
5

General Health Questionnaire

SUMMARY

- The GHQ12 is a good measure of psychological well being in the population and was asked of half of the respondents to the Northern Ireland Health and Social Wellbeing Survey. 27.6% respondents had a GHQ12 score of 3 or more and 21.3% had a score of 4 or more. Women were more likely than men to have poor psychological health. Unlike the self-reported measures of health there was no general decline in psychological wellbeing with age.
- The prevalence of psychological morbidity was higher in Northern Ireland than in either England or Scotland.
- Those who were widowed, separated or divorced generally had the worst mental health though the relationship between marital status and mental health varied by age and sex, for example, in middle age marriage was associated with best mental health for men but amongst women it was those who were single who fared better.
- Catholics tended to have higher GHQ-12 scores (worst mental health) than Protestants, the differences between the two communities being most marked at younger ages.
- Those who were living alone or who suffered a perceived lack of social support tended to have worse mental health.
- Being of lower socio-economic status was also associated with poorer mental health and these differences were generally most pronounced in the middle age range.
- GHQ caseness was closely associated with other measures of self reported ill health especially general health, while it was thought that much of the variation in mental health in Northern Ireland was secondary to variations in physical health the possibility of overlap in the questions was also considered.

5.1 Introduction

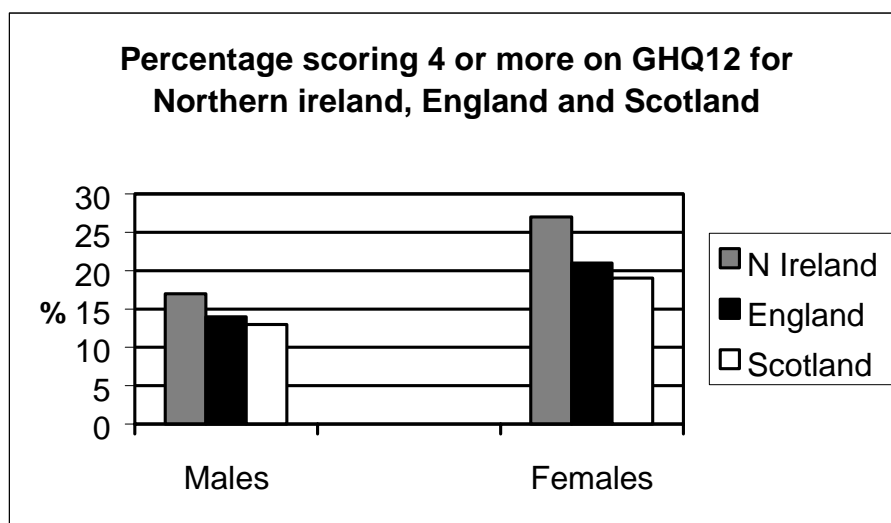
A total of 2093 respondents completed the GHQ12 questions in the survey. 27.6% (578) of the respondents had a GHQ12 score of 3 or more and 21.3% (445) had a score of 4 or more. Women were more likely than men to have an elevated GHQ12 score. The difference between men and women was greatest for those aged 16-24, at this age the percentage of women with a GHQ12 score of 3 or more was more than twice that of men.

Table 5.1

For men both the youngest (16-24) and the oldest age groups (75+) were the least likely to have high GHQ12 scores. In the middle age groups the prevalence was highest amongst women with the exception of the 55-64 age group in which the prevalence was higher for men. The prevalence of psychiatric morbidity in women, though highest in those aged 25-34, was fairly constant between the ages of 16 to 55.

5.2 Comparing Northern Ireland with England and Scotland

To compare GHQ12 results with data from Health Survey for England (1995) and Health Survey for Scotland (1995), it was necessary to use a cut off score of four or more and restrict the age range to 16-64 years. In Northern Ireland the proportion of men scoring 4 or more was 17%, compared to 13% in Scotland and 14% in England. The equivalent figures for women were 27% in Northern Ireland, 19% in Scotland and 21% in England, as shown in the figure below



A comparison of high GHQ12 scores by age and sex revealed a number of further differences between the countries. In Northern Ireland the prevalence of psychological morbidity amongst men (as defined by a GHQ12 score of 4 or more) rises more steeply with age (between 16 and 64) than in either England or Scotland. In Northern Ireland the prevalence for women rises with increasing age while in England there was little association between age and the prevalence of high GHQ12 scores. In Scotland the prevalence was highest in the middle age groups. **Table 5.2**

5.3 GHQ scores and social and economic factors

In the following section the association between psychiatric morbidity and social and economic factors are described.

