

Appendix 2: AQMeN Online Survey – Summary Tables

Table 1. Institution

	N	%
Not given	3	1.4
Abertay University	5	2.3
Biomathematics and Statistics Scotland	1	0.5
Edinburgh Napier University	13	6.0
Glasgow Caledonian University	20	9.3
Local Authority	3	1.4
NHS	1	0.5
Other	7	3.3
Police	1	0.5
SPHSU, MRC	9	4.2
Scottish Government	1	0.5
University of Aberdeen	17	7.9
University of Dundee	9	4.2
University of Edinburgh	27	12.6
University of Glasgow	49	22.8
University of Highlands and Islands	9	4.2
University of St Andrews	9	4.2
University of Stirling	4	1.9
University of Strathclyde	20	9.3
University of West of Scotland	4	1.9
University outside Scotland	3	1.4
Total responding	215	100.0

Table 2. Discipline

	N	%
Architecture	1	0.5
Biology and Life Sciences	2	0.9
Drug Misuse	3	1.4
Economics, Finance, Management, Business, Marketing	34	15.8
Education	24	11.2
Geography, Geosciences, Environmental Studies	6	2.8
Government	3	1.4
Health Related	35	16.3
Law and Criminology	5	2.3
Linguistics, Languages	1	0.5
Other	27	12.6
Politics, Employment Research	18	8.4
Psychology	20	9.3
Social Science, Humanities	6	2.8
Social Work	5	2.3
Sociology, Social Policy	10	4.7
Sports related	1	0.5
Statistics	7	3.3
Transport	3	1.4
Urban Studies	4	1.9
Total responding	215	100.0

Table 3. How would you describe yourself?

	N	%
	83	38.6
Professional statistician	14	6.5
Regular user of quantitative methods	66	30.7
Occasional user of quantitative methods	41	19.1
Non user but consumer of results of quantitative analysis	11	5.1
Total responding	215	100.0

Note: This question was added later and therefore only answered by some respondents.

Table 4. Descriptive quantitative analysis

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Frequencies, cross-tabulation, means etc	44	31	9	7	9
Comparing frequencies or means	42	33	9	6	10
Graphical output (eg bar-charts, histograms, pie-charts etc)	40	35	10	5	10
Transforming data distributions (eg log, quadratic)	16	24	20	25	15
Indices of inequality (eg GINI index)	7	14	19	45	15
Measures of association (eg correlation)	33	33	13	9	12

Table 5. Regression analysis

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Simple/multiple linear	30	23	20	14	13
Log-linear	11	18	21	35	16
Logistic/ordinal/multinomial	13	21	22	25	18
Other (eg poisson, negative binomial)	7	12	15	46	20

Table 6. Longitudinal analysis

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Event history analysis	2	8	14	52	23
Times series analysis	4	16	17	40	23
Trajectory modelling	0	3	14	61	21
Other longitudinal analysis	3	9	14	47	27

Table 7. Grouping analysis

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Principal components/factor analysis	9	24	20	30	17
Cluster/classification analysis	5	15	20	40	19
Latent class analysis	2	5	14	57	21
Multi-dimensional scaling	1	8	14	55	22

Table 8. Other complex analysis methods

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
Probability, set theory, matrix algebra	5	13	13	49	20
Multi-level modelling	2	11	17	47	23
Structural equation modelling	3	8	13	54	21
Spatial analysis/modelling	0	7	11	61	20
Geographically weighted regression	0	4	8	67	20
Econometric techniques	3	9	13	55	20
Simulation and risk analysis	2	5	11	59	23
Missing value analysis/imputation	3	11	19	46	21
Content analysis (eg NVivo)	1	15	17	48	19

Table 9. Software packages

	Percentage respondents with each level of expertise				
	Advanced	Intermediate	Beginner	Non user	Not given
SPSS	23	37	19	8	14
Stata	5	7	9	49	29
SAS	1	4	5	57	33
R/S/SPlus	2	3	5	57	33
Minitab	4	8	8	47	32
GAUSS	.	.	0	65	34
Amos	1	3	5	57	34
Lisrel	.	1	2	62	35
MPlus	0	0	1	62	36
LatentGold	.	.	0	65	34
MLWin	1	5	4	56	34
ARC/gis	.	3	4	59	34
BUGS (OpenBUGS WinBUGS etc)	1	.	3	61	35

