

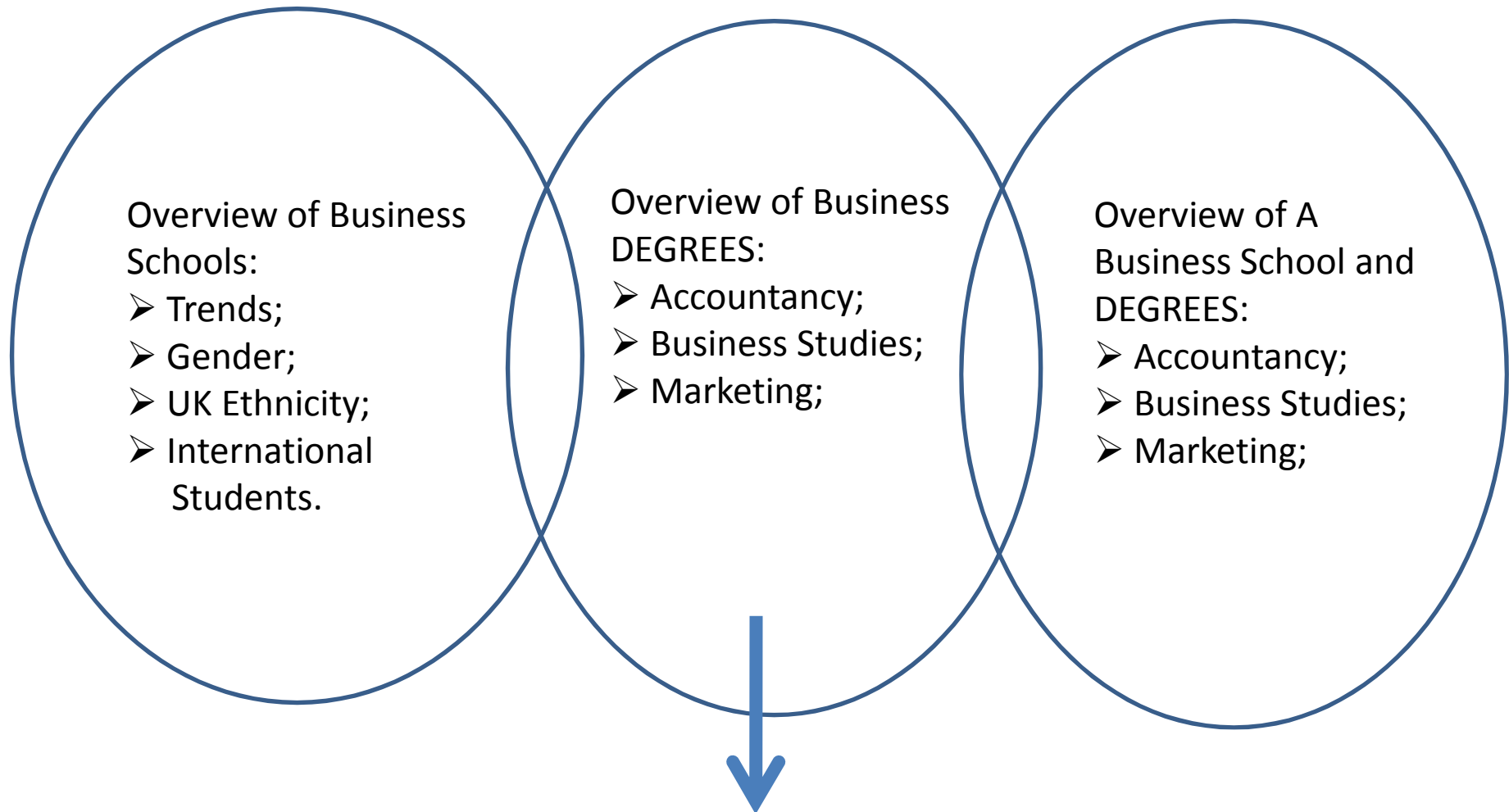
Enhancing the student experience: Lessons from the NSS for Business Schools

Dr. Aftab Dean (Leeds Met)

Dr. Mark Langan (Manchester Met)

Steve Probert (BMAF)

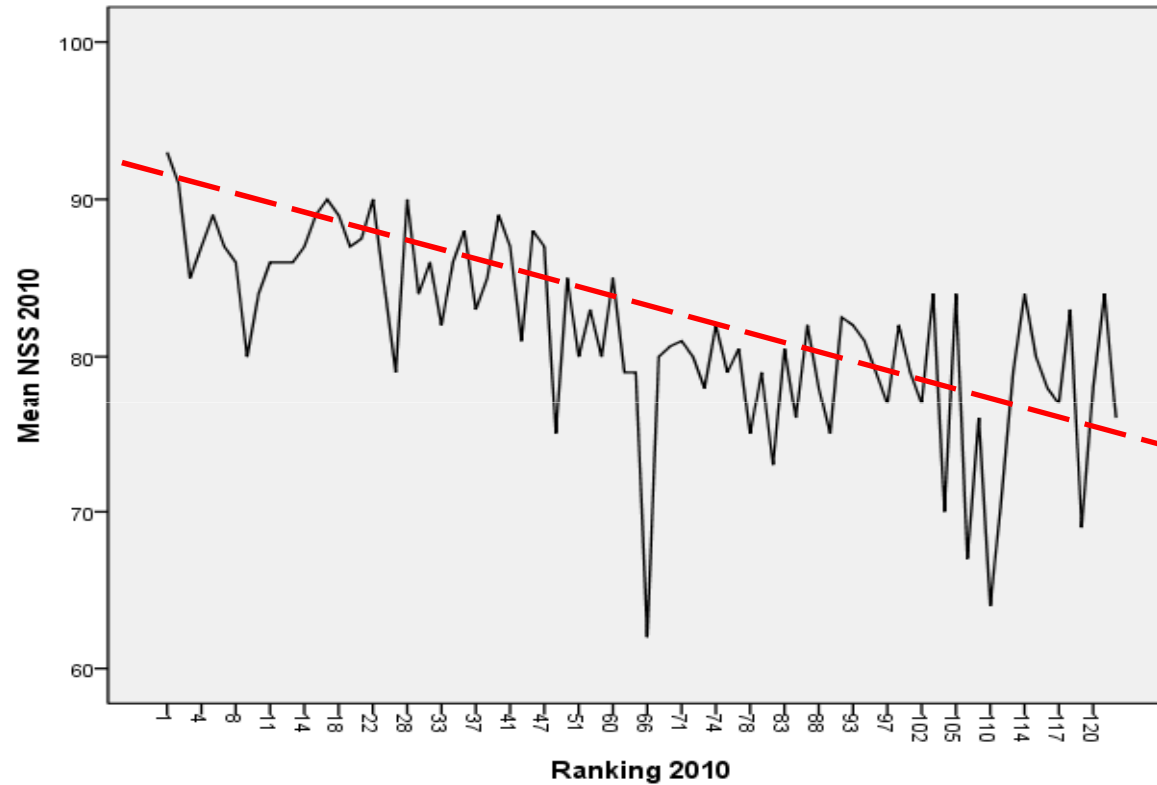
Structure



Contrast with Science and Engineering

League Table Ranking

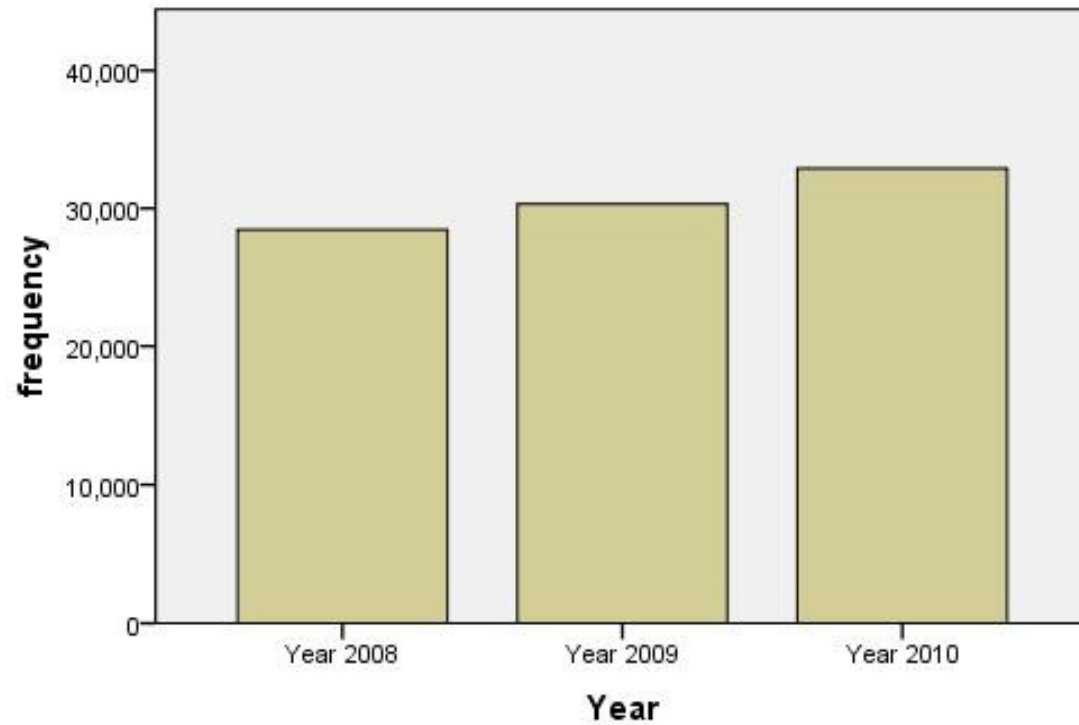
How NSS results influence league table ranking



