

## 13. Health

In this section the physical and psychological health status of the two LSIA cohorts are examined. Issues of particular interest include migrants' level of pre-existing long-term health conditions, their use of medical services since arriving in Australia, their level of self-assessed health status, and their reported level of psychological well-being. Specifically, the aim of this section is to determine whether there are any significant differences on these health characteristics between the two cohorts, and to explore any health differences based on visa category, gender, age, region of origin, and English proficiency.

### 13.1 Pre-Existing Long-Term Health Conditions

Overall, migrants had very good health on arrival in Australia. A little over 90 per cent of both Cohort 1 and Cohort 2 respondents reported having no long-term health conditions that restrict them in physical activity or work. Six out of the eight per cent of Cohort 1 (408 cases) with such a health condition reported that they had the condition before immigrating to Australia, compared to eight out of the nine per cent with such conditions in Cohort 2 (322 cases). This is a small but statistically significant difference.

The most commonly reported pre-existing health condition in Cohort 1 was arthritis or rheumatism. In Cohort 2, the most common condition was nerves or stress problems. The majority of people with stress or nervous problems in both cohorts were from the Humanitarian visa category. The number of migrants reporting having each pre-existing health condition is reported in Table 13.1.

Table 13.2 shows the difference in pre-existing health conditions between Cohort 1 and 2, viewed by (a) visa category, (b) gender, (c) age, and (d) region of birth. As seen in Table 13.2a, migrants from the Independent, Preferential family/family stream and Humanitarian visa categories in Cohort 1 were significantly less likely to have pre-existing health conditions than migrants from the same categories in Cohort 2. For example, 13 per cent of Cohort 1 Humanitarian migrants had a pre-existing health condition, whereas the same visa group in Cohort 2 had over double this rate of pre-existing health conditions, at 29 per cent.

**Table 13.1: Number Of Cases Of Pre-Existing Long-Term Health Conditions, Cohorts 1 and 2**

	<b>Cohort 1</b>	<b>Cohort 2</b>
Have a Pre-Existing Long-Term Health Condition	408 (6%)	322 (8%)
Arthritis or Rheumatism	107	56
Hearing problem or deafness	40	22
Blindness or impaired vision	85	41
Nerves or stress problems	51	81
Heart Disorder	42	48
Loss of limb or any other part of the body	9	8
Diabetes	29	31
Hepatitis or other liver disorder	n/a	12
Asthma	40	52
Tuberculosis	n/a	0
Any permanent loss of memory or loss of mental ability	15	6
Kidney Disorder	n/a	7
Any other long-term health condition not listed	88	67
No pre-existing long term health condition	6553 (94%)	3859 (92%)
<b>Total N</b>	<b>6961</b>	<b>4181</b>

Notes: (1) n/a = these conditions were not specifically asked about in Cohort 1 survey

(2) Respondents could report having more than one condition.

Even after examining the different composition of the two cohorts (the origins, age and special assistance subgroups of the Humanitarian migrants in each cohort), no explanation was found for why Cohort 2 Humanitarian migrants were in poorer health than Cohort 1 Humanitarian migrants. Examination of the frequencies of each type of health condition suggests that the poor health status of the Humanitarian immigrants is related to nerves and stress problems, particularly in Cohort 2. In Cohort 1 Humanitarian migrants, stress was the second most common pre-existing condition: for Cohort 2, stress was by far the most common condition, with 57 per cent of the pre-existing conditions reported by Humanitarian migrants being stress problems. In Cohort 2, a large 17 per cent of the sample of Humanitarian immigrants reported having a pre-existing stress problem, compared to only three per cent of Humanitarian immigrants in Cohort 1. This again suggests that the reduction in size of the Humanitarian intake in Cohort 2 has meant a selection of Humanitarian immigrants with more adverse circumstances.

**Table 13.2: Presence of Pre-Existing Long-Term Health Conditions, Cohorts 1 and 2, by Visa Category, Gender, Age and Region of Birth (per cent)**

Those Reporting Presence of a Pre-Existing Health Condition	Cohort 1	Cohort 2	Significance <sup>1</sup>
<i>(a) Visa Category</i>			
Concessional family/skilled Australian-linked	3	2	n.s.
Independent	1	4	***
Preferential family/family stream	6	8	*
Business skills/employer nomination scheme	2	3	n.s.
Humanitarian	13	29	***
<i>(b) Gender</i>			
Male Primary Applicant	5	8	***
Female Primary Applicant	7	7	n.s.
Male Migrating Unit Spouse	5	6	n.s.
Female Migrating Unit Spouse	7	9	n.s.
<i>(c) Age</i>			
15-24	3	4	n.s.
25-34	3	5	***
35-44	5	7	n.s.
45-54	13	15	n.s.
55-64	17	29	**
65+	29	39	*
<i>(d) Region of Birth</i>			
English Speaking Countries	5	5	n.s.
Other European Countries	9	17	***
Asian Countries	5	5	n.s.
Other Countries	5	9	***
Total	6	8	***

Note: (1) Pearson Chi-square test, n.s. = not significant, \* = probability < 0.05, \*\*\* = probability < 0.001.