Marital Status

Those who were widowed, separated or divorced generally had the worst mental health. For those under the age of 64, marriage was generally associated with better mental health, though the direction and extent of the relationship varied between the sexes. Marital status was a very significant factor for the mental health of younger men, for example, there was more than a two-fold difference in the prevalence of psychiatric morbidity between those who were married and those who were separated, widowed or divorced. There was little difference between married and single men, or between married or single women. The effects of widowhood or of being separated or divorced on mental health were more modest for women at this age. Married or cohabiting men aged 45-64, had approximately half the prevalence of psychological morbidity than either single or separated, widowed or divorced men had. For women of this age, being single was associated with better mental health. At the older age group, smaller numbers obscured the relationship for single men and women. However for men, again being married was better for mental health than being separated, widowed or divorced, while for women the reverse was true. **Table 5.3**

Denomination

At most ages, Catholic adults were more likely to have a high GHQ score i.e. poorer mental health. The difference was more marked for younger adults. The prevalence of significant psychiatric morbidity at different ages and sexes varied by denomination. For Catholic men the prevalence was constant up to the age of 64 and fell a little at the

older ages. Protestant men had a low prevalence at both the younger and older ages but a high prevalence between the ages of 45-64. For women the pattern was almost reversed, with Catholic women showing an increase in prevalence between 45-64, while Protestant women showed improving mental health with increasing age. The difference between the denominations was greatest for men aged 16-44 and women aged 45-64. There was little difference in mental health between denominations for both sexes at the oldest age group (65+).

Table 5.4

Social isolation – lone person households

Adults who were living alone were more likely to have a high GHQ score of 3 than those who were not living alone. This was most evident at the younger ages. There was a moderate difference at the youngest age group for both men and women. The difference in psychiatric morbidity between those living alone and those who were not was particularly marked for men between the ages of 45-64 but not so marked for women. At the oldest age group there was relatively little difference in GHQ score by social isolation for both men and women.

Table 5.5

Perceived social support

The social support scale was derived by assigning a score from a scale where one denoted lack of support to three - no lack of support for each of seven questions. A maximum score of 21 indicated no lack of social support, a score of 18 to 20 signified some lack of support, while a score under 18 indicated a severe lack of social support. Respondents with a severe lack of social support were more likely to have a GHQ score of 3 or more than those with some or no lack of social support. For those aged 16-44 there was a marked difference between categories for women, though for men the differences were small. There was a large difference at age 45-64 for both men and women and the difference decreased for both sexes at the oldest age group.

Table 5.6

Social Class

In general there was a higher prevalence of psychiatric morbidity among those in the manual social classes (IIIM to V) than those in non-manual social classes (I to IINM), though at the youngest age group there was little difference in mental health between the social classes. This was true for both men and women. The largest difference was

at ages 45-64, though only for women. By age 65+ the difference between the social classes for both sexes was once again attenuated. **Table 5.7**

Qualification

At all ages and for both sexes, those who have some formal educational qualifications had better mental health than those who had no such qualifications. The difference between these two categories was more pronounced at the youngest age group. For men there was a modest difference between those with and without a qualification in relation to their mental health. While those with no qualification reported a higher prevalence of psychiatric morbidity in the youngest and oldest age groups, the differences were small and there was no difference at age 45-64. There was, however, a marked difference for women across the three age bands, which was much more apparent at the youngest age group. **Table 5.8**

Tenure

Respondents living in rented accommodation were more likely to have a high GHQ score than those in owner occupied homes. Overall, there were moderate differences between the categories at age 16-44 and relatively little difference for those over the age of 65. The greatest difference was at age 45-64. For men, the difference in mental health between renting and living in owner occupied housing appeared to be greatest at 16-44, while for women those in the youngest and oldest age groups showed relatively little difference in mental health between types of tenures; however, there appeared to be a substantial difference in levels of psychiatric morbidity at age 45-64 between those renting and those in owner occupied housing. **Table 5.9**