Key Findings from the NSS results in relation to Business Schools

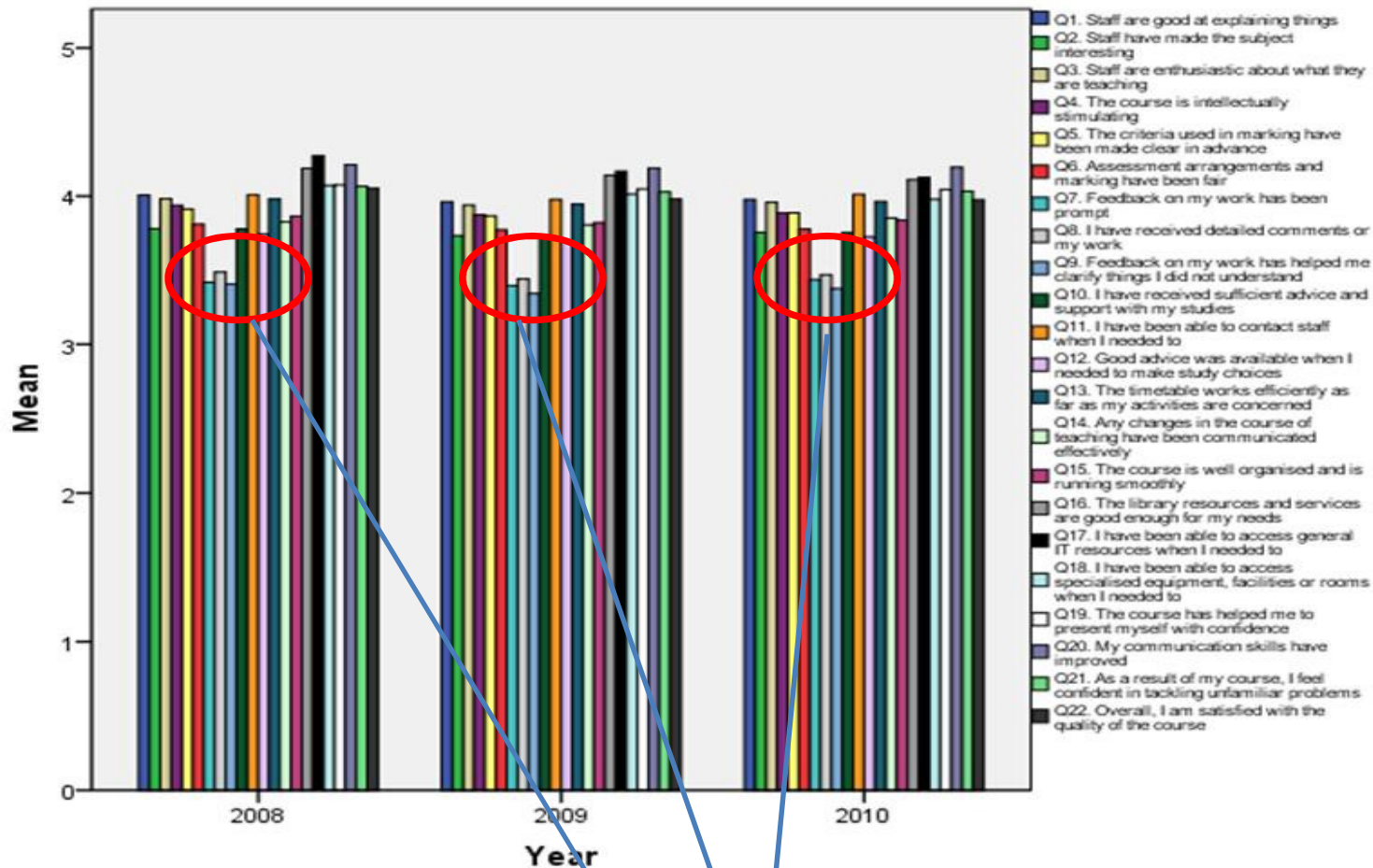
Dr. Aftab Dean

NSS response rates



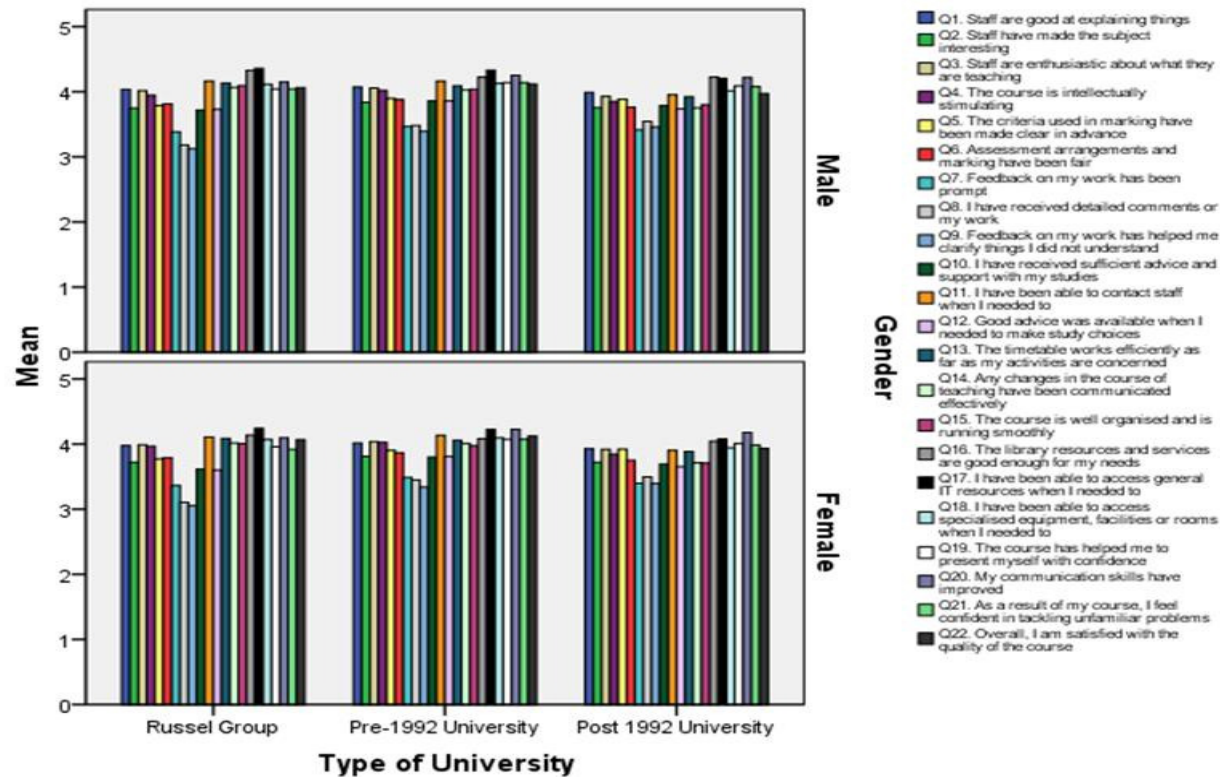
Response rate has grown steadily over the last 3 years

NSS scores overview



Frequency analysis shows **Assessment and Feedback** scored lowest
Learning Resources scored highest