Table 13.2b indicates that there were no significant differences in the prevalence of pre-existing health conditions between Cohort 1 and Cohort 2 migrating unit spouses (male or female). Similarly, there was no difference in the health status of female Primary Applicants between Cohorts 1 and 2. However, pre-existing illnesses were significantly more prevalent in male Primary Applicants from Cohort 2. Overall, pre-existing illnesses were slightly more prevalent in female migrants than male migrants for both cohorts.

Not surprisingly, Table 13.2c shows that the prevalence of pre-existing health conditions increases progressively with the age of the migrant. Migrants aged 65 and over in both cohorts were over nine times more likely than those aged under 25 to report the presence of a pre-existing health condition. Cohort 1 migrants aged 25-34, 55-64, and 65+ were significantly less likely to have pre-existing health conditions than migrants from the same

age groups in Cohort 2. In saying this, it is important to remember that the absolute numbers of people with pre-existing illness are small.

Table 13.2d shows that migrants from Non-English-speaking European countries were more likely than migrants from English-speaking countries and Asian countries to report pre-existing health conditions. This finding is not all that surprising given that Non-English-speaking European migrants are a major source of Australia's Humanitarian migrants (such as those from Yugoslavia, Croatia and Bosnia).

Table 13.3 shows the difference in the number of pre-existing health conditions reported between Cohort 1 and 2, disaggregated by (a) visa category, and (b) gender. In both cohorts, having only one pre-existing condition was considerably more common than having two or more conditions. Migrants from Cohort 2 were significantly more likely than Cohort 1 migrants to report having two or more pre-existing illnesses. Specific to Visa category, Cohort 2 Humanitarian migrants were significantly more likely to report having two or more illnesses than Humanitarian migrants from Cohort 1, at a rate over four times that of Cohort 1. Male Primary Applicants in Cohort 2 were significantly more likely to have two or more health conditions than those from Cohort 1. There was however no difference between the females in the two cohorts.

Thus overall, these findings suggest that pre-existing health conditions were more prevalent in migrants from Cohort 2, particularly older migrants, female migrants, and migrants entering Australia on a Humanitarian visa. Migrants entering Australia after the withdrawal of access to social welfare payments to new migrants tended to have poorer health status. Much of the rise, however, is to be found among the Humanitarian migrants, whose access to social welfare services was unchanged.

**Table 13.3a: Number of Pre-Existing Health Conditions among those Reporting at Least 1 Condition, Cohorts 1 and 2, by Visa Category (per cent)**

No. of Pre-existing Conditions Reported	Cohort	Concessional family/skilled Australian-linked	Independent	Preferential family/family stream	Business skills/employer nomination scheme	Humanitarian	Total
One	1	3	1	5	2	11	5%
	2	2	4	7	3	17	6%
Two or more	1	+	+	1	0	3	1%
	2	0	1	1	+	13	2%
Significance <sup>1</sup>		n.v.	n.v.	*	n.v.	***	***

Notes: (1) Pearson Chi-square test, n.v. = test not valid, \* = probability < 0.05, \*\*\* = probability < 0.001

(2) + Number of observations very small (used n<5 in weighted table).

**Table 13.3b: Number of Pre-Existing Long-Term Health Conditions, Cohorts 1 and 2, by Gender of Primary Applicant and Migrating Unit Spouse (per cent)**

No. of Pre-existing Conditions Reported	Cohort	Male Primary Applicant	Female Primary Applicant	Male Migrating Unit Spouse	Female Migrating Unit Spouse	Total
One	1	4	6	5	5	5%
	2	6	6	3	7	6%
Two or more	1	1	1	0	2	1%
	2	2	1	3	2	2%
Significance <sup>1</sup>		***	n.s.	n.v.	n.s.	***

Note: (1) Pearson Chi-square test, n.v. = test not valid, n.s. = not significant, \*\*\* = probability < 0.001

### **13.2 Use of Medical Services**

The questions regarding the use of medical services asked in the LSIA survey of Cohort 1 and the LSIA survey of Cohort 2 were not completely comparable, and thus only frequencies for each group, focusing on Cohort 2, are presented.

In Cohort 2, nine per cent of the respondents reported suffering from a medical condition (excluding colds, flu and long-term conditions) since migrating to Australia. Migrants who entered Australia on a Humanitarian visa were the most likely – at 15 per cent--to have suffered from a medical condition since arriving in Australia. This reinforces the impression that the Humanitarian migrants had poorer health than those in the other visa categories. Business skills/ENS migrants were the least likely visa group to have suffered a medical condition since arrival, with 4 per cent reporting this. Female migrants reported having a medical condition since arrival slightly more often than male migrants, and male Primary Applicants reported slightly less presence of a medical condition than male migrating unit spouses (8% and 9% respectively).

In regards to visiting a health care provider, Cohort 1 were asked to report the number of visits to a health professional since arriving in Australia (a period of 3 to 6 months in 75% of cases). Cohort 2 instead were asked to report the number of visits to a health professional in the four weeks prior to the interview. As a result of the longer time frame, Cohort 1 made substantially more health care visits than Cohort 2. Of Cohort 2, 32 per cent reported seeing a health care provider at least once in the previous four weeks. Of this 32 per cent, the average number of visits to a health professional was 1.66 times (sd=1.2) in the past four weeks. As can be seen in Table 13.4a, Humanitarian migrants had visited a health professional the most frequently out of the visa groups (15% visiting a doctor three or more times in the past four weeks), followed by the Preferential family/family stream. Business skills/ENS migrants were the least likely to see a health professional, with 85 per cent making no visits in the previous 4 weeks. These percentages correspond well with the reports of suffering from a medical condition since arrival. According to Table 13.4b male migrants in Cohort 2 were less likely to visit a health professional than the female migrants. Cohort 2 female Primary Applicants were slightly more likely to visit a health professional than female migrating unit spouses, with 39 per cent and 33

per cent respectively reporting at least one health care visit in the past four weeks. There were no differences between male Primary Applicants and migrating unit spouses.