Car Availability

Adults without access to a car recorded higher levels of psychiatric morbidity than those who had access to a car. There was a moderate difference at the youngest age, a large difference at 45-64 and again relatively little difference over the age of 65. The difference in psychiatric morbidity between those with and without access to a car between the ages of 45-64 was particularly marked for men. **Table 5.10**

Household Income

In general, respondents in higher income categories were less likely to have a GHQ score of 3 or more. For those aged 16-44 there was an almost two-fold difference between categories for men, though for women the differences were not as marked. At age 45-64 for men again the difference was almost two-fold and there was a three-fold difference between income categories for women. Smaller numbers obscured the relationship between the lowest and highest categories among the oldest age group.

Table 5.11

Urban/Rural Areas

In general, respondents in the most urban areas were more likely to have a high GHQ12 score than those in rural and most rural areas. However, it was difficult to discern any overall trend in the prevalence of psychiatric morbidity from most urban to most rural areas, though in those aged less than 65, there was a lower prevalence in the urban areas compared to the most urban areas which may perhaps reflect the more affluent suburbs.

Table 5.12

Deprivation at area level

Generally respondents living within the most deprived category were more likely to have a GHQ12 score over 3. There was a moderate difference at the youngest age group, a greater difference at age 45-64 and once again the difference weakened among the oldest age group. The greatest difference was for women at age 45-64 where those in the most deprived group were twice as likely to have a high GHQ12 score than those in the most affluent group. At the oldest age group smaller numbers obscured the pattern. Interestingly, at the youngest and oldest ages mental health appears to be better in the 'average' than in the 'affluent' areas.

Table 5.13

5.4 Relationship with self reported health measures

The Health Survey included a number of questions about respondents' perception of their own health, for example their general health, limiting long standing illness and disability. This section looks at the relationship between these measures of self reported health and the respondents GHQ12 scores.

GHQ12 and limiting long standing illness

Large differences were evident when comparing those respondents who reported having a limiting long-standing illness and those who had not. Among the former 41.6% of men and 50.3% of women had a GHQ score of over 3, while the equivalent figures for the latter were 14.7% of men and 24.5% of women (see Table 5.14).

GHQ12 and self reported general health

Table 5.14 shows a clear and linear relationship between quality of self-reported general health and prevalence of high GHQ12 scores. Among those who said that their health was 'good', 12.8% of men and 19.6% of women had a high GHQ12 score. By contrast, among those who rated their general health as 'not good', 56.8% of men and 63.9% of women had a high GHQ12 score.

GHQ12 and disability

There was also a clear relationship between the presence of any disability and GHQ12 score. Respondents who reported having a disability were more likely than those who did not to have a GHQ12 score of over 3. For men, the figures were 61.3% and 16.7% respectively and for women they were 57.7% and 27.1% (see Table 5.14).

5.5 Logistic regression

The main social and economic factors were included in a logistic regression for GHQ12, for men and women separately (see Table 5.15(a)). Logistic regression allowed us to examine which social and economic factors affected the odds of having a high score on the GHQ12.

When all other factors (principally health factors) were controlled for, the odds of having significant psychiatric morbidity fell with increasing age, in both men and women. For men only age and health factors were associated with poor mental health, for women the likelihood of psychiatric morbidity increased if perceived social support was felt to be lacking.

The major determinant of mental health of the population at all ages was the presence or absence of physical ill health or (for men) exposure to health stresses in the last year.

(Health stresses included the deterioration of an existing medical condition, serious health problem of a family member or friend or the death of a family member or friend).

There is a potential problem with including health factors in the regression models. While it is reasonable to include measures of purely physical health, it would be wrong to include another measure of mental health as this would simply produce a tautological statement and swamp the influence of other social or economic variables. A difficulty arises as we were not sure if some of these measures related solely to the physical aspects of health. However we interpreted the three health measures as primarily representing physical health for the following reasons:

1. The disability questions very evidently related to aspects of physical health and the spectrum of disability ranged from an inability to walk 200 yards without stopping or discomfort to the inability to get out of bed or a chair without difficulty.
2. Limiting long-standing illness is known to be a poor indication of mental or emotional health¹ being much more closely aligned with physical aspects of health.
3. The proposed census question likewise, has been shown to be more associated with the physical aspects of health.

