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Labour market conditions, labour force activity and prevalence of psychiatric disorders

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Abstract

Background. At a population level, the extent that labour market conditions influence labour force activity among people with psychiatric disorders, remains equivocal. Similarly equivocal is the hypothesised relationship between economic conditions and the reported prevalence of specific psychiatric disorders. We investigated these issues by examining the extent that labour market conditions were associated with change in labour force activity among people with anxiety disorders, affective disorders, and schizophrenia, in comparison to healthy working age adults. *Methods.* Data files were provided by the Australian Bureau of Statistics (ABS) from a population survey conducted in 1998 and replicated in 2003. Multi-stage probability samples were obtained in 1998 ($N_1=37,580$) and 2003 ($N_2=36,088$). Adults with schizophrenia, depression, and anxiety disorders were compared to healthy working age adults. *Results.* Greater labour demand in 2003 was positively associated with increased labour force participation among healthy adults. The proportions actively looking for work declined among healthy adults and among those with anxiety disorders. Full-time employment significantly increased among healthy working age residents. The proportions employed part-time significantly increased in all groups except among people with schizophrenia. *Conclusion.* These results support policies which remove disincentives and increase access to the more intensive evidence-based employment programs even when labour market conditions are improving.

Key words: psychiatric disorders, labour force, employment.

Introduction

Anxiety disorders, affective disorders, psychotic disorders, and schizophrenia have an increasingly negative impact on labour force activity [1-3]. In studies of people with severe mental illness, the evidence remains equivocal as to the extent that labour market conditions determine employment outcomes. Catalano et al. [4] found no support for the widely held assumption that people with severe mental illness are most at risk of job-loss when labour demand contracts. Salkever et al. [5] found a weak relationship between employment outcomes and local unemployment rates in a multi-site study of people with schizophrenia. Other researchers point to the availability of vocational rehabilitation programs and local unemployment rates as influencing employment outcomes for people with severe mental illness [6-7]. Such labour market influences are most appropriately investigated at a national level, to aggregate the influences of regional (e.g. rural versus urban) labour markets. Yet at national (population) levels, little has been reported about how labour market conditions impact on employment among people with psychiatric disorders.

In good economic times, Governments expect to consolidate labour market programs. The issue then becomes to what extent can the more intensive and more costly programs for people with severe mental illness be contracted in line with lower demand for mainstream labour market programs. Two recent administrations of a large Australian population survey provided a rare opportunity to investigate this issue. From 1998 to 2003 Australia's gross domestic product (GDP) grew by 34.5%, national unemployment decreased by 1.6% and long term unemployment decreased by 8.4% [8]. We expected that the employment gain due to improved labour market conditions would be greatest among healthy working age adults, and least among people with more severe categories of mental illness, due to their greater need for more intensive and continuous employment assistance [9].

Method

Data source

The Australian Bureau of Statistics (ABS) provided confidentialized data files from the fourth and fifth administrations of a five-yearly population survey conducted in Australia since 1981. The survey and data release are authorized by the Australian Federal *Census and Statistics Act, 1905*. The first data file represented the Survey of Disability, Ageing and Carers (SDAC) 1998, conducted from March to May 1998 [10-11], gathering a household sample of 37 580 people after confidentiality protections were applied by the ABS. The second data file represented the SDAC 2003, conducted June to December 2003, incorporating a household sample of 36,088 people after the confidentiality protections were applied [12].

The ABS protected the confidentiality of individuals surveyed in both administrations by removing households with rare combinations of demographic and health conditions from the data file, and where necessary, aggregating variables to suppress identifiable details. Hence, data provided for this investigation may not exactly match that reported elsewhere by the ABS. Other than reducing the total sample size by 1.5% in 1998 and 0.4% in 2003, confidentiality protections did not limit these analyses, except that the range of anxiety ICD-10 codes had to be narrowed because a new confidentiality protection introduced in 2003 led to different aggregation rules being applied compared to the 1998 data file.