In Cohort 1, 52 per cent reported visiting a health care provider at least once since arriving in Australia, of which the average number of visits was 2.83 (sd=3.3). As shown Table 13.4a, Humanitarian migrants had visited a health professional the most frequently out of the visa groups (24% visiting a doctor three or more times since arrival), followed by the Preferential family/family stream. Business skills/ENS was the least likely to see a health professional since arrival, with 61 per cent making no visits since arrival. This is the same pattern found with Cohort 2. Also similar to what was found in Cohort 2, Table 13.4b shows that male migrants in Cohort 1 were less likely to visit a health professional than female migrants. Cohort 1 female Primary Applicants were slightly more likely to visit a health professional than female migrating unit spouses, with 25 per cent of female Primary Applicants reporting three or more health care visits since arrival, compared to 21 per cent of female spouses. A corresponding pattern was found in males, with male Primary Applicants visiting a health professional slightly more than male migrating unit spouses, with 45 versus 41 per cent respectively visiting someone at least once since arrival.

**Table 13.4a: Number of Health Care Visits Since Arriving in Australia for Cohort 1 Migrants and Number of Health Care Visits in the Past 4 Weeks for Cohort 2 Migrants, by Visa Category (per cent)**

Number of Health Care Visits Since Arriving In Australia	Concessional family/skilled Australian-linked	Independent	Preferential family/family stream	Business skills/employer nomination scheme	Humanitarian	Total
<i>Cohort 1</i>						
0	55	56	45	61	41	48
1	23	19	22	22	21	21
2	10	11	13	8	15	12
3+	12	14	21	9	24	19
Number of Health Care Visits in Past 4 Weeks						
<i>Cohort 2</i>						
0	76	69	64	85	51	67
1	18	22	23	11	21	21
2	4	5	7	2	14	6
3+	3	4	6	2	15	5

Note: (1) A very small number of people reported 'don't know' to the relevant question and these responses were included with the '0 visits' category.

(2) Due to a lack of complete comparability between the questions asked of Cohorts 1 and 2, so significance testing could be undertaken.

**Table 13.4b: Number of Health Care Visits Since Arriving in Australia for Cohort 1 Migrants and Number of Health Care Visits in Past 4 Weeks for Cohort 2 Migrants, by Gender of Primary Applicant and Migrating Unit Spouse (per cent)**

	Male Primary Applicant	Female Primary Applicant	Male Migrating Unit Spouse	Female Migrating Unit Spouse	Total
<i>Number of Health Care Visits Since Arriving In Australia</i>					
Cohort 1					
0	55	40	59	47	48
1	22	21	14	21	21
2	11	14	8	12	12
3+	12	25	19	21	19
<i>Number of Health Care Visits in Past 4 Weeks</i>					
Cohort 2					
0	74	60	74	67	67
1	18	25	17	21	21
2	5	8	4	7	6
3+	5	6	5	5	5

Note: (1) A very small number of people reported 'don't know' to the relevant question and these responses were included with the '0 visits' category.  
 (2) Due to a lack of complete comparability between the questions asked of Cohorts 1 and 2, so significance testing could be undertaken

### **13.3 Self-Assessed Health Status**

Overall, migrants in both cohorts believed that they were in good health over the month prior to the interview. A high 91 per cent of Cohort 1 and 92 per cent of Cohort 2 reported believing their health over the last month was either good or very good. In comparison, findings from the Australian Bureau of Statistics (1995) National Health Survey indicate that only 83 per cent of the general Australian population reported feeling their health was either good, very good, or excellent ('excellent' was not a response category in the LSIA survey). Recent migrants to Australia are more likely to believe they are in good health than are Australians in general. Although both LSIA and the National Health Survey examined only people aged 15 and over, the average age of the LSIA sample is younger than that of the general Australian population, and thus the better self-assessed health status of the LSIA migrants probably reflects this young profile. Two per cent of both LSIA cohorts reported that their health was poor or worse. Overall however, there was a significant difference between cohorts 1 and 2 on their level of self-assessed health status. Cohort 2 migrants were significantly more likely to report their health was 'very good' than Cohort 1, and Cohort 1 migrants were slightly more likely to report their health was 'fair'. This is despite Cohort 2 migrants having significantly more pre-existing health conditions than Cohort 1 (as described in the previous section), reflecting the differences between subjectively and objectively assessing health status.