When the analysis was rerun without including the census' general health question, the effects of the other indicators of physical health were strengthened and LLSI question was now an insignificant predictor of mental health for men as were health stresses in the last year for women. This adds further support to the contention that the general health question was reflecting the physical aspects of health.

Rerunning the analysis in stages (see Table 5.15(b)), starting with demographic and social factors, then adding the measures of socio-economic status before finally adding indicators of physical health, enabled us to understand a little more of the interplay of these factors. Initially only marital status was significantly associated with GHQ caseness for men. The improvement in mental health with increasing age and social support was evident in women. Although there was a tendency for Catholics to have

¹ Cohen, J., Forbes, J. and Garroway, M. (1995). Interpreting self reported limiting long term illness. British Medical Journal. 311, 722-724

poorer mental health this did not reach conventional levels of statistical significance. For both men and women, those who were widowed, separated or divorced had between one and a half and twice the risk of having significant psychiatric morbidity. The additions of socio-economic factors modified this picture somewhat. For men age was now associated with mental health, (though there was no evidence of a trend) and there was some indication that the likelihood of poorer mental health increased as household income fell. Women without academic qualifications had an increased risk of poor mental health, and the inclusion of socio-economic factors reduced the relationship between marital status and mental health. Neither tenure, social class nor car availability were associated with mental health in either men or women.

The further addition of physical health factors reduced to non-significance many of the remaining associations between social and economic factors and mental health. Again the inference is that physical health is a major determinant of mental health and that many of the associations between social and socio-economic status and poor mental health are mediated through their associations with poorer physical health. For women, social support remained important throughout and its relationship to mental health status was unaffected by social or economic factors. It is possible that, in women, good social support increases personal resilience and, other things being equal, reduces the risks of poor mental health.

Neither area deprivation factors, Board of residence or the urban/rural nature of where the respondent lived were significantly associated with mental health status.

Conclusion:

Much of the poorer mental health, as measured by the GHQ12, in Northern Ireland was associated with poorer physical health. There was evidence of an inherent tendency towards better mental health with advancing age, though with the age-related decline in physical function, the overall effect was to keep the prevalence of significant psychological morbidity fairly constant across the age bands. Most of the socio-economic effects on mental health in Northern Ireland appeared to be mediated through the association between socio-economic standing and physical ill-health. Good levels of social support mitigated against the likelihood of poor mental health in women.

Table 5.1 GHQ12 scores of 3 or more by age and sex

	Age						
	16-24	25-34	35-44	45-54	55-64	65-74	75+
	%	%	%	%	%	%	%
Men	14.4	25.7	24.6	26.7	35.0	23.7	11.9
Women	32.8	36.1	34.5	31.8	35.9	22.4	27.2
Total	25.1	32.3	30.3	29.6	35.6	23.0	21.2

Table 5.2 Comparison of GHQ12 score of 4 or more for Northern Ireland, England and Scotland by age and sex

GHQ12 score of 4 or more	Age						Total
	16-24	25-34	35-44	45-54	55-64	%	
	%	%	%	%	%	%	%
Men							
NI	8.9	15.1	17.5	18.5	26.5		16.9
England	12.0	12.0	16.0	17.0	14.0		14.0
Scotland	9.0	11.0	12.0	17.0	17.0		13.0
Women							
NI	25.5	26.5	23.9	30.0	33.3		27.4
England	21.0	21.0	21.0	21.0	19.0		20.0
Scotland	16.0	23.0	19.0	22.0	16.0		19.0

Table 5.3 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and marital status