Sampling

The SDAC design and operation are detailed elsewhere [1,11-12]. Both survey administrations took place in urban and rural areas in all States and Territories, except in remote and sparsely settled parts of Australia. Statistical adjustments for not sampling remote residents in the Northern Territory were applied because unlike other States, approximately 20% of Northern Territory residents live in remote areas. Participants included all people except prisoners, non-Australian diplomatic personnel, and members of non-Australian

defence forces stationed in Australia. Both survey samples were selected using multistage sampling techniques based on population census collection districts.

There were two different components to each survey, a household component and a cared accommodation component. Because our focus was on labour force activity, only the household components were utilised. The household component covered: 15,316 private dwellings in 1998 and 14,019 private dwellings in 2003 (approximately one per 400 in Australia); and 399 non-private dwelling units in 1998, and 303 in 2003. Non-private dwellings included hotels, motels, boarding houses, educational and religious institutions, guest houses, construction camps, short-term caravan parks, youth camps and camping grounds, staff quarters, and self-care components of retirement villages. Non-private dwellings were selected separately from private dwellings to ensure adequate representation. Each non-private dwelling was given a chance of selection proportional to the average number of people accommodated. Individual level population weights were provided by the ABS to enable the estimation of population prevalence.

In Australia, unemployment statistics originate from monthly labour force surveys conducted by the ABS. These surveys use an internationally agreed definition of economic activity, adopted by the Thirteenth International Conference of Labour Statisticians (1982), in accord with the United Nations System of National Accounts [13]. By this definition, unemployment is defined in terms of proportions of ‘labour market participants’, a reference group which typically includes persons aged 15-64 years who, when surveyed, are either currently employed (worked at least one hour in the reference week), or who meet the criteria for actively looking for work [13].

Survey responses

Information was obtained from 93.0% of private dwellings sampled in 1998, and from 89.8% of private dwellings in 2003. Completed interviews were obtained from 35,569

persons or 94.4% of the total persons targeted in the household component of the survey. Partial non-responses in 1998 included income-refusal 1.9% and income-don't know 3.4%. Full non-responses included refusals 0.1%; non-contacts 0.1%; and language problems, death, illness or other, less than 0.05%. In 2003, full responses were obtained from 36,241 individuals in the household component of the survey. Details of responses in 2003 from non-private dwellings and details of partial individual responses were not available from the ABS at the time of writing.

Our secondary analysis, replicated in each survey, captured people of labour market age (15-64 years) in four mutually exclusive diagnostic categories: healthy controls ($n_{1998}=19,956$; $n_{2003}=14,289$), those with ICD-10 anxiety disorders (excluding co-morbid depression) ($n_{1998}=716$; $n_{2003}=830$), those with ICD-10 depression (including co-morbid anxiety) ($n_{1998}=370$; $n_{2003}=623$), and those with schizophrenia ($n_{1998}=53$; $n_{2003}=75$). Application of ABS population weights as recommended [11-12] produced population prevalence estimates of household residents of working age (15-64 years) in all categories of interest. People with other co-morbid ICD-10 health conditions were not excluded from this investigation.

Identifying people with schizophrenia, depression and anxiety

During the household interviews all categories of health conditions were systematically investigated and coded according to the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10) [14]. A large proportion of health conditions were coded automatically in the field using computer-assisted pick-lists. Experienced ABS household interviewers (who were not medically trained) were given three days training in the computer assisted interview schedule and the ICD-10 classification system. The 2003 schedule was updated from previous administrations in 1998, 1993, 1988, and 1981.

Schizophrenia, affective, and anxiety disorders were identified in three possible ways: by self-report, with a responsible adult of the household, or by another responsible adult person assisting with the interview. Other responsible persons typically included legal guardians, parents, first degree relatives, and adults with formal caring responsibilities. The mental health condition section began with the question: *"Does anyone in the household need to be helped or supervised in doing things because of a mental illness or condition?"* This question was followed by a structured combination of open and closed questions to reveal the nature of disabilities, spectrum of underlying health conditions, and activity restrictions and limitations. Multiple interviews with respect to the same person were frequently required to complete the schedule.