Table 13.5 reports the differences in self-assessed health status between Cohort 1 and 2, disaggregated by (a) visa category, (b) gender, (c) age, and (d) region of birth. As seen in Table 13.5a, Business skills/ENS and Concessional family/skilled Australian-linked visa categories had the healthiest self-reported status. Migrants in the Humanitarian visa category reported much poorer self-assessed health status than those in other categories, with only 37 per cent of Cohort 1 and 31 per cent of Cohort 2 reporting their health was very good. Cohort 2 migrants in the Humanitarian visa category reported significantly poorer health than those in Cohort 1, reflecting correspondence with the above findings on pre-existing health conditions. Migrants from the Cohort 2 Preferential family/family stream were significantly more likely to report better health status than Cohort 1 migrants in the same visa category.

Table 13.5b shows that females overall reported a poorer health status than males. Female Primary Applicants in Cohort 2 reported significantly healthier self-reported status than did those in Cohort 1. The same pattern was found in male Primary Applicants. There were no differences between the cohorts on health status for male and female migrating unit spouses. Table 13.5c indicates that as expected, self-reported 'very good' health status reduced the older the migrant was. In both the 25-34 age group and the 45-54 age group, migrants in Cohort 2 reporting feeling their health was significantly better than those in Cohort 1. No significant differences were discovered in the other age groups.

In Table 13.5d migrants born in English speaking countries reported better health status than did those born in other countries. Viewed by cohort, significant differences were found within the migrants born in non-English speaking European countries and Asian countries. Cohort 2 migrants born in these two regions reported better self-assessed health than Cohort 1 migrants born in the same region. This finding is particularly interesting considering the worse pre-existing health conditions of Cohort 2 migrants from non-English speaking European countries than those from Cohort 1. This again demonstrates the differences found depending on whether health is subjectively or objectively defined.

Overall, as found with pre-existing conditions, poorer self-assessed health status was more prevalent in Cohort 2 migrants on a Humanitarian visa. However, in contrast Cohort 2 migrants overall reported having better self-assessed health status than Cohort 1 migrants, which is contrary to what one might expect given that pre-existing health conditions were more prevalent in Cohort 2. Thus, migrants entering Australia after the withdrawal of access to social welfare benefits to new migrants were more likely to report good self-assessed health status, but at the same time were more likely to have a pre-existing long-term health condition. Perhaps having a pre-existing health condition made the migrants more likely to report better self-assessed health status six months after arrival in Australia, because they may have received treatment for their pre-existing condition since arrival, which has improved their overall health. Those who have experienced a recent improvement in health may be more likely to self-report good health than people whose health has remained stable. Such an occurrence may explain the differences between these subjective and objective measures of the health status of the LSIA migrants.

**Table 13.5a: Self-Assessed Health Status, Cohorts 1 and 2, by Visa Category (per cent)**

Level of Self-Assessed Health Status	Cohort	Concessional family/skilled Australian-linked	Independent	Preferential family/family stream	Business skills/employer nomination scheme	Humanitarian	Total
Very Good	1	60	57	48	62	37	50
	2	65	59	54	60	31	55
Good	1	36	38	42	32	46	41
	2	31	37	38	35	43	37
Fair	1	4	4	9	6	13	8
	2	4	4	7	5	16	6
Poor/ Very Poor	1	+	1	2	+	5	2
	2	+	1	2	+	9	2
Significance <sup>1</sup>		n.v.	n.s.	***	n.v.	***	***

Note: (1) Pearson Chi-square test: + Number of observations very small (n<5), n.v. = test not valid, n.s. = not significant, \*\*\* = probability < 0.001.

(2) There are 3 missing observations in Cohort 1, making the Cohort 1 sample size 6958 instead of 6961.

**Table 13.5b: Self-Assessed Health Status, Cohorts 1 and 2, by Gender of Primary Applicant and Migrating Unit Spouse (per cent)**

Level of Self-Assessed Health Status	Cohort	Male Primary Applicant	Female Primary Applicant	Male Migrating Unit Spouse	Female Migrating Unit Spouse	Total
Very Good	1	57	45	53	43	50
	2	61	52	61	45	55
Good	1	37	42	43	47	41
	2	32	39	32	46	37
Fair	1	5	11	4	8	8
	2	5	8	6	8	6
Poor/ Very Poor	1	1	3	+	2	2
	2	2	2	+	2	2
Significance <sup>1</sup>		***	***	n.v.	n.s.	***

Note: (1) Pearson Chi-square test: + Number of observations very small (n<5), n.v. = test not valid, n.s. = not significant, \*\*\* = probability < 0.001.

(2) There are 3 missing observations in Cohort 1, making the Cohort 1 sample size 6958 instead of 6961.

**Table 13.5c: Self-Assessed Health Status, Cohorts 1 and 2, by Age (per cent)**

Level of Self-Assessed Health Status	Cohort	15-24	25-34	35-44	45-54	55-64	65+	Total
Very Good	1	47	54	51	41	40	31	50
	2	52	59	57	51	35	24	55
Good	1	44	38	40	39	46	51	41
	2	40	34	36	38	45	58	37
Fair	1	7	6	7	17	10	16	8
	2	6	5	6	6	16	17	6
Poor/ Very Poor	1	2	2	2	3	4	2	2
	2	2	2	1	4	4	+	2
Significance <sup>1</sup>		n.s.	*	n.s.	***	n.v.	n.v.	***

Note: (1) Pearson Chi-square test: + Number of observations very small (n<5), n.v. = test not valid, n.s. = not significant, \* = probability < 0.05, \*\*\* = probability < 0.001.

(2) There are 3 missing observations in Cohort 1, making the Cohort 1 sample size 6958 instead of 6961.