Table 10. 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)	2	6	58	34
Scottish School Leavers Survey	1	6	59	34
Scottish Crime Survey	1	6	58	35
Scottish Social Attitudes Survey	3	17	49	31
Scottish Health Survey	4	14	49	33
Scottish Household Survey	7	16	46	32
Scottish components of national datasets (eg BHPS)	4	11	53	33
Other Scottish datasets	10	12	41	36
Other UK datasets	16	15	35	34
Other datasets	17	7	28	47

Table 11. Descriptive quantitative analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)				
		Advanced	Intermediate	Beginner	Non user	Not given
Frequencies, cross-tabulation, means etc	55	.	42	22	18	18
Comparing frequencies or means	53	.	42	23	15	21
Graphical output (eg bar-charts, histograms, pie-charts etc)	46	4	33	26	17	20
Transforming data distributions (eg log, quadratic)	74	.	12	28	34	26
Indices of inequality (eg GINI index)	84	.	8	20	44	27
Measures of association (eg correlation)	71	1	27	30	23	20

Table 12. Regression analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)				
		Advanced	Intermediate	Beginner	Non user	Not given
Simple/multiple linear	91	3	19	36	23	19
Log-linear	100	2	8	29	39	22
Logistic/ordinal/multinomial	108	3	15	31	27	24
Other (eg poisson, negative binomial)	109	1	10	21	41	27

Table 13. Longitudinal analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)				
		Advanced	Intermediate	Beginner	Non user	Not given
Event history analysis	107	.	6	20	47	28
Times series analysis	121	1	14	24	35	26
Trajectory modelling	98	.	4	17	51	28
Other longitudinal analysis	107	1	8	19	41	31

Table 14. Grouping analysis

	Number requiring training	Percentage of respondents at each level (of those requiring training)				
		Advanced	Intermediate	Beginner	Non user	Not given
Principal components/factor analysis	114	1	18	27	35	19
Cluster/classification analysis	118	1	8	24	44	23
Latent class analysis	108	.	4	18	52	27
Multi-dimensional scaling	113	.	7	19	50	25

Table 15. Other complex analysis methods

	Number requiring training	Percentage of respondents at each level (of those requiring training)				
		Advanced	Intermediate	Beginner	Non user	Not given
Probability, set theory, matrix algebra	68	1	9	18	44	28
Multi-level modelling	104	.	9	23	41	27
Structural equation modelling	93	.	4	22	46	28
Spatial analysis/modelling	79	.	6	19	47	28
Geographically weighted regression	68	.	1	15	56	28
Simulation and risk analysis	78	.	5	18	45	32
Missing value analysis/imputation	87	1	11	25	36	26
Content analysis (eg NVivo)	76	.	12	26	38	24

Table 16. Top training priorities

(Respondents gave up to 3 priorities and those listed 5 times or more are included)

Priority	Number of respondents listing as priority
1 Basic statistics / overview	29
2 Multilevel modelling	26
3 Regression and correlation	24
4 SPSS	22
5 Factor analysis	17
6 Longitudinal analysis	16
7= Structural equation modelling	15
7= GIS / Geographically weighted regression	15
9 Advanced regression (logistic, ordinal, etc)	12
10 Time series analysis	11
11= Cluster analysis	8
11= Stata	8
13= Panel analysis	7
13= Bayesian methods	7
15 Overview of advanced methods	6
15= R	6
15= Logistic regression	6
15= Mixed methods	6
19 Event history analysis	5

Table 17. General level of expertise in quantitative methods

	N	%
1. Not given	27	13
2. Non-user of all methods	21	10
3. Beginner level in at least one descriptive method	15	7
4. Intermediate level in at least one descriptive method	26	12
5. Intermediate level in at least one advanced method (beyond linear regression)	78	36
6. Advanced level in at least one advanced method (beyond linear regression)	48	22