NSS scores by Type of University



Males score all NSS variables higher

NSS Results by UK Ethnicity

White

Pakistani

Black

Chinese

Indian

Mixed

NSS results by UK ethnicity

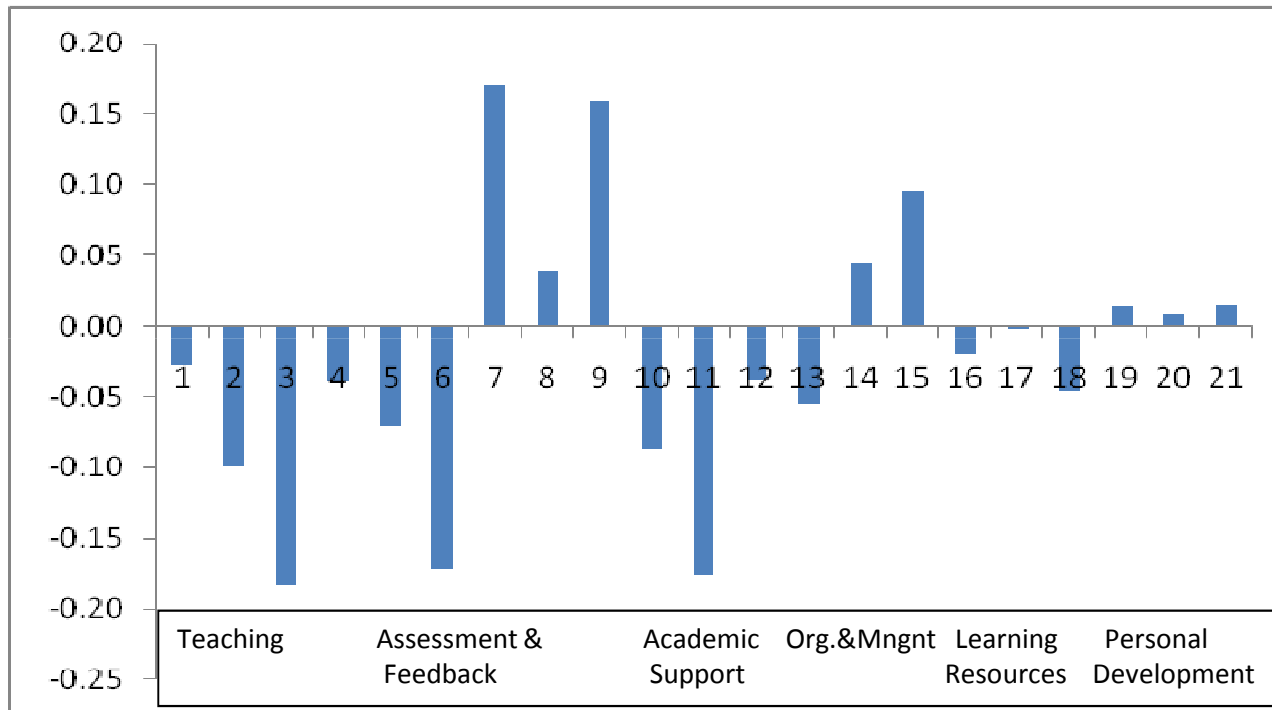
NSS Themes	White	Black	Indian	Pakistani	Chinese	Mixed
Teaching	-	+	-	-	+	-
Assessment and Feedback	-	+	-	-	+	-
Academic Support	+	-	-	-	+	-
Organisation and Management	-	+	+	-	+	-
Learning Resources	+	+	+	+	+	-
Personal Development	+	+	+	+	-	-
Overall Satisfaction	-	+	+	+	+	-

Satisfaction by UK ethnicity

NSS theme	Ethnic Group (significant differences in higher NSS scores)
Teaching	Black White
Assessment and Feedback	Chinese Black
Academic Support	Chinese White
Organisation and Management	Indian Chinese Black
Learning Resources	Indian White
Personal Development	Black
Overall Student Satisfaction	Black