**Table 13.5d: Self-Assessed Health Status, Cohorts 1 and 2, by Region of Birth (per cent)**

Level of Self-Assessed Health Status	Cohort	English Speaking Countries	Other European Countries	Asian Countries	Other Countries	Total
Very Good	1	61	46	45	54	50
	2	63	50	54	55	55
Good	1	34	43	43	39	41
	2	32	36	39	36	37
Fair	1	5	9	10	6	8
	2	5	10	6	6	6
Poor/ Very Poor	1	1	3	2	2	2
	2	1	4	1	3	2
Significance <sup>1</sup>		n.s.	*	***	n.s.	***

Note: (1) Pearson Chi-square test, n.s. = not significant, \* = probability < 0.05, \*\*\* = probability < 0.001.

(2) There are 3 missing observations in Cohort 1, making the Cohort 1 sample size 6958 instead of 6961.

### **13.4 Psychological Well-Being**

In addition to inquiring about physical health, LSIA also investigated the psychological well being of migrants. The widely used 12-item General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988) was administered to participants. This standardised instrument can be used to yield both dimensional and categorical representations of psychological ill health.

Dimensionally, the GHQ-12 provides a continuous score ranging from zero to 36, with higher scores indicating greater psychological distress. Categorically, the GHQ-12 provides a method aimed at detecting the possibility of psychological disorder in respondents. In clinical settings this instrument is used as a screening device to indicate whether a full psychological evaluation is required due to the likelihood of illness. To achieve this, each respondent is placed into one of two categories based on their score on the GHQ-12. A threshold score based on validity research conducted in similar populations is used to determine whether a respondent is suffering from significant psychological distress or whether they can be considered to have normal psychological health. Despite the fact that recent research has validated the GHQ-12 in Australia (Donath, 2001), we decided to use a threshold score, which has been determined by validity research (Goldberg et al., 1997) covering 15 different areas in the world (such as Europe, South America, and Asia). This is because such a broad-based population is likely to be more similar to recent Australian migrants than is the Australian population. Thus based on validity research using the GHQ-12 in 15 areas, a threshold score of 11/12 was used in the following analyses (Goldberg et al., 1997). This threshold for the GHQ-12 has well-established validity for use in people from a variety of ethnic backgrounds (Goldberg et al., 1997). Nonetheless, the validity of the GHQ-12 for all ethnic groups represented in the LSIA sample is unknown.

Table 13.6 shows the prevalence of significant psychological distress in the migrants using the categorical threshold score method, disaggregated by (a) visa category, (b) gender, (c) age, (d) region of birth, and (e) English proficiency. This dichotomous method found that 74 per cent of the migrants in both cohorts were found to have normal psychological health. This means that 26 per cent of the migrants indicated symptoms of significant psychological distress at a level which suggests the need for a full psychological assessment in order to determine whether they meet the diagnostic criteria for a psychological disorder, such as depression or anxiety disorder. In comparison, in the general Australian population (using its optimal threshold score) 7.5 per cent have been found to have psychological distress at this level (Donath, 2001). It is not surprising

that migrants experience higher levels of psychological distress than do the general population, considering the major changes occurring in the lives of the migrants. Their high level of psychological distress is likely to be a result of the stress of moving to a new country and leaving their family, friends and the familiarity of home behind. In fact, a change in residence or living conditions is considered by psychologists to be one of the most stressful and disruptive events that can occur in one's lifetime. Moving to a different country would involve at least 19 of the 43 life changes considered to be the most stressful, such as changes in job, financial state, and family contact (Holmes & Rahe, 1967). It therefore can be expected that a significant number of the migrants would be depressed and stressed only three to six months following arrival in Australia.

Furthermore, Humanitarian migrants are likely to have experienced a range of stressful events, in the factors that qualified them for such a visa. In Cohort 2, Humanitarian migrants are much more likely to display psychological distress than are the other groups. This difference was much more muted in Cohort 1. It would be particularly interesting to examine the change in the level of psychological distress from wave 1 to waves 2 and 3, to determine whether psychological distress falls following a longer period of time living in and adjusting to Australia. These findings using a threshold score must be interpreted with the reservation that the GHQ-12 threshold scores have not been validated with a migrant population and thus the true validity of the threshold score chosen for the migrant sample is not known.

Overall, there was no difference in the prevalence of psychological distress between Cohorts 1 and 2 (see Table 13.6). When we look across visa categories, Table 13.6a indicates that significant psychological distress was more common in the Humanitarian visa group than in the other visa groups, and significantly more so in Cohort 2. Business skills/ENS migrants had the lowest levels of psychological distress. In the opposite pattern to that found in the Humanitarian migrants, Business skills/ENS migrants from Cohort 2 had significantly lower psychological distress than those in Cohort 1. Such findings may explain why there was no significant difference between the average experiences of the two cohorts on psychological distress status.