	Age		
	16-44	45-64	65+
	%	%	%
Men			
Single	19.3	57.9	7.7
Married/cohabiting	21.2	25.6	19.7
Sep/div/wid	53.3	45.7	23.7
Total	21.5	30.8	19.7
Women			
Single	33.3	23.8	13.3
Married/Cohabiting	32.8	30.7	29.5
Sep/div/wid	47.8	47.0	23.5
Total	34.5	33.5	24.6
All Adults			
Single	27.5	40.0	11.6
Married/Cohabiting	28.0	28.4	24.0
Sep/div/wid	48.8	46.5	22.9
Total	29.3	32.3	22.3

Table 5.4 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and denomination

	Age		
	16-44 %	45-64 %	65+ %
Men			
Catholic	27.7	26.2	22.5
Protestant	16.9	35.0	19.1
Total	21.3	31.3	19.9
Women			
Catholic	35.9	40.6	24.7
Protestant	33.8	29.1	24.0
Total	34.8	33.7	24.2
All Adults			
Catholic	32.7	34.2	24.6
Protestant	26.6	31.5	21.5
Total	29.3	32.6	22.4

Table 5.5 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and social isolation

	Age		
	16-44 %	45-64 %	65+ %
Men			
Not living alone	20.5	27.2	19.5
Living Alone	37.0	50.0	19.0
Total	21.5	30.4	19.4
Women			
Not living alone	31.4	32.9	24.4
Living Alone	44.0	40.5	23.9
Total	34.5	33.8	24.2
All Adults			
Not living alone	28.7	30.5	22.1
Living Alone	41.5	44.2	22.5
Total	29.3	32.3	22.5

Table 5.6 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and social support

	Age		
	16-44	45-64	65+
	%	%	%
Men			
No lack of social support	23.1	24.1	16.5
Some lack of social support	18.0	29.2	20.5
Severe lack of social support	24.2	45.5	28.6
Total	21.5	30.6	19.4
Women			
No lack of social support	30.9	30.0	21.7
Some lack of social support	31.5	31.8	28.0
Severe lack of social support	53.5	53.7	30.4
Total	34.5	33.4	23.8
All Adults			
No lack of social support	28.0	28.0	19.7
Some lack of social support	25.9	30.5	24.5
Severe lack of social support	39.6	49.0	29.4
Total	29.3	32.2	22.0

Table 5.7 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and social class

	Age		
	16-44	45-64	65+
	%	%	%
Men			
SC non-manual	21.0	28.9	18.8
SC manual	21.8	29.7	20.3
Total	21.5	29.4	19.9
Women			
SC non-manual	32.8	28.3	21.2
SC manual	35.9	37.1	29.8
Total	34.2	33.0	25.8
All Adults			
SC non-manual	29.3	28.8	20.4
SC manual	29.1	33.7	24.9
Total	29.2	31.7	23.2

Table 5.8 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and academic qualification

	Age		
	16-44	45-64	65+
	%	%	%
Men			
Any	20.2	30.1	16.4
None	25.7	31.0	22.0
Total	21.5	30.6	19.7
Women			
Any	29.8	28.8	16.7
None	50.3	37.8	26.7
Total	34.6	33.8	24.2
All Adults			
Any	25.9	29.4	16.5
None	40.2	35.2	25.0
Total	29.3	32.4	22.3

Table 5.9 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and tenure

	Age		
	16-44	45-64	65+
	%	%	%
Men			
Owner occupied	18.1	28.6	16.8
Renting	31.1	38.8	25.5
Total	21.6	30.6	19.5
Women			
Owner occupied	32.3	28.3	25.2
Renting	38.8	50.6	23.2
Total	34.6	33.6	24.5
All Adults			
Owner occupied	26.1	28.4	21.3
Renting	36.0	46.1	24.3
Total	29.2	32.3	22.3

Table 5.10 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and car availability

	Age		
	16-44	45-64	65+
	%	%	%
Men			
One or more	19.6	27.5	20.8
None	31.1	50.0	16.7
Total	21.5	30.6	19.5
Women			
One or more	33.0	31.0	21.8
None	39.2	44.6	26.7
Total	34.5	33.6	24.2
All Adults			
One or more	27.3	29.3	21.3
None	36.6	46.5	23.5
Total	29.3	32.2	22.2

Table 5.11 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and household income category