Example analysis for an individual UK ethnic group

Satisfaction levels of Pakistani Students compared to English students



Pakistani Female Students: Provide Lower NSS scores when living at home

International Students

Gulf

Chinese

Africa

Malay

Indian

S.E. Asia

EU

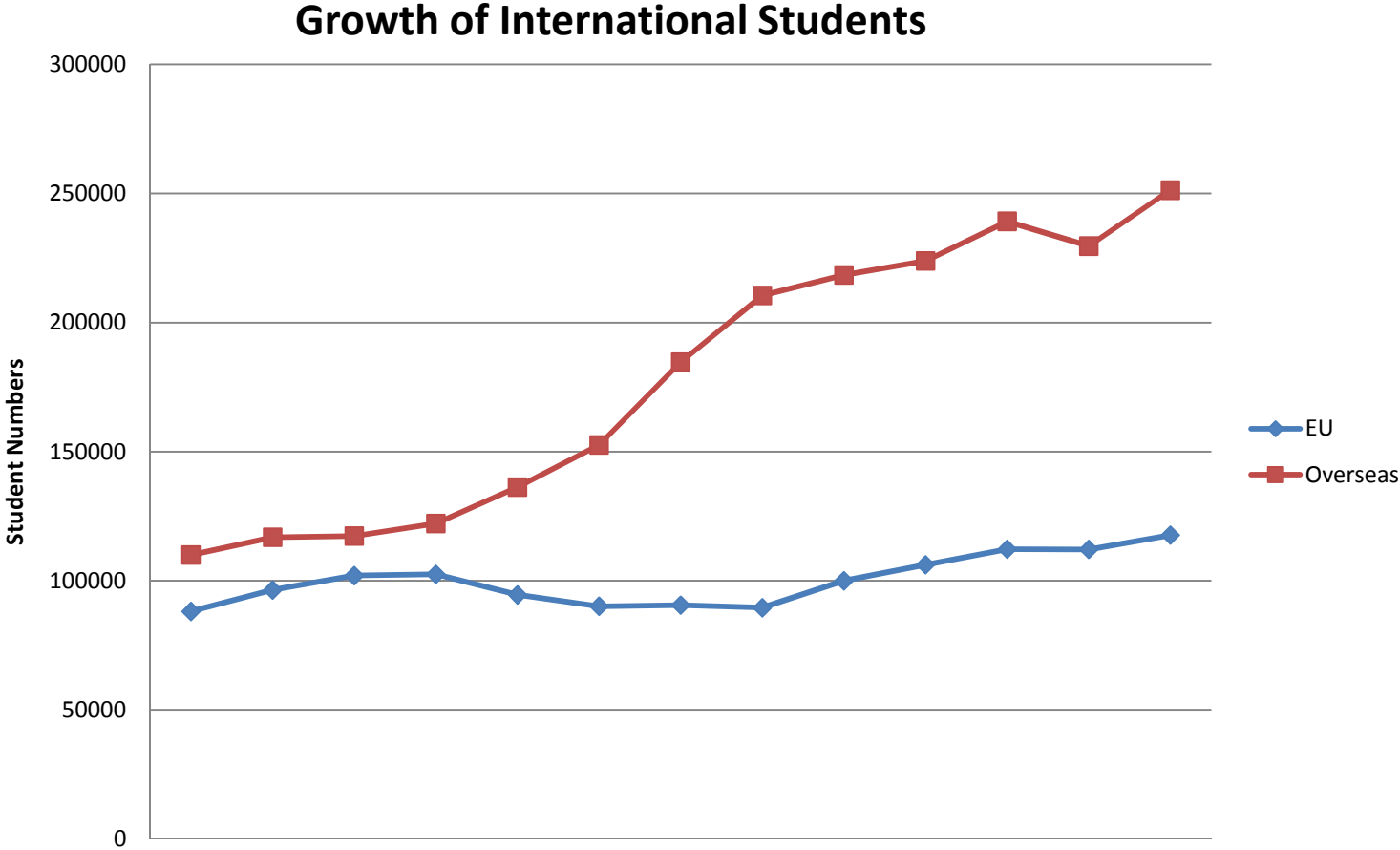
Turkish

EE

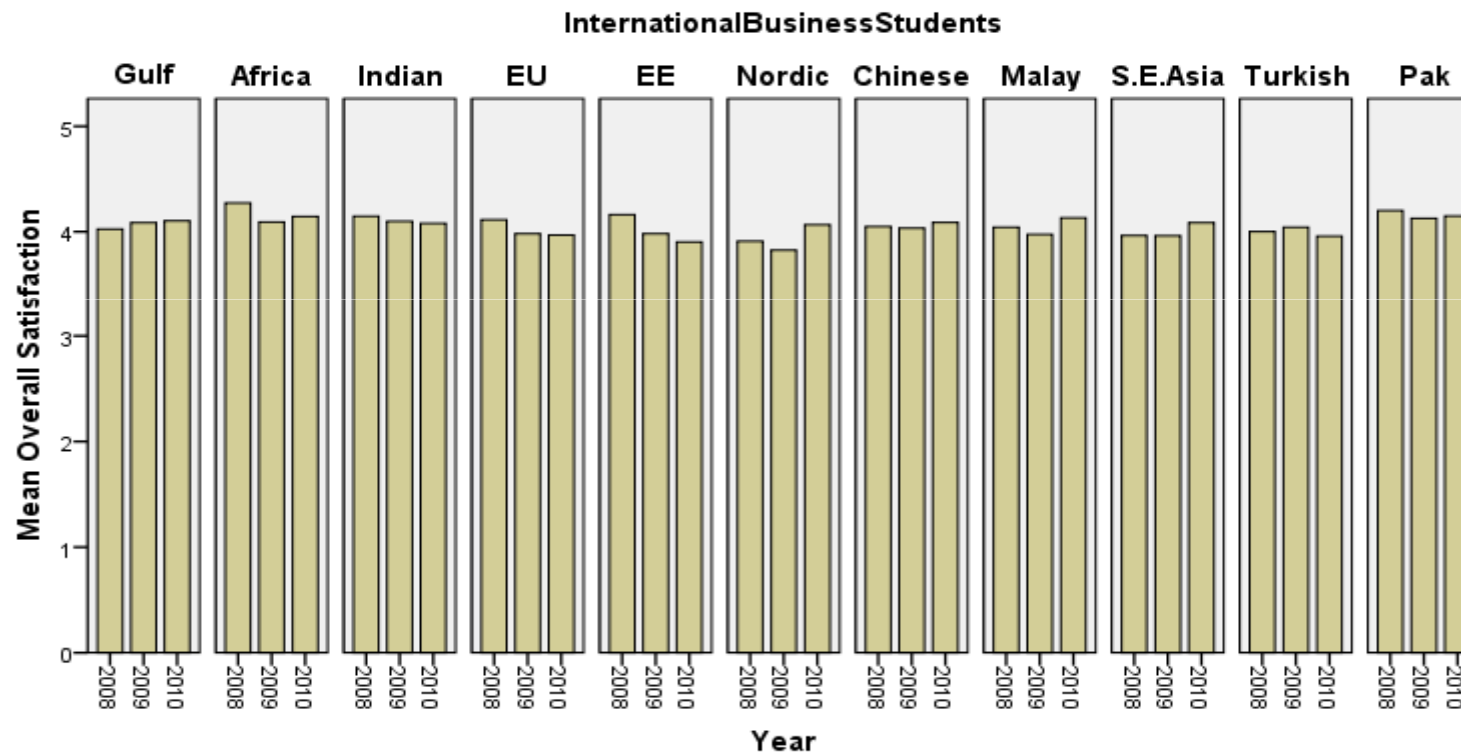
Pakistani

Nordic

Growth of International Students



Breakdown of Overall Satisfaction by international students



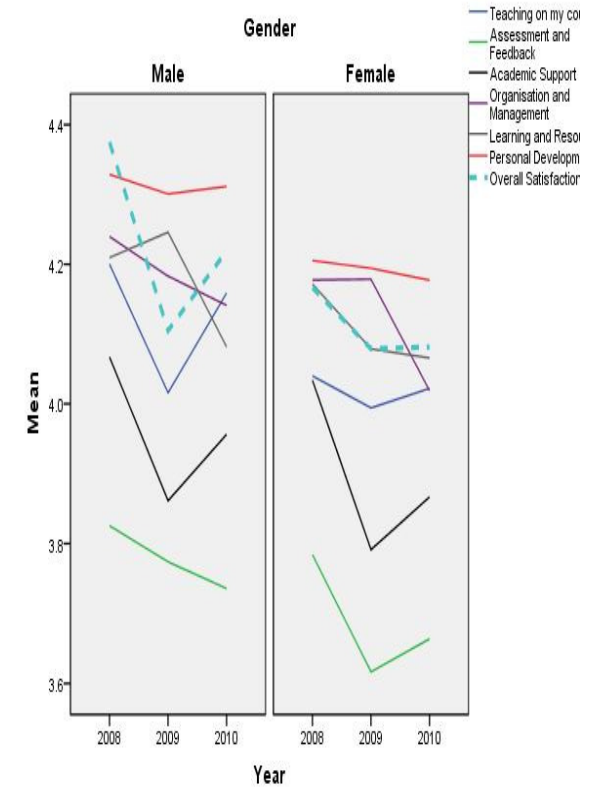
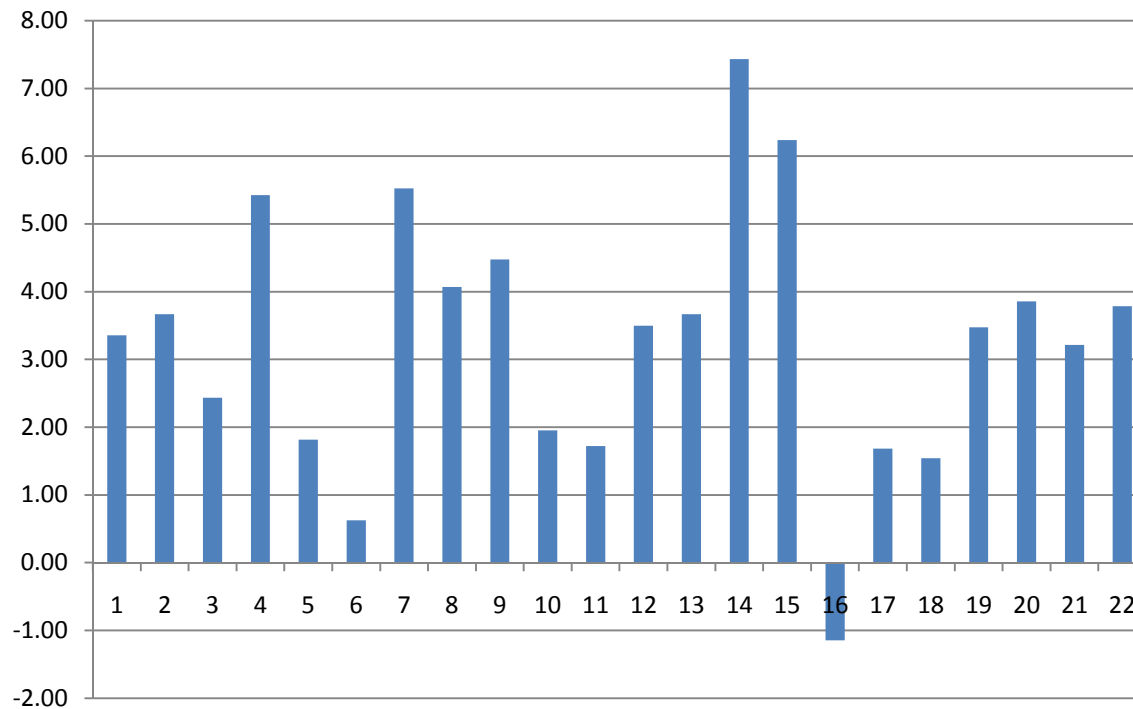
Most Satisfied: **African, Pakistani, and Gulf**

Review of International student responses

NSS Themes	Gulf	African	Indian	EU	EE	Nordic	Chinese	Malay	S.E.Asian	Turkish	Pak
Teaching	+	+	+	-	+	+	+	+	-	-	+
Assessment and Feedback	-	+	-	-	-	-	+	-	-	-	+
Academic Support	+	+	+	+	-	-	+	+	-	-	+
Organisation and Management	+	+	+	+	+	+	+	-	-	+	+
Learning Resources	+	+	-	-	+	+	-	-	-	+	+
Personal Development	+	+	+	+	+	-	-	-	-	-	+
Overall Satisfaction	+	+	+	+	=	-	+	+	=	=	+

Analysis by International Student group: African Student NSS scores

African NSS scores compared to all other students

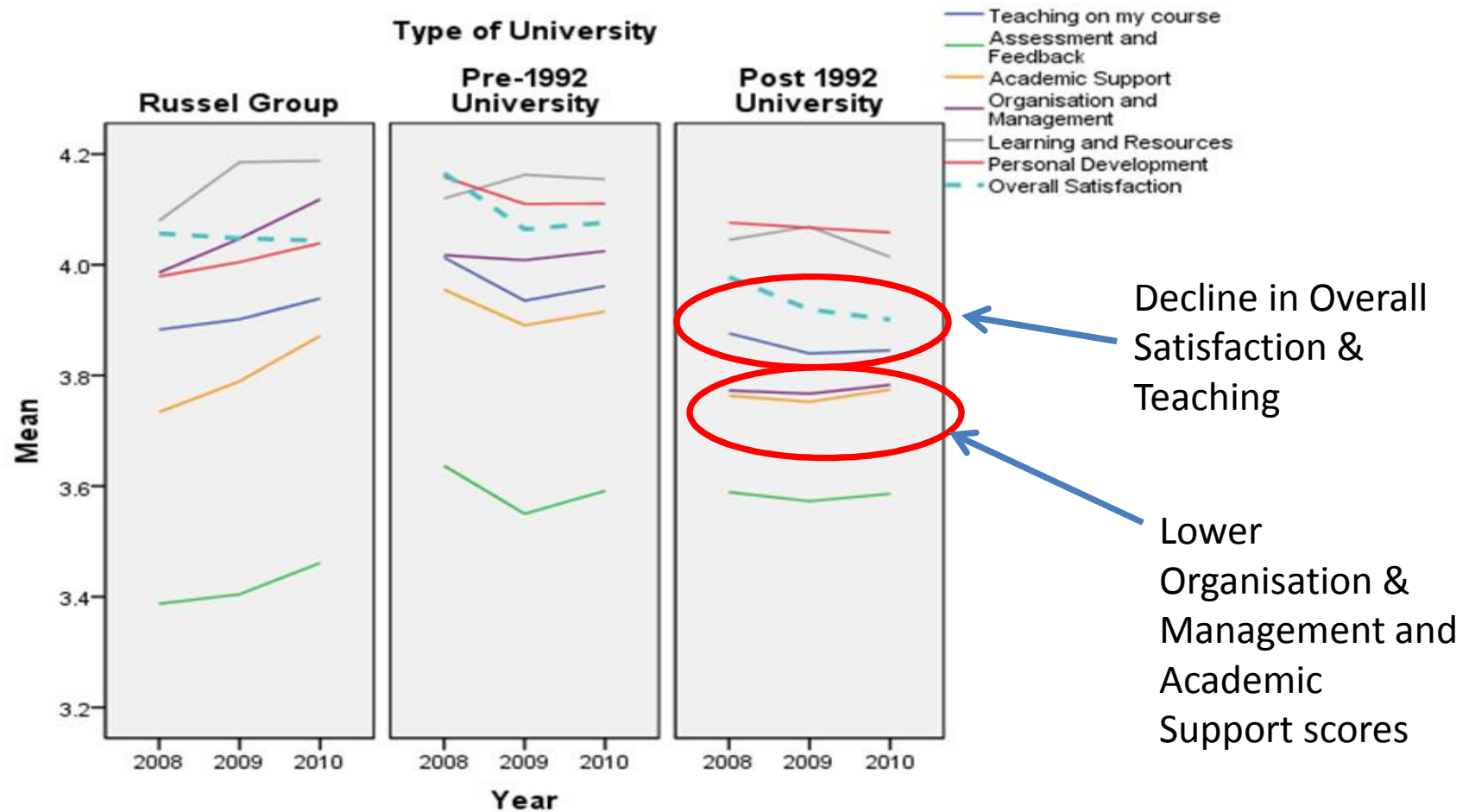


Female African students scored many NSS variables lower

NSS themes

- Q1 to Q4 - TEACHING
- Q5 to Q9 - ASSESSMENT AND FEEDBACK
- Q10 to Q12 - ACADEMIC SUPPORT
- Q13 to Q15 - ORGANISATION AND MANAGEMENT
- Q16 to Q18 - LEARNING RESOURCES
- Q19 to Q21 - PERSONAL DEVELOPMENT
- Q22 - OVERALL SATISFACTION