ICD-10 classifications of schizophrenia, depression and anxiety were matched in both surveys for this analysis. The classification of anxiety disorders reported previously from the 1998 survey [2] was redefined to match the more restricted range of ICD-10 anxiety condition codes available in the 2003 survey. Obsessive compulsive disorder (ICD-10 code F42) was excluded because it was aggregated by the ABS with other non anxiety related conditions as a new confidentiality protection measure. Other neurotic and stress related disorders and somatoform disorders were excluded because they were aggregated with somatoform disorders. The resulting anxiety disorder category included: phobias (agoraphobia, social phobia and specific phobia, F40); panic disorder and generalized anxiety disorder (F41); acute stress disorder, and posttraumatic stress disorder (F43). Depression and affective disorders included mania (F30), bipolar affective disorder (F31), depression (F32-33), persistent mood disorders (F34), and other affective disorders (F38-39), excluding post natal depression. Schizophrenia was defined by ICD-10 code F20. Other psychotic disorders could not be examined in the 2003 survey for comparison to previous reports, because these condition codes were aggregated with other mixed mental and behavioural disorders by the ABS as a

confidentiality protection measure.

During household interviews, text fields were used for any disorders reported which did not appear to match items on the pick lists. Codes for all text entries were determined post interview by more experienced ICD-10 coders. This was necessary because some disorders were collected under more general descriptive categories within the pick lists. For instance, acute stress disorder (F43.0) and posttraumatic stress disorder (F43.1) were both coded under the description 'nervous tension/stress'. To ensure coding accuracy, all interviews were checked until each interviewer achieved 90% agreement or higher with an experienced coder. Sample monitoring of coding continued throughout the data collection phase. The interview protocols for both the 1998 and 2003 surveys are available from the ABS.

Impairments and labour force activity

The survey used the International Classification of Impairments, Disabilities and Handicaps as a framework to identify disability and the associated level of restriction [15-16]. Each interview commenced with a series of screening questions about activity restrictions, impairments, and long-term health conditions, before the level of disability and the underlying health condition were identified. People had a disability if they had an impairment or restriction in everyday activities that was likely to last for six months or more. It was possible for example, for a person to have a particular disorder as a long-term health condition, but without activity restrictions and hence, without a disability.

Labour force activity in 1998 and 2003 was grouped into four mutually exclusive categories: (1) non-participation in the labour force, defined as not employed, and not available for work or not looking for work; (2) looking for work, defined as both available for work and actively looking for work; (3) part-time employment or self-employment, defined as currently working less than 35 hours per week; and (4) full-time employment or self employment, defined as currently working 35 or more hours per week.

Analyses

Analyses were restricted to persons aged 15-64 years with schizophrenia, affective, or anxiety disorders, as the underlying ICD-10 conditions, in the household component of the surveys. The stability of disorder prevalence between 1998 and 2003 was examined by analysis of variance. A control group of persons aged 15-64 years without activity restrictions, disability or long-term health conditions provided reference points for labour force activity. Analyses were conducted using SAS version 8.02 [17], and followed the statistical methods recommended by the ABS (pp. 35-39) [11]. Population weights were provided by the ABS as an individual level variable within each respondent's record (p. 21) [11], enabling the calculation of unbiased population prevalence estimates within the scope of the survey. Standard errors (SE) of population estimates were calculated as recommended using the jack knife method [18]. Differences among population estimates of interest were examined using standardised Z-scores. Further analyses were limited by the low prevalence of schizophrenia, which led to small sub-groups with high standard errors frequently reaching 25-50% of the estimate value.

Results

Comparison of prevalence estimates 1998-2003

The prevalence of affective disorders varied across both surveys in a distinct and consistent pattern (see Table 1 and Figure 1). Analysis of variance showed (Table 2) that depression prevalence depended on age, sex, and year of the survey, at first and second order levels, but not at the third order. From 1998 to 2003, the prevalence of depression increased more among females than among males, and increased with age among both males and females, with a consistent fall in prevalence at age 60-64 years, except among females aged 60-64 years in 1998. The consistency of this pattern can be seen in the relatively parallel gradients in Figure 1, which indicate reliability of prevalence estimates in both survey administrations.