	Age		
	16-44	45-64	65+
	%	%	%
Men			
More wealthy	14.9	24.2	20.0
Average	24.2	25.0	20.5
More poor	25.2	40.5	20.0
Total	21.9	30.0	20.3
Women			
More wealthy	28.8	14.3	7.1
Average	32.5	33.8	32.3
More poor	40.9	41.7	18.9
Total	34.6	32.5	24.0
All Adults			
More wealthy	22.2	19.0	8.7
Average	29.1	30.3	27.6
More poor	35.2	41.2	19.4
Total	29.4	31.3	22.4

Table 5.12 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and urban/rural nature of area of residence

	Age		
	16-44 %	45-64 %	65+ %
Men			
Most urban	31.1	37.8	7.7
Urban	22.8	27.1	23.3
Average	12.8	42.0	21.6
Rural	15.6	18.6	24.0
Most rural	22.2	29.4	22.6
Total	21.4	30.4	19.4
Women			
Most urban	39.4	38.5	19.0
Urban	35.9	30.0	31.5
Average	40.7	37.5	15.0
Rural	26.7	29.7	29.4
Most rural	31.1	31.0	21.7
Total	34.7	33.4	23.2
All Adults			
Most urban	35.8	38.2	14.7
Urban	30.6	28.7	28.6
Average	30.7	39.8	18.2
Rural	22.4	24.4	27.1
Most rural	27.4	30.3	22.1
Total	29.3	32.3	21.8

Table 5.13 Proportion of respondents with a GHQ12 score of 3 or more by age, sex and area deprivation category

	Age		
	16-44 %	45-64 %	65+ %
Men			
More affluent	19.7	27.1	21.5
Average	14.6	33.3	23.1
More deprived	26.9	31.6	14.0
Total	21.6	30.6	19.4
Women			
More affluent	33.1	24.0	26.5
Average	27.1	33.8	13.5
More deprived	40.2	43.1	27.1
Total	34.6	33.7	23.8
All Adults			
More affluent	27.4	25.1	24.0
Average	22.6	33.6	17.6
More deprived	34.9	38.2	21.7
Total	29.3	32.3	21.8

Table 5.14 Relationship of psychosocial wellbeing to self-reported health measures, by sex

GHQ12 Score	LLSI		General health			Disability	
	No	Yes	Good	Fairly Good	Not Good	No	Yes
Men							
less than 3	85.3	58.4	87.2	79.1	43.2	83.3	38.7
3 or more	14.7	41.6	12.8	20.9	56.8	16.7	61.3
Base	678	165	452	278	132	756	106
Women							
less than 3	75.5	49.7	80.4	69.1	36.1	72.9	42.3
3 or more	24.5	50.3	19.6	30.9	63.9	27.1	57.7
Base	898	332	612	388	230	1055	175

Table 5.15(a) Final logistic regression model for having a high GHQ score (3 or more) for men and women