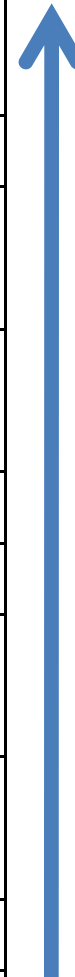
NSS themes



Key variables influencing student satisfaction

Key variables associated with Overall Satisfaction

Organisation and Management	Q.15 The course is well organised and is running smoothly
Teaching	Q4 The course is intellectually stimulating
Academic Support	Q10 I have received sufficient advice and support with my studies
Personal Development	Q19 The course has helped me to present myself with confidence
Teaching	Q2 Staff have made the subject interesting
Teaching	Q1 staff are good at explaining things
Personal Development	Q21 As a result of my course, I feel confident in tackling unfamiliar problems
Academic Support	Q12 Good advice was available when I needed to make study choices
Personal Development	Q20 My communication skills have improved
Teaching	Q3 Staff are enthusiastic about what they are teaching



Statistical Modelling

NSS Themes	Independent Variable
Organisation & Managmnt	Q15. The course is well organised and is running smoothly
Teaching	Q2. Staff have made the subject interesting
Teaching	Q1. Staff are good at explaining things
Teaching	Q4. The course is intellectually stimulating
Academic Support	Q10. I have received sufficient advice and support with my studies
Personal Development	Q19. The course has helped me to present myself with confidence
Personal Development	Q21. As a result of my course, I feel confident in tackling unfamiliar problems
Academic Support	Q12. Good advice was available when I needed to make study choices
Teaching	Q3. Staff are enthusiastic about what they are teaching
Personal Development	Q20. My communication skills have improved



Benchmarking Courses

Performance of Accountancy Department at Universty X

Year	Rank
2008	12
2009	2
2010	5
Overall Performance in last three years	3rd place out of 34 English University business schools

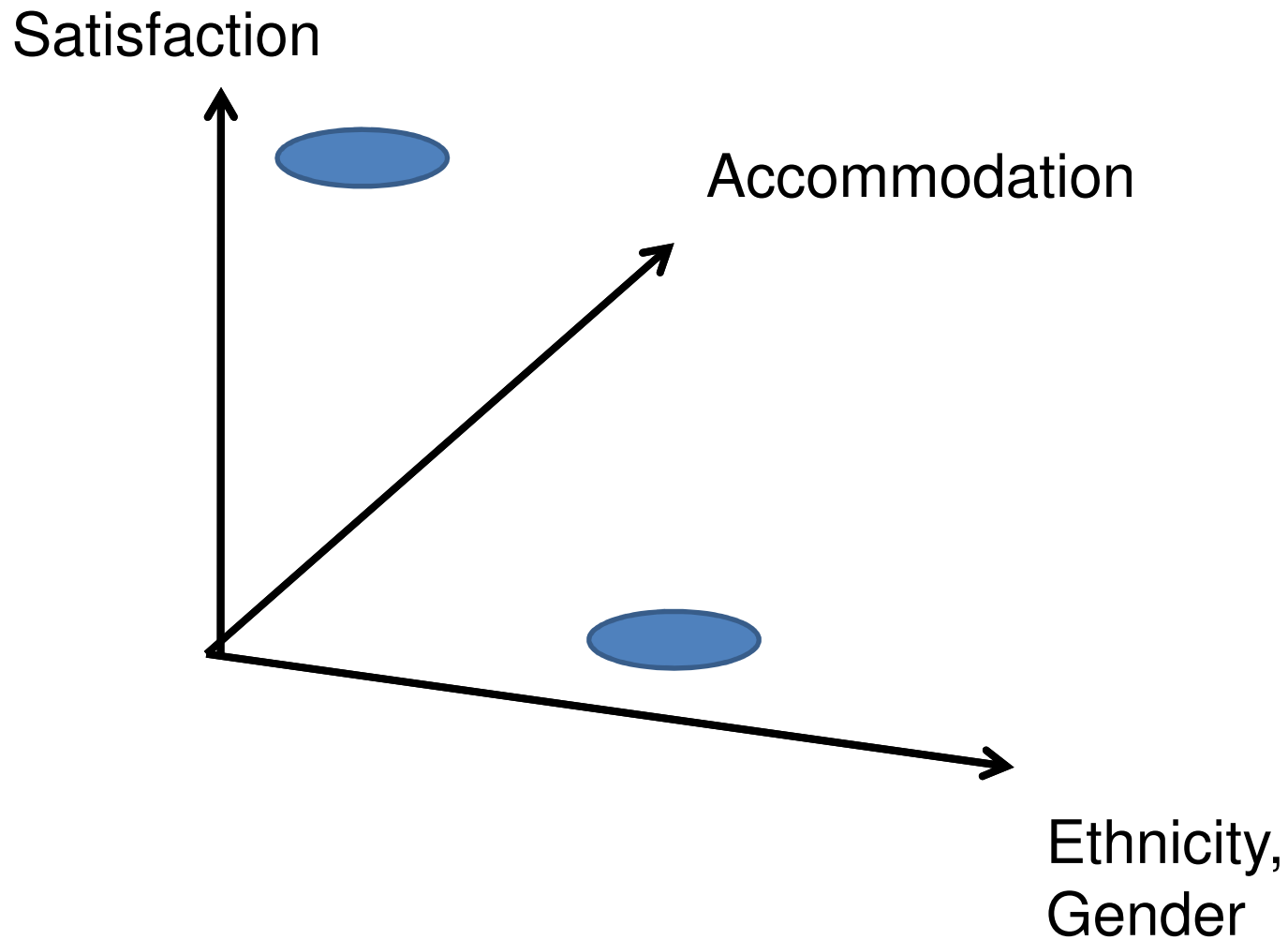
Key Factors Influencing Satisfaction

Academic Support	Q10. I have received sufficient advice and support with my studies
Personal Development	Q21. As a result of my course, I feel confident in tackling unfamiliar problems
Teaching	Q1. Staff are good at explaining things
Academic Support	Q12. Good advice was available when I needed to make study choices
Personal Development	Q20. My communication skills have improved
Feedback	Q8. I have received detailed comments on my work
Feedback	Q7. Feedback on my work has been prompt
Personal Development	Q19. The course has helped me to present myself with confidence
Academic Support	Q11. I have been able to contact staff when I needed to
Feedback	Q9. Feedback on my work has helped me clarify things I did not understand

1. Academic Support
2. Personal Development
3. Teaching
4. Feedback

Profiling dissatisfied students by course

Profiling Students by Course



**Compare and contrast with
Science & Engineering
subjects...**

... using different approaches...

