

2007 Special Focus Report on International Comparisons

The Foundation for Child Development Child and Youth Well-Being Index (CWI) Project

A composite index of trends in the well-being of America's children and youth.

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July 17, 2007
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Durham, North Carolina

International Comparisons of Child Well-Being – The United States and Four English-Speaking Countries

The Foundation for Child Development Child and Youth Well-Being Index (CWI) Project issued its annual update on trends in the quality of life of America's children and youths on April 17, 2007. This focused report compliments the annual update.

In previous years, the CWI Project has focused on a specific domain or set of indicators associated with the U.S. Child Well-Being Index, such as educational attainment or safety and behavioral concerns. For this year's report, we compare U.S. trends in child and youth well-being with those of four other English-speaking or Anglophone countries, specifically: Canada, Australia, New Zealand, and the United Kingdom. These nations are chosen for comparisons with the U.S. because:

- all share a common language;
- Australia, Canada, New Zealand, and the U.S. were colonies of the United Kingdom at one time;
- all five nations are liberal democracies that have representative democratic forms of government;
- all five also place considerable emphasis on the use of economic markets for the production and distribution of goods and services; and
- because of the above, all share at least some elements of culture.

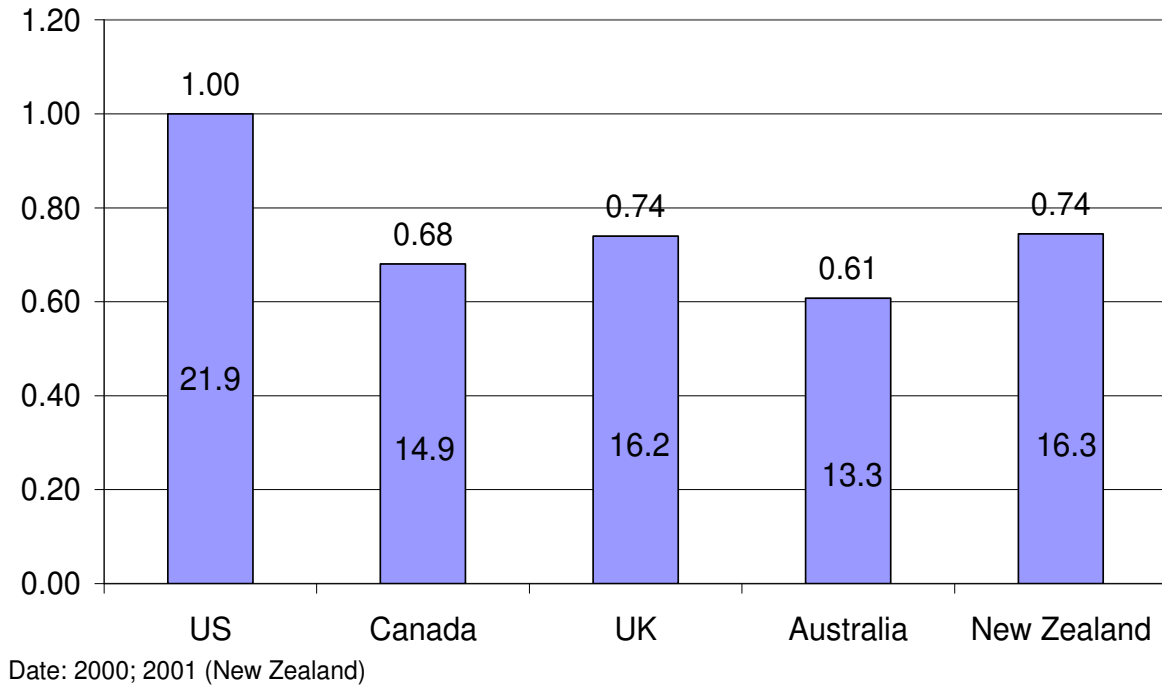
We assembled data on 19 Key International Indicators of child and youth well-being that were measured around the year 2000. The 19 Key International Indicators are listed in Appendix A, and their sources are listed in Appendix B.

