'.

From these results and discussion, a number of factors which are hindering the departments 'readiness to change', can be identified. These are discussed in the recommendations (chapter 7) and relate to: communications, team working, vision/objectives/ goals, role definition and systems.

5.6 May Awayday Survey

A full analysis of the results could not be undertaken as the results were only available as this work was being concluded. Ten replies were received (all from academics). One reply was from a member of staff who had not been at the January Awayday and so was not included in the analysis. Briefly the results (Appendix A19), show that the Awayday/ working party process (question 1) has been a great success (average score: 1.9 cf. max. score 'definitely agree' of 2.0). This has been supported by comments from the manager and other staff.

Table 5.10 shows a comparison of the average results of January and May surveys, for the four identical questions.

Issues	January	May	Change
The Awayday was time well spent.	0.7	1.56	22%
The outcomes from the Awayday will lead to positive changes in the School.	0.0	0.78	20%
I am being kept fully informed of developments within the School.	0.1	0.89	20%
Only minor changes are required on our present teaching programmes.	-0.6	-0.67	-2%

Table 5.10: Comparison of results of January and May surveys (scale: +2=very positive to -2= very negative).

The results show a positive improvement for the first three questions. Of particular note is the pleasing improvement on communication (though this is probably not reflect by staff who did not attend the Awayday). The last question reflects attitudes on a deeply held belief by staff. This area is going to require sensitive attention! Other replies to the May questionnaire (Table 5.11), do though suggest that the concept of promoting readiness to change has been achieved.

Issue	Data
6. The School is now (within the constraints imposed by the Faculty etc.) succeeding in implementing change.	0.78
7. Further changes that go beyond the working party recommendations are needed in the School.	1.22
8. The School is ready to implement more change.	0.56

Table 5.11: Showing results from the May survey (scale: +2=very positive to -2=very negative)

5.7 Comments on Results

Appraisal of questionnaire

The use of wording some questions so that the likely response was positive rather than negative, the author felt kept respondent concentration. It also in one case led to a form being easily disregarded as the user had entered 'strongly disagree' to every statement.

A number of limitations were noted in the construction of the questionnaire:

- one question was worded as a 'double negative': 'I am not experiencing any stress'. Oppenheim (1992) recommends to avoid this as the 'disagree' response is likely to cause difficulty. The question should be amended to 'I am experiencing stress'. NB. Analysis of the results did not show any confusion as all the results were negatively biased.
- the number of questions being averaged for each category should be made more consistent for efficiency and reliability.
- the wording of the 'null' scale position needs to be considered (e.g., Carnall, 1990 uses 'neutral' and Oppenheim, 1992 uses 'uncertain')
- other scales (e.g., issues of dimensionality, equality of intervals etc.), for example a six 'point' scale (which forces a decision as there is no 'central' point) could be considered.
- two new questions are proposed to strengthen the 'personal motivation' issue (see section 5.5). These are:
'I am able to effectively prioritise my work'
'I support the department's vision'

Comparison of personal motivation and personal readiness for change

The results from Table 5.3 show interesting results i.e., some staff have low motivation but high readiness for change and vice versa. It may be possible to relate these results to Schein's (1985) employee models, particularly 'complex man', and why in practice, academic managers may be tempted to treat all academics as individuals. For example, one manager reported: 'The research mentoring scheme has worked reasonably well, but the four (least productive) staff concerned are all very different and have to be treated on an individual basis....the important point is that

overall strategies often do not help a lot in individual cases, and it is this side of management for quality for which many university managers are ill-prepared' (HEQC: Case Study 51, 1995). This has potential for further research.

Focus groups

It was found that to systematically and impartially record comments during a focus group session, the check list of the procedures (Appendix A14) was found crucial (as the author, working with his own peer group, was constantly tempted to get involved). This worked well in practice.