... devised by Alan Fielding

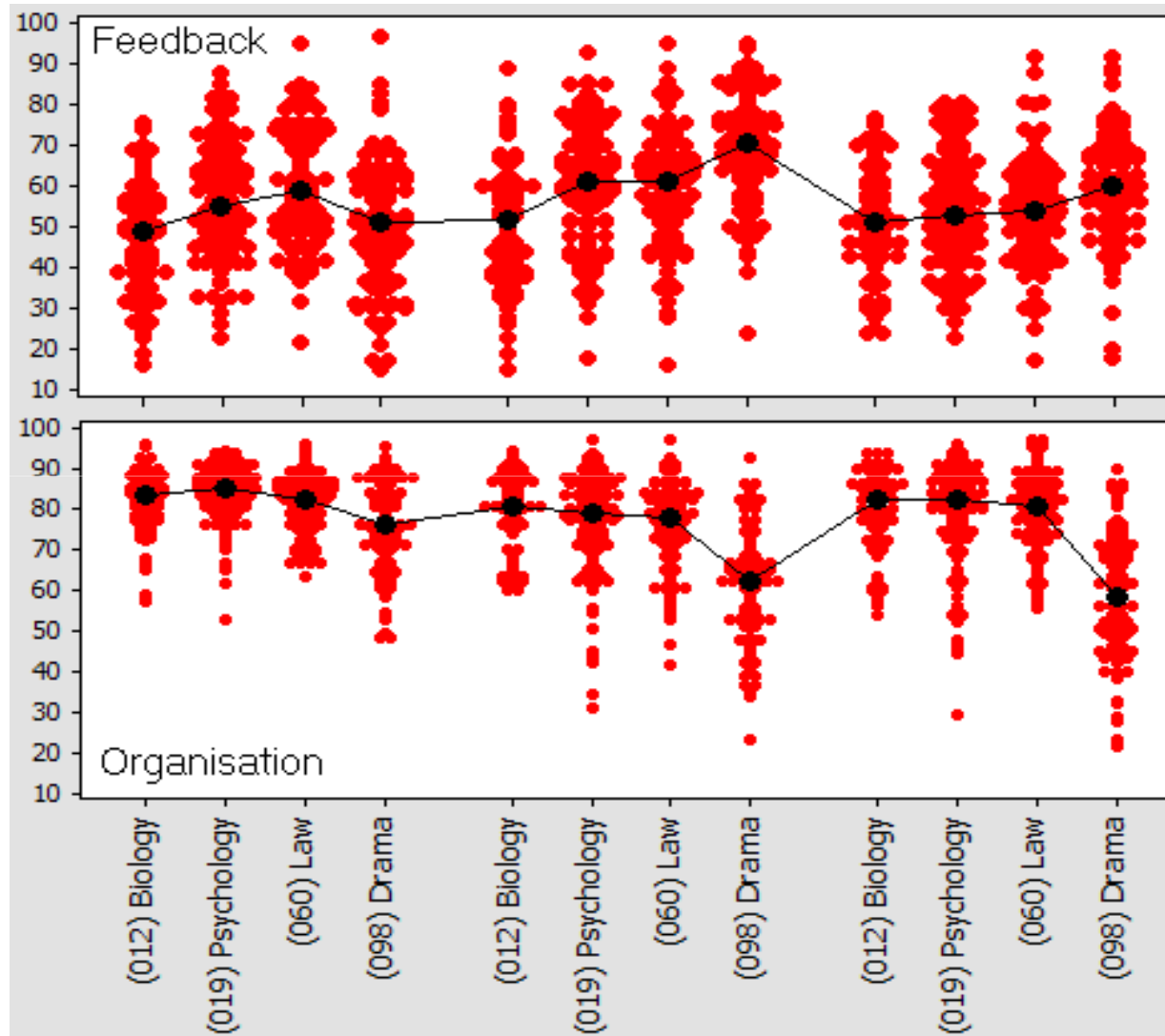
Satisfaction Metric

Satisfaction is % of students answering 4 or 5 to a question.
 e.g. Q 1 Biology MMU – 95% of students were satisfied

Note that **dissatisfaction** may tell a different story.

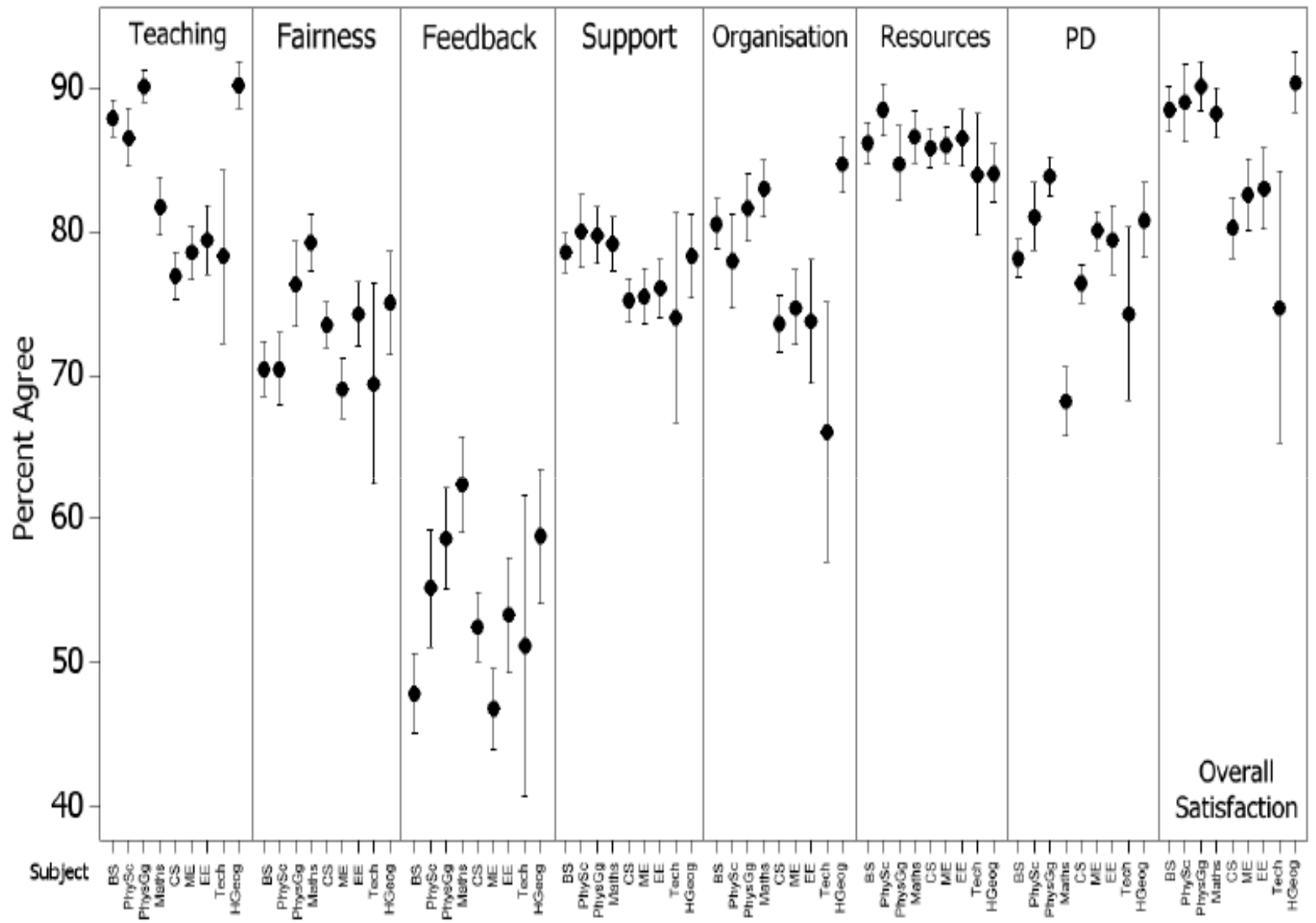
	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Subject name	Level	Mode	Question	1	2	3	4	5	Mean	%agree	LCL	UCL	Sample	n
L02	(012) Biology	First degree	Full-time	01	0	1	4	72	23	4.16	95	86%	98%	116	74
L03	(012) Biology	First degree	Full-time	02	1	3	5	63	27	4.12	90	80%	96%	116	74
L04	(012) Biology	First degree	Full-time	03	1	0	10	57	32	4.18	89	78%	95%	116	74
L05	(012) Biology	First degree	Full-time	04	0	1	9	49	41	4.29	90	79%	95%	116	74