	Men		Women		
	Odds ratio (95% Confidence Intervals)	P-value	Odds ratio (95% Confidence Intervals)	P-value	
Demographic & Social Factors			Demographic & Social Factors		
<i>Age (p<0.001)</i>			<i>Age (p<0.001)</i>		
16-44	1.00		16-44	1.00	
45-64	0.71 (0.43 - 1.16)	0.18	45-64	0.58 (0.40 - 0.84)	0.00
65+	0.24 (0.12 - 0.48)	0.00	65+	0.18 (0.11 - 0.30)	0.00
<i>Denomination (p=0.35)</i>			<i>Denomination (p=0.65)</i>		
Protestant	1.00		Protestant	1.00	
Catholic	1.20 (0.82 - 1.76)		Catholic	1.07 (0.80 - 1.42)	
<i>Marital Status (p=0.13)</i>			<i>Marital Status (p=0.50)</i>		
Married/Cohabiting	1.00		Married/Cohabiting	1.00	
Single	1.01 (0.63 - 1.63)	0.96	Single	1.13 (0.79 - 1.61)	0.50
Sep/Wid/Div	1.95 (1.02 - 3.71)	0.04	Sep/Wid/Div	1.25 (0.84 - 1.87)	0.27
<i>Social Support (p=0.71)</i>			<i>Social Support (p<0.001)</i>		
Severe lack of support	1.00		Severe lack of support	1.00	
Some lack of support	0.80 (0.48 - 1.35)	0.41	Some lack of support	0.44 (0.29 - 0.68)	0.00
No lack of support	0.87 (0.53 - 1.41)	0.56	No lack of support	0.42 (0.29 - 0.63)	0.00
Socio-economic Factors			No Qualification	1.31 (0.92 - 1.85)	0.13
No Qualification	0.93 (0.61 - 1.41)	0.72			
<i>Household Income (p=0.38)</i>			<i>Household Income (p=0.45)</i>		
Wealthier	1.00		Wealthier	1.00	
Wealthy	1.03 (0.58 - 1.84)	0.92	Wealthy	1.32 (0.84 - 2.08)	0.23
Average	1.11 (0.61 - 2.02)	0.73	Average	0.99 (0.62 - 1.58)	0.95
Poor	1.26 (0.70 - 2.27)	0.45	Poor	0.88 (0.55 - 1.42)	0.60
Poorer	0.60 (0.27 - 1.31)	0.20	Poorer	1.04 (0.61 - 1.78)	0.90
Health Factors					
<i>LLSI</i>	1.40 (0.79 - 2.46)	0.25	<i>LLSI</i>	1.54 (1.02 - 2.33)	0.04
<i>Any Health Stress</i>	1.71 (1.04 - 2.81)	0.04	<i>Any Health Stress</i>	1.34 (0.91 - 1.97)	0.14
<i>Disability</i>	4.09 (2.11 - 7.94)	0.00	<i>Disability</i>	2.04 (1.23 - 3.40)	0.01
<i>General Health (p<0.00)</i>			<i>General Health (p<0.00)</i>		
Good	1.00		Good	1.00	
Fairly good	1.61 (1.04 - 2.52)	0.03	Fairly good	1.76 (1.26 - 2.46)	0.00
Not good	4.00 (2.06 - 7.76)	0.00	Not good	5.76 (3.59 - 9.22)	0.00
Baseline odds	0.166		Baseline odds	0.482	

Table 5.15(b) Logistic regression models for having a high GHQ score (3 or more) for men and women*

	Men				Women			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
Demographic & Social Factors								
<i>Age</i>								
16-44	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
45-64	1.41	1.32	0.83	0.71	0.99	0.77	0.63	0.58
65+	0.91	0.69	0.29	0.24	0.58	0.45	0.20	0.18
<i>Denomination</i>								
Protestant	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Catholic	1.21	1.19	1.25	1.20	1.23	1.12	1.06	1.07
<i>Marital Status</i>								
Married/Cohabiting	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Single	0.85	0.88	1.02	1.01	0.87	0.91	1.02	1.13
Sep/Wid/Div	2.12	2.18	1.85	1.95	1.54	1.44	1.34	1.25
<i>Social Support</i>								
Severe lack of support	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Some lack of support	0.71	0.77	0.81	0.80	0.45	0.46	0.41	0.44
No lack of support	0.65	0.71	0.83	0.87	0.40	0.42	0.39	0.42
Socio-economic Factors								
<i>No Qualification</i>								
		1.09	0.93	0.93		1.67	1.40	1.31
<i>Household Income</i>								
Wealthier		1.00	1.00	1.00		1.00	1.00	1.00
Wealthy		1.29	1.16	1.03		1.41	1.37	1.32
Average		1.84	1.23	1.11		1.29	1.01	0.99
Poor		2.23	1.46	1.26		1.12	0.90	0.88
Poorer		1.27	0.72	0.60		1.32	1.05	1.04
Health Factors								
<i>LLSI</i>								
			2.21	1.40			2.70	1.54
<i>Any Health Stress</i>								
			2.10	1.71			1.73	1.34
<i>Disability</i>								
			4.87	4.09			2.70	2.04
<i>General Health</i>								
Good				1.00				1.00
Fairly good				1.61				1.76
Not good				4.00				5.76
Baseline odds	0.315	0.199	0.173	0.166	0.432	0.676	0.646	0.482

* Numbers in bold represent odds which are significant at p<0.05