In this Report, some of the differences in several of the Key International Indicators are highlighted. We then describe a summary 'report card' that shows comparisons of the U.S. with the four comparison countries on all 19 indicators. Our discussion of the indicators is organized into the seven domains/areas of social life of child and youth well-being that comprise the CWI, namely, *Family Economic Well-Being*, *Social Relationships* (to family and peers), *Health*, *Safety/Behavioral Concerns*, *Educational Attainments*, *Community Connectedness* (to educational, economic, and political institutions), and *Emotional Well-Being*.

Figure 1 compares *child poverty rates*, a Key Indicator for *Family Economic Well-Being* for all five countries. The poverty line is defined as 50% of median adjusted disposable income for all persons. In Figure 1, the numbers *within* the bars represent the percent of children below this poverty line for each of the respective countries. The numbers *above* the bars indicate the relative ratio of a country's poverty rate in comparison with that of the U.S., whose rate is coded as 1.00. Ratios below 1.00 indicate a country's rate is lower than that of the U.S., and ratios above 1.00 mean a country's rate is higher than that of the U.S.

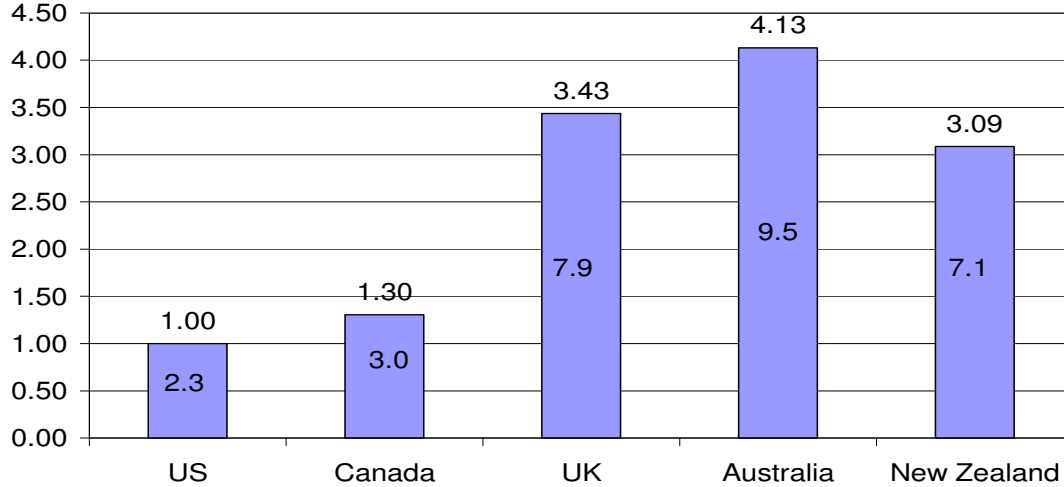
The figure shows that all of the comparison countries have lower poverty rates when compared to the U.S. rate and thus are more successful in rearing children in families with economic well-being above a poverty threshold.

Figure 1. Poverty Rates for Children Ages 0-17
(Percent below 50% of the median adjusted disposable income)



A second Key Indicator for *Family Economic Well-Being* is the percent of working-age households with children without an employed parent. Figure 2 indicates the U.S. has a lower percent of households with children that do not have an employed parent (2.3). The highest rates were found in Australia (9.5), the United Kingdom (7.9), and New Zealand (7.1).

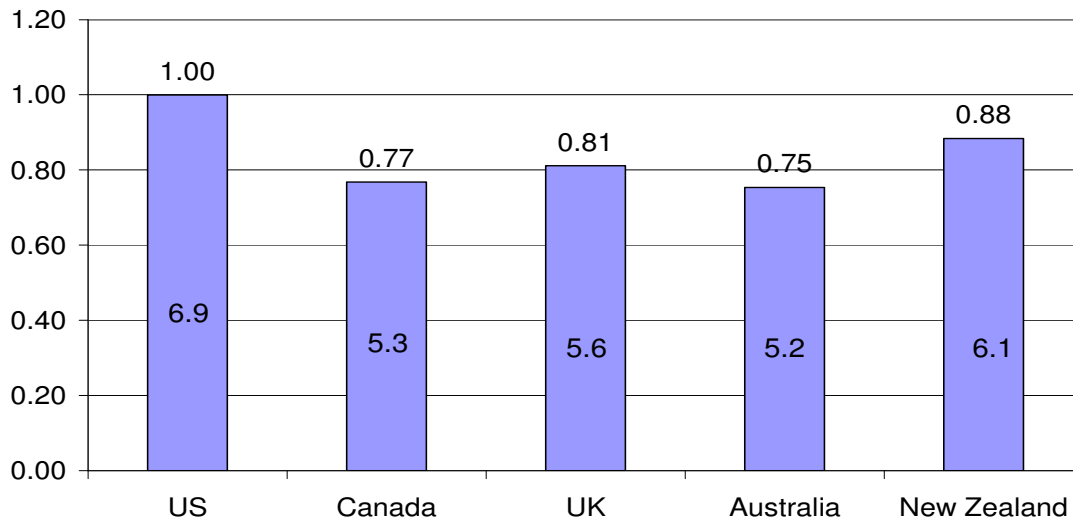
Figure 2. Percentage of Working-Age Households with Children Without An Employed Parent