Subject differences

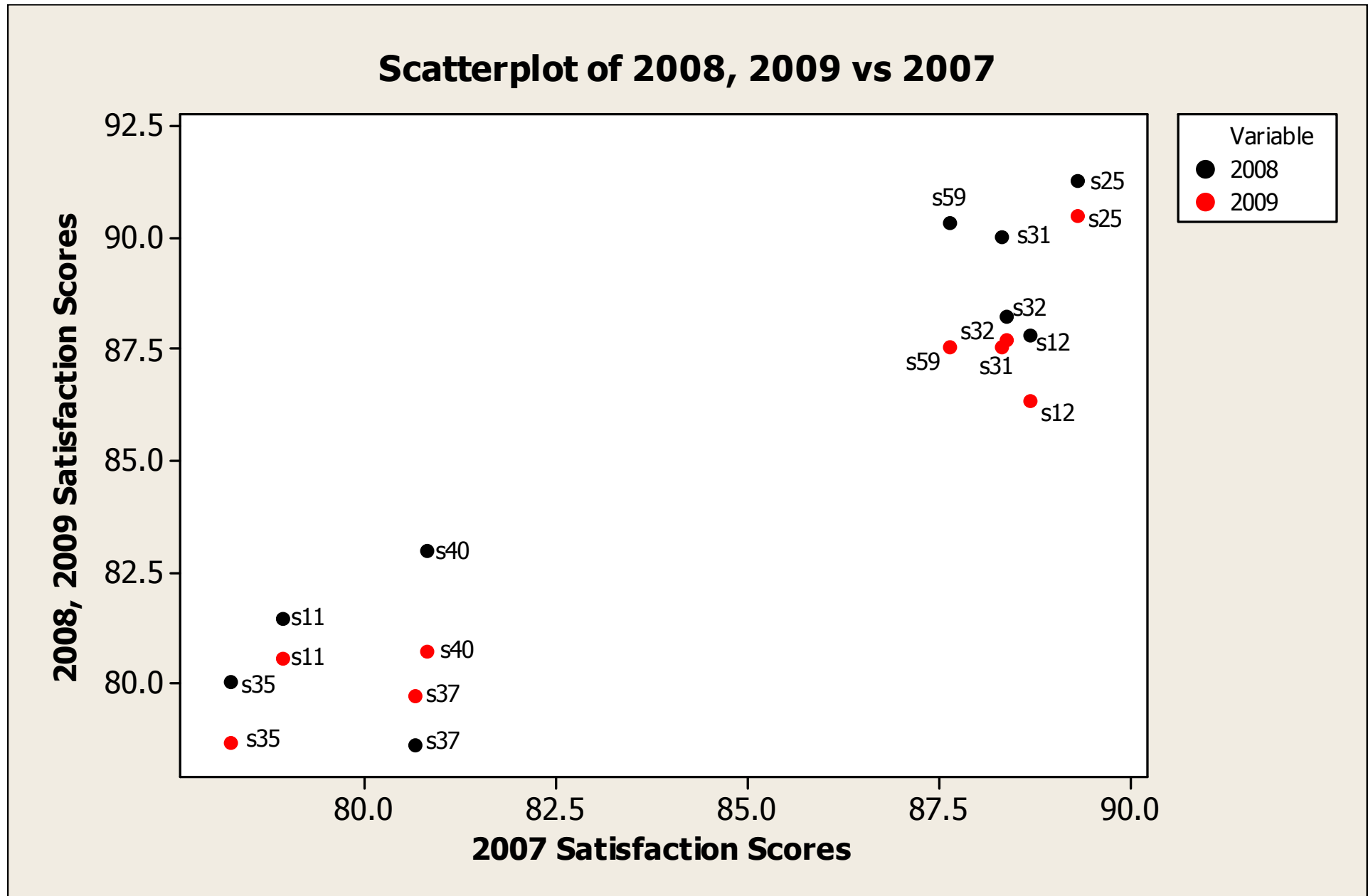


Subject differences confound simple comparisons, examples from 2009 national dataset.

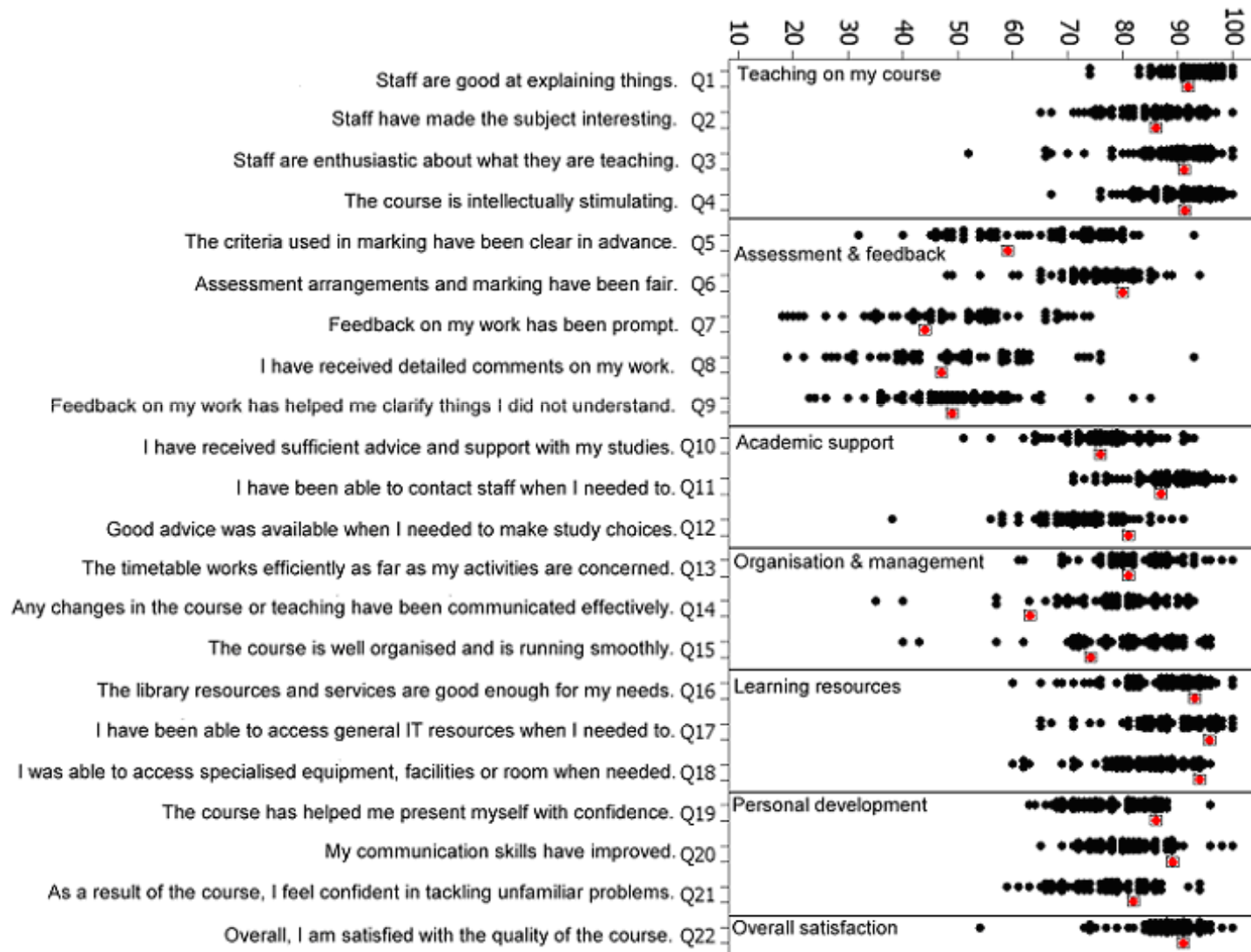
Shows medians for Qs7, 8 & 9 plus 13, 14 & 15.



Subject differences (science/national)



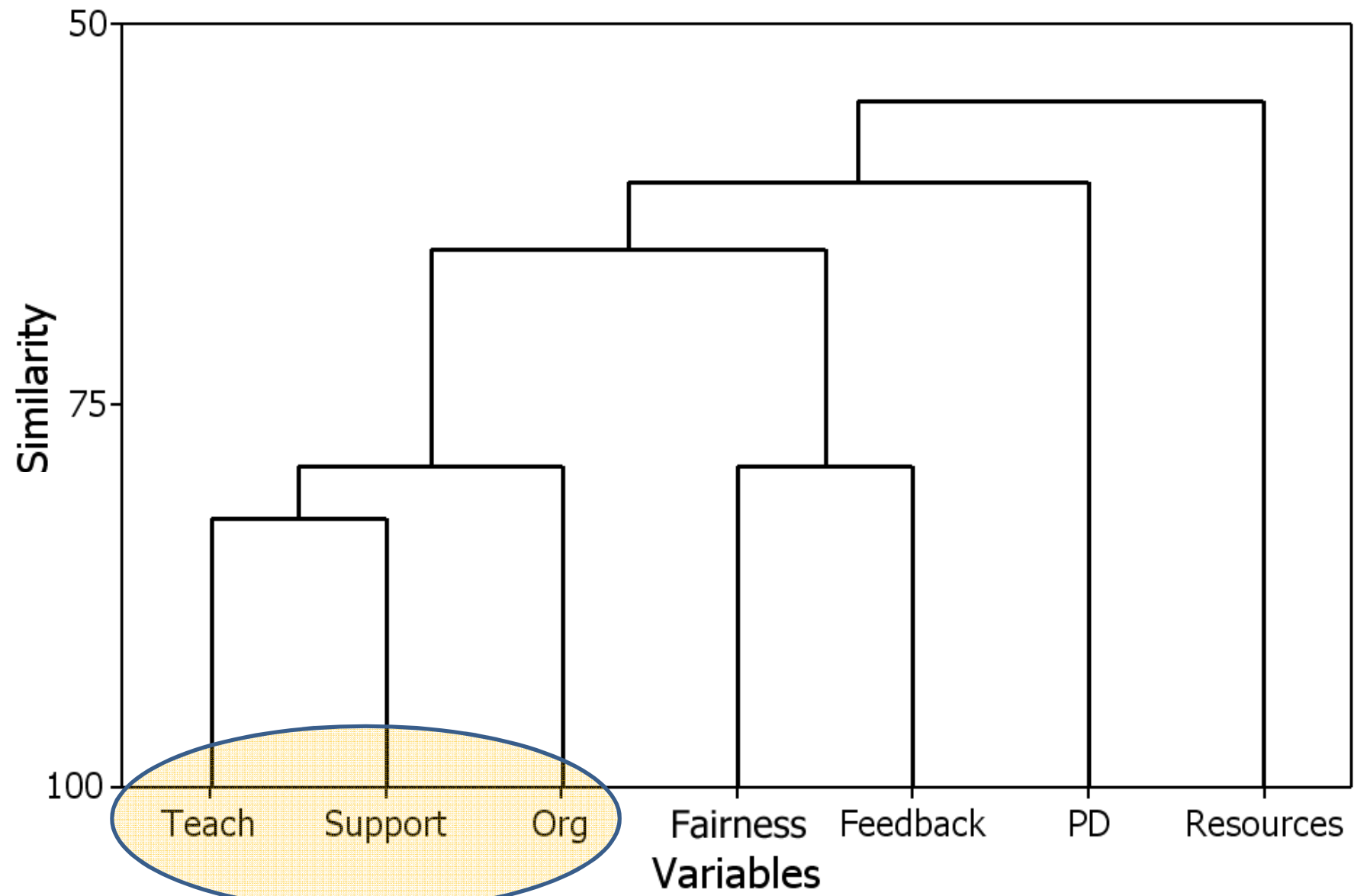
Biology results (2008)