Table 18. Software packages

	Number requiring training	Percentage of respondents at each level (of those requiring training)				
		Advanced	Intermediate	Beginner	Non user	Not given
SPSS	73	3	40	34	11	12
Stata	54	4	9	20	48	19
SAS	25	.	8	12	56	24
R/S/SPlus	40	.	8	13	60	20
Minitab	22	.	14	14	41	32
GAUSS	13	.	.	.	69	31
Amos	31	.	10	26	42	23
Lisrel	24	.	4	13	54	29
MPlus	14	.	.	.	50	50
LatentGold	15	.	.	.	73	27
MLWin	24	.	8	25	38	29
ARC/gis	22	.	18	27	36	18
BUGS (OpenBUGS WinBUGS etc)	15	.	.	20	53	27

Table 19. How likely to participate in different types of training

	Very likely	Quite likely	Not likely	Total replies
Taught courses with hands-on training	123	45	10	178
Presentations by experts, but no hands-on training	48	75	52	175
On-line training	80	64	32	176
Training by video link	33	59	80	172
Step by step examples on the website	91	64	21	176

Table 20. How likely to attend training events in ...?

	Very likely	Quite likely	Not likely	Total replies
Aberdeen	28	26	101	155
Dundee	31	41	83	155
Edinburgh	70	62	31	163
Glasgow	101	45	26	172
St Andrews	24	46	85	155
Stirling	44	57	56	157
Elsewhere in Scotland	16	21	65	102

Table 21. Preferred location for face to face training

	N	%
Aberdeen	20	12
Dundee	13	8
Edinburgh	35	20
Glasgow	85	49
St Andrews	9	5
Stirling	3	2
Elsewhere in Scotland	7	4
Total responding	172	100

Table 22. Preferred duration for face to face training

	N	%
Half day	35	20
1 day	98	57
2 days	27	16
3 days	9	5
5 days	3	2
Total responding	172	100

Table 23. What in your view should be the main priorities for AQMeN?

	Average ranking
Provide support/advice on using quantitative methods	3.0
Run training or CPD courses on intermediate/advanced level statistics	3.8
Provide support/advice on using software packages	4.3
Run training or CPD courses on using software packages	5.0
Provide a forum for like-minded people to have dialogue about quantitative methods	5.4
Enable people to make contact with potential collaborators	6.0
Develop modules for teaching quantitative methods at postgraduate level	6.0
Run training or CPD courses on basic level statistics	6.1
Provide information on other training/CPD opportunities	6.6
Provide information on relevant seminars and/or conferences	6.7

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

Table 24. Which of the following things would you use the AQMeN website to do? Discover and Inform

	Average ranking
Search for information about quantitative methods	3.2
Use online training resources for statistical software packages	3.5
Identify upcoming training or other network events via a calendar	4.4
Discover who in the network has expertise on a given subject	4.5
Find resources for teaching quantitative methods	4.8
Discover related organisations and projects in the UK	5.4
Find out about activities of network members	5.4
Find contact details of network members	5.5

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

Table 25. Which of the following things would you use the AQMeN website to do? Participate and Network

	Average ranking
Start a discussion about a problem or topic on an online forum	2.1
Respond to a thread on an online discussion forum by a member	4.8
Add links to websites of interest to the network	5.0
Upload teaching materials or datasets directly for use by network	5.2
Link to my staff home page & provide a link to AQMeN on my home page	5.3
Write content about topics of interest to myself and the network	5.4
Write descriptions about my activities & expertise for the website	5.9
Link to my social network sites (Facebook, LinkedIn, Twitter, Wordpress...)	5.9

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

Table 26. Would you be prepared to contribute to AQMeN in any of the following ways?

	Yes	No	Total replies
Organising or hosting a seminar	55	91	146
Presenting a paper at a seminar	82	65	147
Offering support to other network members on methods or software issues (where appropriate)	92	55	147
Be involved in the development of training or CPD activities	72	74	146
Be involved in developing teaching modules on advanced methods	48	93	141