In terms of the prevalence of anxiety disorders, there were no effects over and above random variation except for the main effects of age group and sex (see Table 2). The prevalence of anxiety disorders increased with age, with a greater prevalence among females than males. However the prevalence decreased among females aged 35-39 years in 2003 and among both males and females in both surveys at ages 60-64 years. Unlike the prevalence of depression, the prevalence of anxiety disorders did not significantly increase from 1998 to 2003. Again, the prevailing parallel gradients and non-random nature of this pattern (see Figure 2) indicates relative reliability of anxiety disorder prevalence estimates in both survey administrations.

Change in labour force activity 1998-2003

Non participation in the labour force is defined by the ABS as not available for work, not looking for work, and not employed part time or full time [13]. In line with economic growth and increased demand for labour from 1998-2003, non participation in the labour force decreased significantly among well controls. However, non-participation proportions did not change significantly among community residents of working age with anxiety

disorders, affective disorders, or schizophrenia. Looking for work decreased among well controls and among people with anxiety disorders, but did not change among people with affective disorders or schizophrenia (see Tables 3-4).

The stronger economy in 2003 was associated with increased part-time and full-time employment among well controls, and increased part-time employment among people with anxiety disorders, and among people with affective disorders (Tables 3-4). Among people with schizophrenia, part-time employment decreased while full-time employment increased, and overall employment decreased from 1998 to 2003. However, these changes were not statistically significant due to the small cell-sizes and relatively large standard errors of these estimates. This result indicates that increased labour demand is helpful but not sufficient to substantially increase employment among people with the more severe mental disorders such as schizophrenia.

[Insert Tables 1-4 and Figures 1-2, about here]

Discussion

Summary of main results

The proportions employed among people with no health conditions or disabilities (74-77%) were comparable to those reported in four different USA population surveys from 1989 to 1998 (range 76-87% employed) [19]. Among people with anxiety and affective disorders in 1998, 45 and 35% respectively, were employed. While we could not locate any directly comparable international results, these same USA surveys reported higher employment proportions of 48-73% for the category 'any mental disorder'. Our results for people with schizophrenia in 1998 were similar to the category 'schizophrenia and related disorders' in two of the most applicable USA surveys (19.6% employed vs. 22%), and were of a similar order to the 28% employed among people with psychotic disorders reported in an independent Australian national survey conducted in 1997 [20].

We expected that the employment gain due to improved labour market conditions would be greatest among healthy working age adults, and least among people with more severe categories of mental illness due to their greater need for more intensive employment assistance [9,21]. However, in proportional terms this was not the case. The percent changes over time in the well controls were smaller than in the diagnostic groups, even though this represented greater numbers of individuals. This may represent a floor effect for well controls, indicating that almost all who wish to work are doing so. This in turn may suggest that those not participating will increasingly represent people with long term health conditions, that is people who, because of the challenges of their impairments and work restrictions, may be permanently discouraged from participating in the labour force.

Although we evaluated extent of change by statistical significance, there is another way to look at these results. Because this is a population survey, the weighted prevalence estimates and their standard errors can be used to calculate the total number of individuals in

each category who changed their labour force activity at the time these changes in labour market conditions occurred. Our expectation that the benefit of the improved economy would be greatest for the healthy controls and least for people with schizophrenia, was partially supported by the statistical significance of the changes, but was not supported by the relative size (ignoring standard errors for the moment) of the percentage changes in labour force activity.

Increased prevalence of depression

We found a differential increase in prevalence of self-reported depression, compared to anxiety disorders. One possible explanation is that environmental economic change, in absolute terms, can lead to increases in reporting of both depressed mood and stressful life events symptoms [22-24] as well as increases in help-seeking decisions for emotional problems [25]. However it has also been suggested that the effect of positive economic change may be mediated by unemployment as a specific factor [26] but the relationship is likely to be complex [22].

