University of Highlands and Islands

1. Introductory seminar: 9 February 2010

1.1 Notes from Discussion

Good VC links from UHI with Aberdeen and Stirling universities and Scottish Government.

ACTION: Investigate VC conference facilities at Edinburgh and Glasgow

Local network may help as there is concern over robustness and consistency of data across areas in Scottish datasets. Not enough documentation available with data.

Lack of understanding of how to transfer, compare and contrast data.
Concern raised over the experience level will be pitched at. What does 'intermediate' and 'advanced' mean? Would like training at a basic level and thought type of training at PhD event would be helpful for others.

UHI in particular would like to see good online resources and learning materials due to remote location, however willing to travel for practical hands-on training.

Mixed Methods – in particular how much quantitative should be used.

ACTION: Expertise to be investigated and learning document created, with potential for event. SRA???

Provide links to pre-requisite courses that can be taken online where AQMeN events are pitched at a higher level.

Pre –event survey to ensure event meets expectations.

1.2 Attendees

Catherine MacNeil	Highlands & Islands Enterprise
Heather Smith	Highlands & Islands Enterprise
Tim Braunholtz-Speight	UHI Centre for Remote & Rural Studies
Sarah-Anne Munoz	UHI Centre for Rural health
Margaret Currie	UHI Centre for Rural health
NoelleO'Neill	NHS Highlands
Iain Atherton	University of Stirling

Convened by Gaener Rodger

2. Survey Results

Discipline

	N	%
Economics, Finance, Management, Business, Marketing	2	22.2
Health Related	3	33.3
Other	4	44.4
Total responding	9	100.0

General level of expertise in quantitative methods

	N	%
1.Not given	3	33
2.Non-user of all methods	1	11
3.Beginner level in at least one descriptive method	2	22
5.Intermediate level in at least one advanced method (beyond linear regression)	2	22
6.Advanced level in at least one advanced method (beyond linear regression)	1	11

How would you describe yourself?

	N	%
Professional statistician	1	11.1
Occasional user of quantitative methods	5	55.6
Non user but consumer of results of quantitative analysis	3	33.3
Total responding	9	100.0

Note: This question was added later and only some respondents have answered

Expertise: Descriptive quantitative analysis

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Frequencies, cross-tabulation, means etc	11	33	22	11	22
Comparing frequencies or means	11	33	11	11	33
Graphical output (eg bar-charts, histograms, pie-charts etc)	22	22	33	11	11
Transforming data distributions (eg log, quadratic)	.	22	22	33	22
Indices of inequality (eg GINI index)	.	11	22	33	33
Measures of association (eg correlation)	.	33	22	11	33

Expertise: Regression analysis

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Simple/multiple linear	11	11	22	22	33
Log-linear	.	11	11	56	22
Logistic/ordinal/multinomial	.	11	22	44	22
Other (eg poisson, negative binomial)	.	11	22	44	22

Expertise: Longitudinal analysis

	Percentage respondents with each level of expertise			
	Intermediate	Beginner	Non user	Not given
Event history analysis	11	22	33	33
Times series analysis	11	22	33	33
Trajectory modelling	.	22	56	22
Other longitudinal analysis	.	33	44	22

Expertise: Grouping analysis

	Percentage respondents with each level of expertise			
	Intermediate	Beginner	Non user	Not given
Principal components/factor analysis	11	44	11	33
Cluster/classification analysis	11	33	22	33
Latent class analysis	.	22	56	22
Multi-dimensional scaling	.	22	56	22

Expertise: Other complex analysis methods

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Probability, set theory, matrix algebra	.	11	22	44	22
Multi-level modelling	.	.	22	56	22
Structural equation modelling	.	.	22	67	11
Spatial analysis/modelling	.	11	22	44	22
Geographically weighted regression	.	.	22	67	11
Econometric techniques	.	.	22	56	22
Simulation and risk analysis	.	.	33	44	22
Missing value analysis/imputation	.	.	33	44	22
Content analysis (eg NVivo)	11	.	44	22	22