Subject differences in Sci & Eng Feedback Qs and Q22

Question

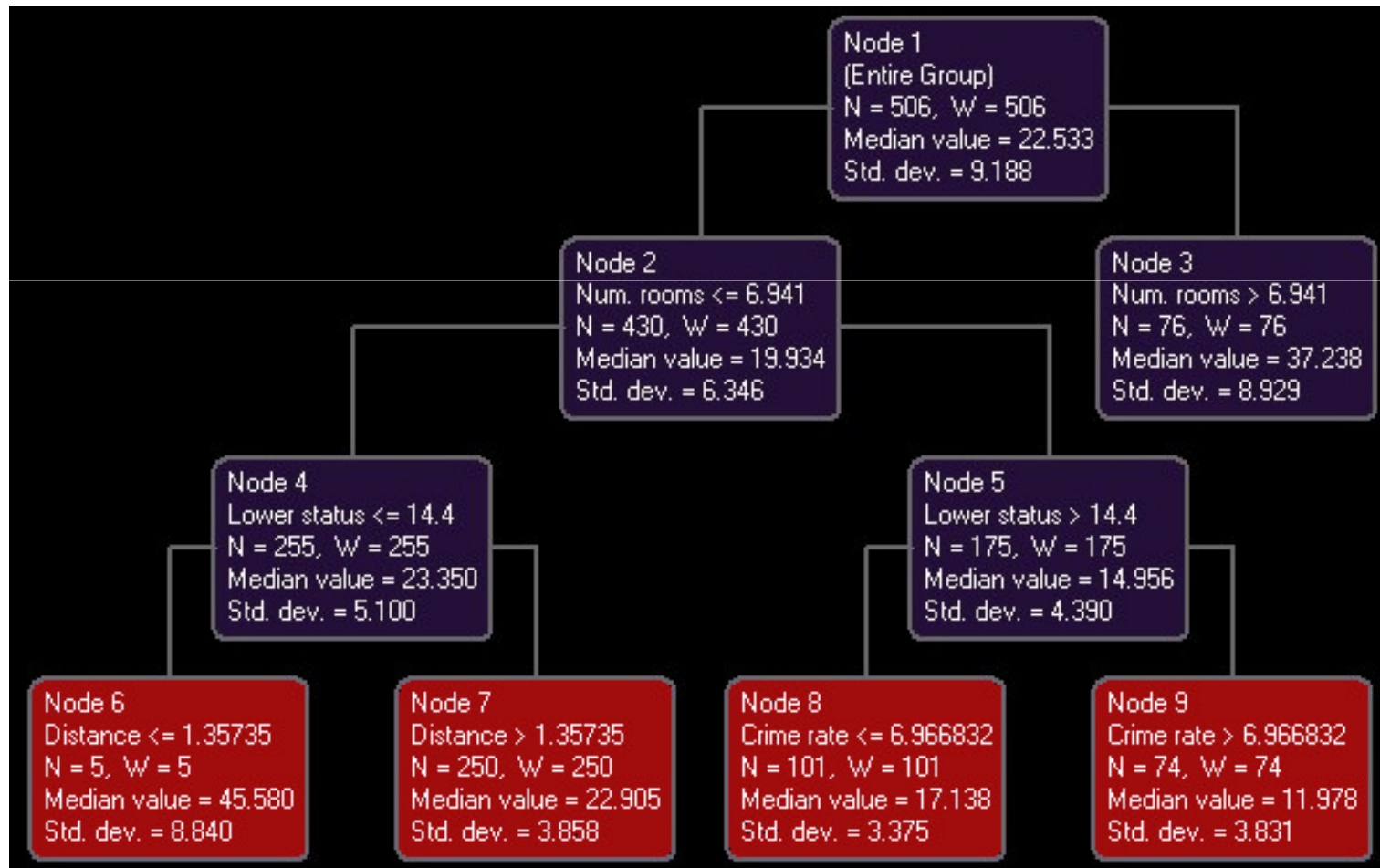
Subject		prompt	detailed	explained
Biological Sciences	r	0.018	-0.130	-0.205
Physical Sciences	r	*0.440	*0.385	*0.589
Physical Geography	r	*0.675	*0.377	*0.566
Mathematical Sciences	r	0.328	*0.460	*0.533
Computer Sciences	r	0.226	0.103	*0.353
Mechanically based Engineering	r	0.117	-0.190	0.192
Electrical and Electronic Engineering	r	0.249	-0.233	-0.150
Technology	r	*0.728	0.090	0.237
Human Geography	r	0.274	0.348	*0.433



Regression Trees (an example)

based on <http://www.dtregr.com/classregress.htm>

Predicts property value



Effectiveness of Q1-21 to predict overall satisfaction (Q22)

Predicting questionnaire item	Inc MSE (%)
Q15 - The course is well organised and is running smoothly	119.89
Q1 - Staff are good at explaining things	71.45
Q4 - The course is intellectually stimulating	66.71
Q14 - Any changes in the course or teaching have been communicated effectively	60.79
Q10 - I have received sufficient advice and support with my studies	55.34
Q11 - I have been able to contact staff when I needed to	43.40
Q3 - Staff are enthusiastic about what they are teaching	40.08
Q2 - Staff have made the subject interesting	38.26
Q12 - Good advice was available when I needed to make study choices	35.27
Subject	32.35
Q6 - Assessment arrangements and marking have been fair	20.10
Q17 - I have been able to access general IT resources when I needed to	18.73
Q19 - The course has helped me present myself with confidence	17.35
Q18 - I have been able to access specialised equipment, facilities or room when I	15.41
Q16 - The library resources and services are good enough for my needs	15.34
Q20 - My communication skills have improved	13.29
Q13 - The timetable works efficiently as far as my activities are concerned	13.16
Q7 - Feedback on my work has been prompt	10.49
Q9 - Feedback on my work has helped me clarify things I did not understand	6.65
Q5 - The criteria used in marking have been clear in advance	6.60
Q21 - As a result of the course, I feel confident in tackling unfamiliar problems	3.32
Q8 - I have received detailed comments on my work	3.04

Predictive model (relative weightings as %)

Predictor	2007 (%)	2008 (%)	2009 (%)
Teaching	<u>27.7</u>	<u>27.8</u>	<u>24.8</u>
Assessment	14.3	15.3	10.0
Fairness	10.7	13.6	6.9
Feedback	3.5	1.7	3.1
Support	18.9	18.9	17.5
Organisation	<u>26.2</u>	<u>23.9</u>	<u>25.9</u>
Resources	2.3	4.2	6.8
Personal Development	10.6	9.9	15.0

How well do Qs 1-21 predict Overall Satisfaction?

- ‘Winners and losers’
- What is being measured?
- Shifts of $\pm 5\%$ from expected values at institutional level
- University groupings

Group	2007	2008	2009
Million+	-1.116	-4.041	-5.509
Alliance	-2.982	1.362	-3.309
None	1.422	0.531	4.566
Russel	2.950	4.504	3.944
1994	1.920	-1.569	2.880
All	0.560	0.172	0.579

Shaded boxes indicate exceeding expected Q22 as predicted by all other questionnaire items

Subject	2007	2008	2009	All
Allied Med	-0.829	-0.785	-0.489	-0.673
Computer Science	-1.038	-0.485	-0.113	-0.488
Mech Eng	1.099	-1.465	-0.390	-0.326
Elec Eng	-0.453	0.330	-0.270	-0.136
EGS	-0.110	0.683	-0.635	-0.101
Hum Geog	-0.248	0.762	0.202	0.252
Biology	1.440	-0.490	0.078	0.286
Maths & Sats	1.528	0.988	1.093	1.193
Chemistry	1.252	1.761	2.902	2.110
All	0.293	0.144	0.264	0.445

Langan et al (submitted)

Conclusions...

- Increased impact and participation
- Reported experiences differ - groupings, interpretation of questions
- Expectations and aspirations
- Enhancement needs layer of interpretation required at all levels (national, institution, programme)
- Actions considered contextually and use external evidence
- Potential for NSSE-type questionnaire items

... further analyses

- Analysis by faculty
- Analysis by Degree
- Analysis by University – faculty and degree
- Analysis by Gender, UK ethnicity, International student, etc
- Potential for more complex predictors (prior attainment, socioeconomic...)
- Matching quantitative, qualitative and institutional information



Enhancing the Student Experience: Lessons from the NSS

Presentation by Dr Aftab Dean, Leeds Metropolitan University

The session will include presentations of the sophisticated statistical analysis of NSS results at institution and course level, discussions of the implications and possible actions to improve NSS results.

Thursday, 16th June 2011 – Leeds Metropolitan University

Wednesday, 29th June 2011 – Oxford

*For further information about the session please contact
a.dean@leedsmet.ac.uk or p.wymer@leedsmet.ac.uk*

*To book a place at either session please contact Karen Pettit at BMAF
on **01865 485769** or kpettit@brookes.ac.uk*