**Table 13.6: Likelihood of Significant Psychological Distress, Cohorts 1 and 2, by Visa Category, Gender, Age, Region of Birth and English Proficiency (per cent)**

Those Identified by the GHQ-12 as Suffering from Significant Psychological Distress	Cohort 1	Cohort 2	Significance <sup>1</sup>
<i>(a) Visa Category</i>			
Concessional family/skilled Australian-linked	29	32	n.s.
Independent Preferential family/ family stream	29	26	n.s.
Business skills/employer nomination scheme	23	22	n.s.
Humanitarian	21	15	*
	33	50	***
<i>(b) Gender</i>			
Male Primary Applicant	24	24	n.s.
Female Primary Applicant	27	26	n.s.
Male Migrating Unit Spouse	27	31	n.s.
Female Migrating Unit Spouse	30	30	n.s.
<i>(c) Age</i>			
15-24	18	20	n.s.
25-34	27	26	n.s.
35-44	30	30	n.s.
45-54	29	27	n.s.
55-64	25	28	n.s.
65+	17	15	n.s.
<i>(d) Region of Birth</i>			
English Speaking Countries	23	26	n.s.
Other European Countries	36	40	n.s.
Asian Countries	25	21	**
Other Countries	23	28	**
<i>(e) English Proficiency</i>			
English Only or Best	23	25	n.s.
English Well and other language	28	22	**
English not well/not at all and other language	27	31	*
Total	26	26	n.s.

Note: (1) Pearson Chi-square test, n.s. = not significant, \* = probability < 0.05, \*\* = probability < 0.01, \*\*\* = probability < 0.001.

(2) Due to a coding inconsistency between cohorts (Cohort 1 could respond 'did not answer due to language difficulties', 'refused/don't know' and 'not stated', whereas Cohort 2 did not have these options), there are 80 missing observations in Cohort 1, making the sample size 6881 instead of 6961.

Nevertheless, as seen in Tables 13.6b and 13.6c, there were no significant differences on psychological distress status between cohorts when viewed by gender or age. More of the migrating unit spouses had considerable psychological distress than the Primary Applicants, and psychological distress was more common in females than in males. Psychological distress was most common in migrants aged between 35 and 54, and was least common in the elderly age group (65+).

Table 13.6d shows that psychological distress was more common in migrants born in non-English speaking European countries and least common in migrants born in Asian countries. The higher prevalence of psychological distress in migrants from non-English speaking European countries is unsurprising given that Non-English-speaking European migrants are a major source of Australia's Humanitarian migrants. In the migrants born in Asian countries, psychological distress was significantly more common in Cohort 1 than in Cohort 2. By examining the data it appears that there were relatively fewer humanitarian migrants from Asia in Cohort 2 than in Cohort 1. With such a difference in composition, better health is expected in Cohort 2 Asian-born migrants. In contrast, for the migrants born in all other countries, psychological distress was significantly more common in Cohort 2 than in Cohort 1. Table 13.6e indicates that psychological distress not surprisingly was more common in migrants who could not speak English well. Of those who could not speak English well, psychological distress was significantly more common in those from Cohort 2 than Cohort 1. However, the opposite pattern was found in those who spoke both English and another language well.

The pattern of findings on the psychological distress of Humanitarian migrants found here reflects that which was found with physical health, with Cohort 2 Humanitarian migrants faring worse than those in Cohort 1. It is a puzzle as to why this might be the case. Some further analyses were conducted in order to try and tease out any differences between the Cohort 1 and Cohort 2 Humanitarian migrants that might explain why psychological distress is much more prevalent in Cohort 2.

Table 13.7 shows the prevalence of significant psychological distress in the Humanitarian migrants using the categorical threshold score method, disaggregated by (a) gender, (b) age, (c) region of birth, (d) English proficiency, (e) length of time since arrival in Australia, and (f)

presence of family members already living in Australia. This table is based on 1142 Humanitarian migrants from Cohort 1 and 373 Humanitarian migrants from Cohort 2. Because of the small numbers involved in these analyses (particularly for Cohort 2), caution must be utilized when interpreting these results.

As can be seen in Table 13.7, no matter which way the Humanitarian group is disaggregated, the psychological distress of Cohort 2 Humanitarian migrants was significantly greater than that in Cohort 1. Male Primary Applicants, male migrating unit spouses, and female migrating unit spouses from Cohort 2 all had significantly higher levels of psychological distress than those in Cohort 1, as did those aged 25-34, 45-54 and 55-64.

Interesting differences between the cohorts are found when examining Humanitarian migrants from South Eastern Europe (the Balkans) and the Middle East. Firstly, psychological distress was much more prevalent among Humanitarian migrants from these countries than in those from other countries such as those in Asia or Africa. When comparing the cohorts, there were no significant differences on distress between Cohort 1 and 2 Humanitarian migrants from Asia and African (other) countries. However, psychological distress was much higher among Cohort 2 Humanitarian migrants from non-English speaking European countries and Middle Eastern countries than was true for Cohort 1. Because of these interesting findings for European countries, Region of Birth data were further segregated to try to pinpoint more precisely where differences exist between Cohort 1 and 2 Humanitarian migrants. In many regions there were not enough observations of migrants in each Cohort, and thus significance testing could not be conducted. For example, there were fewer than 5 psychologically distressed Humanitarian Cohort 1 migrants born in Western Europe. For the South Eastern Europe region (the Balkans) the number of observations was large enough for significance testing to be conducted (with 38 per cent of all Cohort 1 and 45 per cent of all Cohort 2 Humanitarian migrants originating from this region). A highly significant difference within those from the Balkans was found between cohorts, with psychological distress being considerably more prevalent in Cohort 2 Humanitarian migrants from this region than those from Cohort 1. The second Cohort contained both a higher proportion of and more highly stressed migrants from the Balkans.