Date: 2000; 1999 (Canada)

A Key Indicator in the *Health Domain*, *infant mortality*, is compared in Figure 3. Infant mortality rates indicate the number of infants dying before their first birthday per 1,000 live births. This chart shows the U.S. having the highest infant mortality rate of the countries studied.

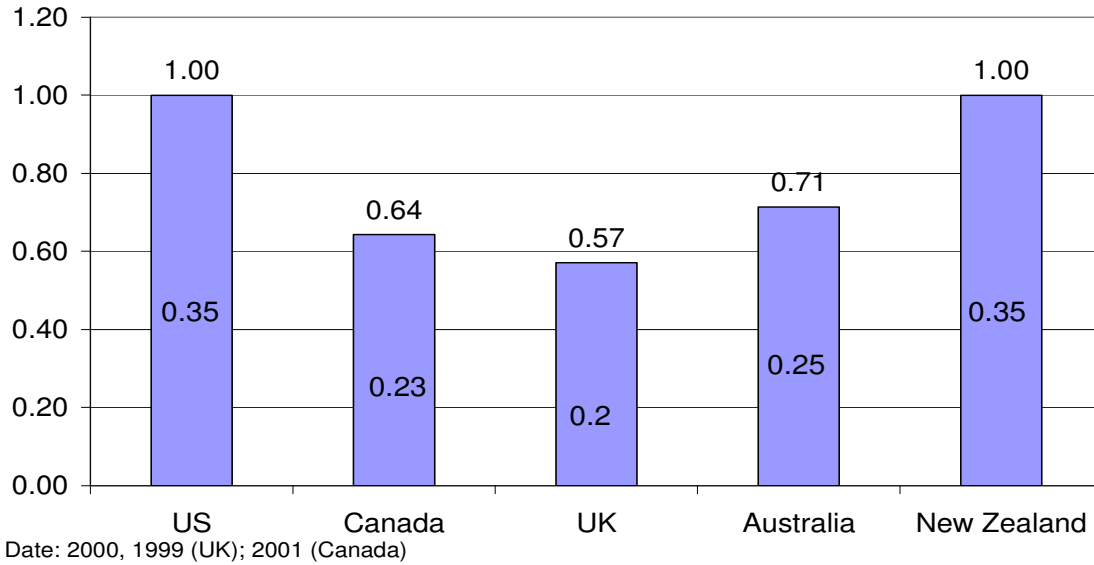
**Figure 3. Infant Mortality Rates
(Number of deaths before age 1 per 1,000 live births)**