An alternative explanation is that the increase in self-reported depression reflects the impact of recent major initiatives in Australia to improve community awareness of, and response to, depression [27]; and The Better Outcomes in Mental Health Care initiatives which aim to improve community access to primary mental health care via education, training and professional support for general practitioners [28]. The findings of other studies support this explanation, which we name the *beyondblue* hypothesis [27]. Jorm, Christensen and Griffiths reported increases over an eight year period (1995 to 2003/04) in the Australian public's recognition of depression, positive beliefs about the helpfulness of mental health professionals and other mental health interventions for depression [29]. Improvements were also seen regarding schizophrenia, but to a lesser extent. They concluded that their data were consistent with a positive effect for *beyondblue* in increasing awareness and reducing

discrimination around depression. This conclusion was further supported by evidence that the changes were greater in jurisdictions with high *beyondblue* exposure compared to those with low *beyondblue* exposure [30-31].

While Jorm and colleagues found an overall increase in reports of depression in oneself or close others, they did not find any change in reports of current psychological distress, assessed using a standardised questionnaire, except among males aged 20-29 years [32]. Measures of psychological distress encompass anxiety disorders, hence this result is consistent with our finding that self-reported prevalence of disorders other than depression remained stable. Jorm and colleagues attributed the increase in self-reporting of depression to an increase in awareness of depression but not to an increase in real disorder prevalence. Repeat administrations of the National Health Survey in 2001 and 2004/05 incorporating measures of psychological and self-reported prevalence have also shown a differential increase in self-reported depression, compared to anxiety disorders, but found no overall change in levels of questionnaire-based reports of psychological distress [33-34]. As the SDAC surveys do not include a measure of psychological distress we could not evaluate whether the same pattern was evident in our sample.

A third possibility is that the observed changes are an artifact of methodological differences between survey administrations. It is unlikely that increased self-reports of depression in 2003 are due to more mild cases being captured in 2003, for whom better profiles of labour force activity would be expected. This is because the conditions reported in the survey are those for which people acknowledge or recognize the diagnostic label, and are conditions that lead to some type of activity restriction and are likely to last for six months or more. A reduction in perceived stigma caused by national depression projects may well have caused the increased reporting of depression. But if so, this also suggests that the SDAC survey method leads to conservative under-estimates of the real prevalence of mental

disorders. A difficulty with the *beyondblue* hypothesis is that stigma is expected to inhibit reporting of depression more among males than females, yet our results show that in 2003 more females than males reported affective disorders compared to 1998. This would be a consistent result if the national campaigns had more positive effect on females than males. This is a promising area for further investigation because this evidence suggests national campaigns are not uniformly effective in countering mental illness stigma across age and sex subgroups.

Limitations

The main methodological limitation was the use of ICD-10 computer-based classifications by trained lay interviewers. The identification of the presence of any affective and anxiety "disorders" was conducted using pick-lists from a laptop computer, by self-report strengthened by involving a responsible adult of the household, or involving another responsible person assisting with the interview. This method may introduce a new source of error compared to methods involving diagnostic assessment. This potential error applied to both surveys due to the replicated survey method and diagnostic specifications, hence is unlikely to be an alternative explanation for the main findings in terms of labour force activity differences between 1998 and 2003. However, caution is warranted because the reliability and criterion validity of this health survey method remains unclear. In large representative population surveys this is a necessary approach due to the prohibitive cost of large scale diagnostic assessment. The trade-off is expected to be loss of sensitivity compared to standardized screening or diagnostic interviews. The ABS could help clarify the strengths and limitations of this survey method by conducting formal reliability and validity studies comparing it to diagnostic screening for the mental disorders, in particular.

A lack of sensitivity to potentially diagnosable but not reported conditions implies these results may be more conservative than results from surveys using diagnostic screening.

In this study, reported conditions are those for which people acknowledge or recognize the diagnostic label, and which lead to some type of activity restriction, and are likely to last for six months or more duration. This means that these results are less likely to be influenced by low levels of anxiety or depression, which either do not meet diagnostic criteria or may meet diagnostic criteria, but otherwise have little or no impact on labour force activity.

Furthermore, comparisons with the National Survey of Mental Health and Wellbeing indicate substantial criterion validity particularly with respect to the variables of interest in this study [35].

As mental disorders were not the primary focus of the SDAC, not all relevant population sub groups were included in the sampling strategy. People with low prevalence disorders, prisoners, indigenous communities, residents of psychiatric institutions, and homeless people were not specifically targeted. Although this is a limitation, it is also extremely rare for these subgroups to be included in any population survey.