Table 13.7(d) shows that in both cohorts, Humanitarian migrants with poorer English proficiency were more likely to report psychological distress. Further, poor English proficiency was significantly more common among psychologically distressed Cohort 2 Humanitarian migrants than those in Cohort 1. In Table 13.7(e) it can be seen that the proportion of psychologically distressed Humanitarian migrants in Cohort 2 was higher regardless of the length of time they had been in Australia.

It might be expected that the presence of other relatives in Australia who do not live with them would be a possible source of support for new migrants, and hence lower their levels of distress. Given the presence of such relatives, there was no significant difference between the cohorts in their levels of distress. At the bottom of Table 13.7, the presence of relatives in Australia is shown specifically for migrants from the Balkans and Middle East regions. There were no significant differences between the cohorts from these regions on the prevalence of psychological distress if they had family in Australia.

Overall, from this examination it can be seen that the presence of greater psychological distress in Cohort 2 Humanitarian migrants compared to Cohort 1 could not be explained as being a result of living in Australia for a shorter period of time, or by differences in the presence of relatives in Australia for support. The change in the country of origin of Humanitarian migrants—particularly the increase from the Balkans—goes part of the way towards explaining the rise in the overall levels of psychological distress among Humanitarian migrants. But the major cause is a rise in the levels of distress *within* specific groups.

**Table 13.7: Percentage of Humanitarian Migrants with each Attribute who Display Significant Psychological Distress, Cohorts 1 and 2, by Gender, Age, Region of Birth, English Proficiency, Length of Time since Arrival in Australia, and Presence of Family in Australia (per cent)**

Those Identified by the GHQ-12 as Suffering from Significant Psychological Distress	Cohort 1 Humanitarian migrants	Cohort 2 Humanitarian migrants	Significance <sup>1</sup>
<i>(a) Gender</i>			
Male Primary Applicant	28	50	***
Female Primary Applicant	40	47	n.s.
Male Migrating Unit Spouse	31	58	**
Female Migrating Unit Spouse	34	49	**
<i>(b) Age</i>			
15-24	20	33	n.s.
25-34	26	43	***
35-44	40	48	n.s.
45-54	45	63	*
55-64	38	68	**
65+	35	+	n.v.
<i>(c) Region of Birth</i>			
Non-English Speaking European Countries	46	64	***
South Eastern Europe (Balkans)	48	63	***
Middle East	18	35	**
Asia	22	34	n.s.
North Africa	+	35	n.v.
Other African Countries	19	32	n.s.
<i>(d) English Proficiency</i>			
English Only or Best	+	+	n.v.
English Well and other language	27	37	n.s.
English not well/not at all and other language	34	52	***
<i>(e) Length of time since Arrival in Australia</i>			
Less than 3 months	30	+	n.v.
3 to 6 months	33	48	***
More than 6 months	33	55	**
<i>(f) Migrants who have other relatives in Australia who don't live with them</i>			
Migrants from South east Europe (Balkans)	46	43	n.s.
TOTAL BALKANS MIGRANTS	48 (209)	39 (66)	n.s.
Migrants from Middle East	43 (99)	48 (42)	n.s.
TOTAL MIDDLE EAST MIGRANTS	(230)	(87)	
<b>TOTAL</b>	<b>33 (n=1142)</b>	<b>50 (n=373)</b>	<b>***</b>

Note: (1) Pearson Chi-square test, n.v. = test not valid, n.s. = not significant, \* = probability < 0.05, \*\* = probability < 0.01, \*\*\* = probability < 0.001. '+' = Number of observations very small (n<5 in weighted table). Numbers in brackets are the actual frequencies rather than percentages.

(2) In the Region of Birth Section, Countries with 0 frequencies in both Cohorts, or one zero frequency and one + (number of observations very small), were omitted from the table.

The analysis so far has been based on measures of distress that are dichotomous—one is or is not distressed. An alternative approach is to scale degrees of distress. By using the dimensional scoring method for the GHQ-12, it was found that the average score on the GHQ-12 in the LSIA migrants was 9.09 (sd=5.17), compared to an average of 8.98 in the general Australian population, and an average of 9.71 in an Australian clinical population of people diagnosed with a mental illness (Donath, 2001). This supports the earlier proposition that the LSIA migrants exhibited a slightly higher level of psychological distress than the general Australian population.

By examining Table 13.8, it can be seen that when comparing the level of psychological distress across the two cohorts, there was no significant difference between Cohort 1 (mean of 9.12) and Cohort 2 (mean of 9.04) on the level of psychological distress. This mirrors the result found when psychological distress was defined dichotomously. By contrast, visa category, gender, age, region of birth and English proficiency all separately had significant effects on the level of psychological distress exhibited by the migrants. Humanitarian migrants were significantly more psychologically distressed than migrants from other Visa categories (mean of 10.8 versus 9.4 and under for the other groups). Male Primary Applicants were less psychologically distressed than female Primary Applicants and both male and female migrating unit spouses. Migrants aged between 25 and 54 (the prime working years) were more distressed than migrants in other age groups. Migrants born in non-English speaking European countries were significantly more distressed than migrants born in other regions, and not surprisingly, migrants who could not speak English well were significantly more psychologically distressed than those who could speak English well.