Expertise: Software packages

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
SPSS	11	33	.	33	22
Stata	.	.	.	67	33
SAS	.	11	.	56	33
R/S/SPlus	.	.	.	67	33
Minitab	.	22	11	44	22
GAUSS	.	.	.	67	33
Amos	.	.	.	67	33
Lisrel	.	.	.	67	33
MPlus	.	.	.	67	33
LatentGold	.	.	.	67	33
MLWin	.	.	.	67	33
ARC/gis	.	11	.	56	33
BUGS (OpenBUGS WinBUGS etc)	.	.	.	67	33

Expertise: Which of the following datasets to you use, and how often?

	Percentage of respondents			
	Use regularly	Used once or occasionally	Do not use	Not given
Growing Up in Scotland (GUS)	.	11	56	33
Scottish School Leavers Survey	.	.	67	33
Scottish Crime Survey	.	11	56	33
Scottish Social Attitudes Survey	.	33	33	33
Scottish Health Survey	.	33	33	33
Scottish Household Survey	.	56	11	33
Scottish components of national datasets (eg BHPS)	.	22	33	44
Other Scottish datasets	11	44	11	33
Other UK datasets	22	22	11	44
Other datasets	.	11	33	56

Training requirements: Descriptive quantitative analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)			
		Intermediate	Beginner	Non user	Not given
Frequencies, cross-tabulation, means etc	4	25	25	25	25
Comparing frequencies or means	5	20	20	20	40
Graphical output (eg bar-charts, histograms, pie-charts etc)	4	25	50	25	.
Transforming data distributions (eg log, quadratic)	4	.	50	25	25
Indices of inequality (eg GINI index)	7	14	29	29	29
Measures of association (eg correlation)	5	20	20	20	40

Training requirements: Regression analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)			
		Intermediate	Beginner	Non user	Not given
Simple/multiple linear	7	14	29	29	29
Log-linear	6	17	17	50	17
Logistic/ordinal/multinomial	6	17	33	33	17
Other (eg poisson, negative binomial)	5	20	40	40	.

Training requirements: Longitudinal analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)		
		Beginner	Non user	Not given
Event history analysis	5	40	20	40
Times series analysis	5	40	20	40
Trajectory modelling	4	50	25	25
Other longitudinal analysis	3	67	33	.

Training requirements: Grouping analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)			
		Intermediate	Beginner	Non user	Not given
Principal components/factor analysis	8	13	50	13	25
Cluster/classification analysis	8	13	38	25	25
Latent class analysis	5	.	40	40	20
Multi-dimensional scaling	5	.	40	40	20

Training requirements: Other complex analysis methods

	Number requiring training	Percentage of respondents at each level (of those requiring training)			
		Intermediate	Beginner	Non user	Not given
Probability, set theory, matrix algebra	4	.	50	25	25
Multi-level modelling	5	.	40	40	20
Structural equation modelling	4	.	50	50	.
Spatial analysis/modelling	5	20	40	20	20
Geographically weighted regression	4	.	50	50	.
Simulation and risk analysis	4	.	50	25	25
Missing value analysis/imputation	4	.	50	25	25
Content analysis (eg NVivo)	6	.	67	17	17

Training requirements: Software packages

	Number requiring training	Percentage of respondents at each level (of those requiring training)		
		Intermediate	Non user	Not given
SPSS	6	50	33	17
Minitab	1	.	100	.
ARC/gis	1	100	.	.