Strengths

These limitations were offset by the many strengths of the surveys, including the large probability sample based on census collection districts, with population weights estimated by the ABS. In addition, the interview protocol was extensive with each interview sometimes taking several hours and several return home visits. ABS staff returned as many times as was required to complete each interview. Each individual interview systematically covered all ICD-10 health conditions, and utilised international standards for labour force activity variables at a level of detail not found in other national surveys of psychiatric disorders. To our knowledge in Australia, there are no other more suitable national surveys of similar scope and depth that collect sufficient specific information about mental health conditions at a diagnostic level, in combination with detailed information about employment restrictions and multiple aspects of labour force activity. We note that through a focus on long term health

conditions, the surveys are more likely to underestimate than exaggerate the labour market challenges. However, this is also a side-benefit for policy makers because when resources are limited, these results can be used to conservatively estimate the resources needed for an adequate policy response.

Conclusions

Labour force activity by people with depression and anxiety disorders increased with improved labour market conditions from 1998 to 2003. However, among people with schizophrenia, labour force activity did not change significantly, indicating a continuing need for the more intensive evidence-based employment programs even when labour market conditions are favourable and improving [20]. The substantial proportions of people with schizophrenia, depression and anxiety disorders not participating in the labour force in 2003 suggest more substantial employment assistance is needed despite an improving economy. These results support policy makers reducing benefits traps [36], which refers to the disincentives to workforce participation caused by income support and fringe benefit entitlements. This would improve takeup of available places in existing intensive services. Another strategy supported by these results is to reallocate mainstream employment program resources to create more places in the more intensive programs, as labour market conditions improve and the demand for less intensive mainstream labour market programs declines.

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Table 1. Prevalence (standard error) of affective and anxiety disorders per 10,000 working age household residents, by age-group, sex, and year of survey.

<i>Disorders</i>	<i>Age Group</i>	<i>Males</i>		<i>Females</i>	
		<i>1998</i>	<i>2003</i>	<i>1998</i>	<i>2003</i>
<i>Affective</i>	15-19	65.57 (24.60)	84.99 (34.66)	64.73 (25.33)	166.34 (35.66)
	20-24	26.26 (16.05)	88.28 (27.17)	66.50 (25.01)	253.63 (56.11)
	25-29	37.28 (18.44)	167.28 (37.16)	126.31 (30.99)	276.76 (42.87)
	30-34	51.59 (21.74)	150.62 (29.67)	191.81 (37.68)	336.71 (56.60)
	35-39	99.92 (8.19)	168.13 (40.19)	168.24 (34.46)	375.05 (49.70)
	40-44	144.41 (33.83)	185.42 (37.26)	263.39 (43.19)	366.41 (50.87)
	45-49	164.84 (36.96)	259.07 (43.62)	198.90 (40.34)	422.44 (58.81)
	50-54	186.96 (41.56)	233.32 (47.65)	225.55 (45.91)	392.70 (60.81)
	55-59	215.70 (52.04)	364.33 (51.80)	320.60 (62.51)	516.25 (69.74)
	60-64	152.40 (50.14)	268.84 (54.42)	334.29 (69.09)	479.39 (81.23)
<i>Anxiety</i>	15-19	13.32 (11.93)	68.15 (22.55)	173.83 (38.22)	120.36 (37.07)
	20-24	112.00 (30.41)	83.88 (29.02)	166.89 (36.75)	240.02 (46.68)
	25-29	160.37 (34.26)	89.31 (30.67)	226.72 (39.59)	309.38 (56.54)
	30-34	155.69 (34.65)	140.77 (33.83)	240.73 (41.46)	315.65 (42.03)
	35-39	216.81 (38.68)	201.69 (37.35)	337.08 (45.69)	204.17 (47.85)
	40-44	214.62 (40.08)	217.42 (43.67)	373.84 (49.44)	360.48 (59.70)
	45-49	292.79 (47.06)	276.98 (45.43)	465.30 (56.96)	456.60 (52.25)
	50-54	410.35 (57.25)	391.70 (60.42)	482.20 (62.34)	469.68 (64.67)
	55-59	464.82 (71.42)	482.07 (75.29)	569.43 (78.43)	665.12 (89.88)
	60-64	441.39 (78.10)	415.99 (59.42)	555.33 (85.27)	644.23 (66.98)

Table 2. Analysis of variance for the prevalence of affective and anxiety disorders.