When investigating the effect of cohort and visa category together it was found that there was a significant interaction between cohort and visa category in relation to psychological distress. Thus the effect of cohort membership on psychological distress depends on the visa category the migrant entered Australia on. By looking at the means in Table 13.8a, it can be seen that Humanitarian migrants in Cohort 2 had significantly higher psychological distress than those in Cohort 1, and that Business skills/ENS migrants in Cohort 2 had significantly lower psychological distress than those in Cohort 1.

Table 13.8b indicates that there was no significant interaction between gender and cohort on psychological distress, meaning that the effect of gender on psychological distress was not dependent on the Cohort the migrant was in.

Unlike the results found when psychological distress is treated dichotomously, a significant interaction between cohort and age on psychological distress was found when measured on a continuous scale (Table 13.8c). As well as demonstrating the higher level of sensitivity of continuously defined variables, this result indicates that the effect of cohort membership on psychological distress depends on the age of the migrant. By examining the means it appears that migrants aged 55 to 64 in Cohort 2 had significantly higher psychological distress than those in Cohort 1, and that migrants aged 65 and older in Cohort 2 had a significantly lower level of psychological distress than those in Cohort 1.

As seen in Table 13.8d, the effect of cohort membership on psychological distress significantly depended upon the region in which the migrant was born. Migrants from Cohort 2 who were born in non-English speaking European countries or other countries had a higher level of psychological distress than those Cohort 1 migrants born in these regions.

Finally, Table 13.8e also reports a significant interaction between cohort membership and English proficiency in relation to psychological distress, with migrants from Cohort 1 who speak English and another language well exhibiting a significantly higher level of psychological distress than those from Cohort 2.

Overall it appears that differences between the two cohorts on psychological distress depended on the visa category, the age, the region of birth and the English proficiency of the migrants. When cohort membership was examined singularly, there were no significant differences between the two cohorts on the level of psychological distress, but when investigated in combination with the above factors, a number of interesting significant differences between the cohorts emerged. Further, there was reasonable correspondence between the findings when psychological distress was treated as either a dichotomous or continuous variable.

Table 13.8: Level of Psychological Distress, Cohorts 1 and 2 by Visa Category, Gender, Age, Region of Birth and English Proficiency (means)

	Cohort 1 (M)	Cohort 2 (M)	Interaction Significance <sup>1</sup>
<i>(a) Visa Category<sup>#</sup></i>			***
Concessional family/skilled Australian-linked	9.3	9.4	
Independent	9.5	9.0	
Preferential family/family stream	8.6	8.3	
Business skills/employer nomination scheme	8.5	7.8	
Humanitarian	10.1	12.8	
<i>(b) Gender<sup>#</sup></i>			n.s.
Male Primary Applicant	8.7	8.6	
Female Primary Applicant	9.3	9.1	
Male Migrating Unit Spouse	8.9	9.8	
Female Migrating Unit Spouse	9.7	9.7	
<i>(c) Age<sup>#</sup></i>			*
15-24	8.1	8.2	
25-34	9.2	8.8	
35-44	9.6	9.8	
45-54	9.6	9.2	
55-64	8.8	9.5	
65+	8.3	7.7	
<i>(d) Region of Birth<sup>#</sup></i>			***
English Speaking Countries	9.1	8.8	
Other European Countries	10.4	11.2	
Asian Countries	8.8	8.2	
Other Countries	8.6	9.5	
<i>(e) English Proficiency<sup>#</sup></i>			***
English Only or Best	8.9	8.8	
English Well and other language	9.2	8.6	
English not well/not at all and other Language	9.3	9.8	
Total	9.12	9.04	n.s.

Note: (1) Analysis of Variance test interaction term, n.s. = not significant, \* = probability < 0.05, \*\* = probability < 0.01, \*\*\* = probability < 0.001.

(2) # = Analysis of Variance test main effect probability < 0.01.

(3) Due to a coding inconsistency between cohorts (Cohort 1 could respond 'did not answer due to language difficulties', 'refused/don't know' and 'not stated', whereas Cohort 2 did not have these options), there are 80 missing observations in Cohort 1, making the sample size 6881 instead of 6961.

### **13.5 Conclusion**

In conclusion, it appears that the vast majority of LSIA migrants arrived in Australia with good physical health and few developed medical conditions after arrival. For those with poorer physical health upon arrival into Australia, pre-existing health conditions were more prevalent in migrants from Cohort 2, particularly migrants entering Australia on a Humanitarian visa.

Poorer self-assessed health status was also more prevalent in Cohort 2 migrants on a Humanitarian visa than in those from Cohort 1. Despite pre-existing conditions being more prevalent in Cohort 2, Cohort 2 migrants overall reported having better self-assessed health status than Cohort 1 migrants, reflecting the difference in subjective and objective interpretations of physical health.

The LSIA migrants did not fare as well in regards to psychological health as they did with physical health. About one-quarter of the migrants were exhibiting a significant level of psychological distress following their arrival in Australia. This most likely reflects the inherent stressfulness of such a life-changing event as migrating to another country. Not surprisingly, Humanitarian migrants and migrants who did not speak English well had the highest level of psychological distress. This indicates a particular need for counselling and support services for these new Australian residents.