Training requirements: List of top three training priorities (all responses in alphabetical order)

Priority
ANOVA
APPLICATION OF STATISTICAL TECHNIQUES
BASIC TRAINING
ENHANCING SKILLS IN USING SPSS
ENHANCING THEORETICAL KNOWLEDGE OF STATISTICAL TECHNIQUES
GIS
HELP WITH IDENTIFYING APPROPRIATE TRAINING
OTHER SPATIAL ANLAYSIS
SIMPLE STATISTICAL TECHNIQUES
STUDENT T-TEST
TO LEARN HOW TO USE SPSS
TO LEARN MORE ABOUT QUANTITATIVE AND QUALITATIVE RESEARCH
TRAINING IN MORE COMPLEX MODELLING
UNDERSTANDING REGRESSION ANALYSIS
UNDERSTANDING SECONDARY QUANTITATIVE DATA SOURCES AVAILABLE
USING QUANTITATIVE METHODS IN MIXED METHODS STUDIES

Training requirements: How likely to participate in different types of training

	Very likely	Quite likely	Not likely	Total replies
Taught courses with hands-on training	6	1	.	7
Presentations by experts, but no hands-on training	2	2	3	7
On-line training	5	2	.	7
Training by video link	2	3	2	7
Step by step examples on the website	4	3	.	7

Training requirements: How likely would you be to attend face-to-face training events in ...?

	Very likely	Quite likely	Not likely	Total replies
Aberdeen	3	2	1	6
Dundee	2	1	3	6
Edinburgh	3	3	1	7
Glasgow	2	3	1	6
St Andrews	.	1	4	5
Stirling	2	2	2	6
Elsewhere in Scotland	5	.	.	5

Training requirements: Preferred duration for face to face training

	N	%
Half day	1	14
1 day	5	71
2 days	1	14
Total responding	7	100

Training requirements: Are there any datasets on which you would like specific training?

	N	%
No	4	67
Yes	2	33
Total responding	6	100

What in your view should be the main priorities for AQMeN?

	Average ranking
Provide support/advice on using quantitative methods	3.7
Provide support/advice on using software packages	5.8
Provide a forum for like-minded people to have dialogue about quantitative methods	6.0
Enable people to make contact with potential collaborators	6.3
Develop modules for teaching quantitative methods at postgraduate level	7.3
Run training or CPD courses on intermediate/advanced level statistics	6.2
Run training or CPD courses on basic level statistics	4.5
Run training or CPD courses on using software packages	5.2
Provide information on other training/CPD opportunities	6.5
Provide information on relevant seminars and/or conferences	7.2

Respondents ranked priorities 1-10 (1 = top priority, 10 = bottom priority)

Which of the following things would you use the AQMeN website to do? Discover and Inform

	Average ranking
Search for information about quantitative methods	2.9
Find resources for teaching quantitative methods	5.0
Use online training resources for statistical software packages	2.9
Discover related organisations and projects in the UK	5.7
Identify upcoming training or other network events via a calendar	4.0
Find contact details of network members	5.8
Find out about activities of network members	5.0
Discover who in the network has expertise on a given subject	5.1

Respondents asked to provide top 5 rankings (1=high, 5=low), unranked items given a low rank of 6

Which of the following things would you use the AQMeN website to do? Participate and Network

	Average ranking
Link to my staff home page & provide a link to AQMeN on my home page	5.4
Write descriptions about my activities & expertise for the website	6.0
Link to my social network sites (Facebook, LinkedIn, Twitter, Wordpress…)	6.0
Write content about topics of interest to myself and the network	5.3
Add links to websites of interest to the network	4.6
Upload teaching materials or datasets directly for use by network	4.4
Start a discussion about a problem or topic on an online forum	2.8
Respond to a thread on an online discussion forum by a member	4.3

Respondents asked to provide top 5 rankings (1=high, 5=low), unranked items given a low rank of 6

Would you be prepared to contribute to AQMeN in any of the following ways?

	Yes	No	Total replies
Organising or hosting a seminar	2	3	5
Presenting a paper at a seminar	1	4	5
Offering support to other network members on methods or software issues (where appropriate)	2	3	5
Be involved in the development of training or CPD activities	2	3	5
Be involved in developing teaching modules on advanced methods	.	5	5