Disorder	<i>Affective</i>			<i>Anxiety</i>		
Source	<i>df</i>	χ^2	<i>p</i>	<i>df</i>	χ^2	<i>p</i>
Age	9	119.32	<.001	9	458.69	<.001
Sex	1	52.28	<.001	1	92.13	<.001
Year	1	62.62	<.001	1	0.25	.62
Age*Sex	9	42.32	<.001	9	3.89	.92
Age*Year	9	25.67	.002	9	4.15	.90
Sex*Year	9	34.04	<.001	9	4.15	.90
Age*Sex*Year	9	2.71	.97	9	12.71	.18

Table 3. Labour market conditions by labour force activity.

Labour market conditions	Community residents of working age (15-64 years)	Not in the labour force % (SE %)	Looking for work % (SE %)	Employed part-time % (SE %)	Employed full-time % (SE %)	Prevalence per 10,000 (SE)
1998	Well controls (no disability or long term health conditions).	19.82 (0.16)	6.24 (0.11)	21.03 (0.16)	52.91 (0.21)	8,184.80 (32.00)
	Anxiety disorders (ICD-10)	47.23 (2.00)	7.49 (1.00)	15.75 (1.32)	29.53 (1.69)	281.27 (7.27)
	Depression and affective disorders (ICD-10)	57.36 (3.28)	7.74 (1.50)	13.70 (1.89)	21.20 (2.26)	144.77 (5.80)
	Schizophrenia (ICD-10)	76.30 (11.63)	4.06 (3.24)	16.49 (6.08)	3.15 (2.88)	22.19 (2.87)
2003	Well controls (no disability or long term health conditions).	19.08 (0.30)	3.96 (0.20)	22.24 (0.38)	54.71 (0.46)	8,119.06 (31.20)
	Anxiety disorders (ICD-10)	46.09 (2.81)	4.22 (0.88)	21.95 (1.89)	27.75 (2.28)	290.86 (12.45)
	Depression and affective disorders (ICD-10)	51.60 (2.55)	6.57 (1.05)	18.61 (1.46)	23.23 (2.18)	269.82 (12.60)
	Schizophrenia (ICD-10)	73.48 (10.39)	10.65 (4.18)	7.87 (2.84)	8.00 (3.72)	30.62 (3.31)

Note: Row percents sum to 100% across columns 3-6. The balance of the respondents to the household component of the 1998 survey were people of working age with other long term health conditions and disabilities (prevalence of 1,366.98 [SE 12.06] per 10,000. The balance of the respondents to the household component of the 2003 survey were people of working age with other long term health conditions and disabilities (prevalence of 1,289.64 [SE 26.58] per 10,000). With these groups included, the prevalence estimates within the last column sum to 10,000.

Table 4. Significance of change in labour force activity 1998-2003.

Community residents of working age (15-64 years)	Not in the labour force % change	Looking for work % change	Employed part-time % change	Employed full-time % Change	Change in prevalence per 10,000
Well controls (no disability or long term health conditions).	*-0.74	***-2.28	**1.21	***1.80	***-65.74
Anxiety disorders (ICD-10)	-1.14	*-3.27	**6.20	-1.78	9.59
Depression and affective disorders (ICD-10)	-5.76	-1.17	*4.91	2.03	***125.05
Schizophrenia (ICD-10)	-2.82	6.59	-8.62	4.85	8.43

Notes: * Statistically significant Z-score of difference at the 95% confidence level. ** Statistically significant at the 99% confidence level.
 *** Statistically significant at the 99.9% confidence level.

Figure 1. Prevalence of affective disorders per 10,000 working age community residents in 1998 compared to 2003 by age and sex.

Figure 2. Prevalence of anxiety disorders per 10,000 working age community residents in 1998 compared to 2003 by age and sex.