Date: 2000

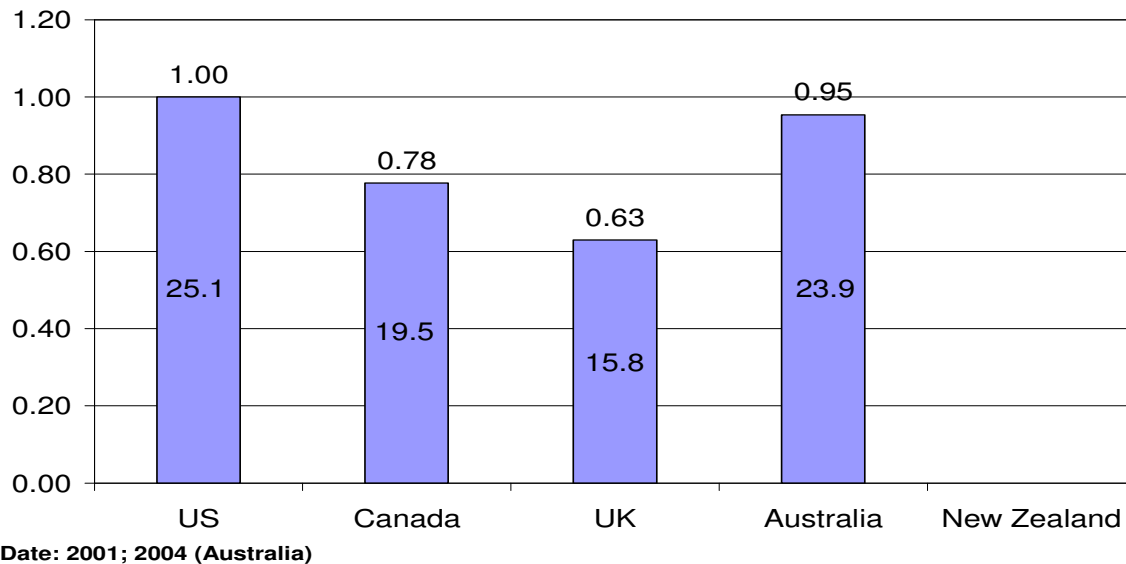
Figure 4 shows that *child and youth mortality rates (ages 1-19)*, another Key Health Domain Indicator, were highest for children and youths in the U.S. and New Zealand.

Figure 4. Child Mortality Rates
(Number of deaths per 1,000 children ages 1-19)



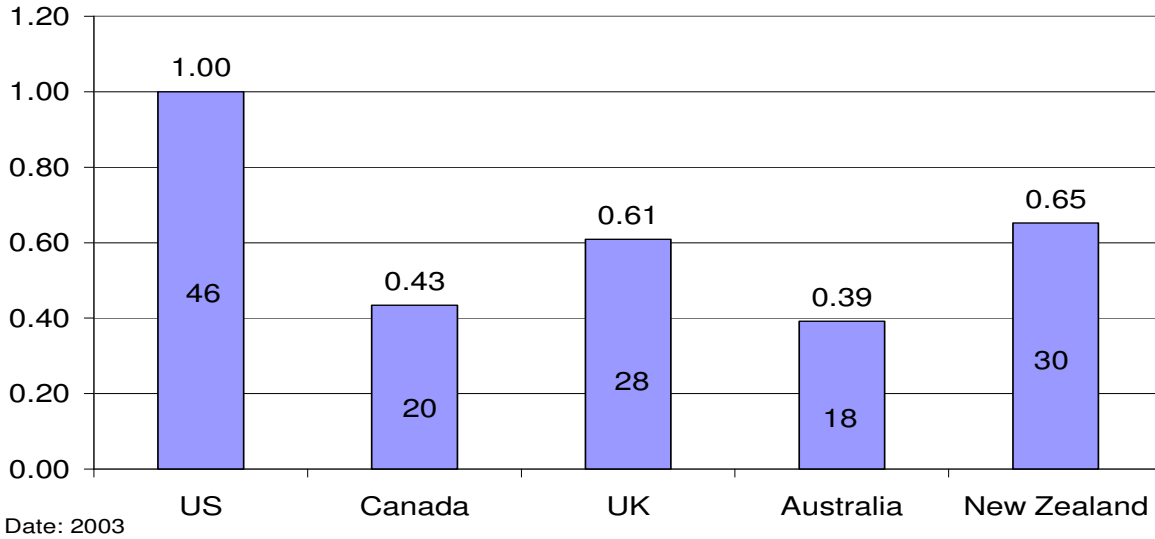
An increasingly important *Health Domain* indicator is the *percent of overweight children*. Figure 5 shows comparisons based on international standards for overweight children, and the U.S. youths have the highest rate (25.1), closely followed by Australia (23.9). The rates for Canada (19.5) and the U.K. (15.8) are lower.

Figure 5. Percent of Overweight Youths (Ages 13 and 15)



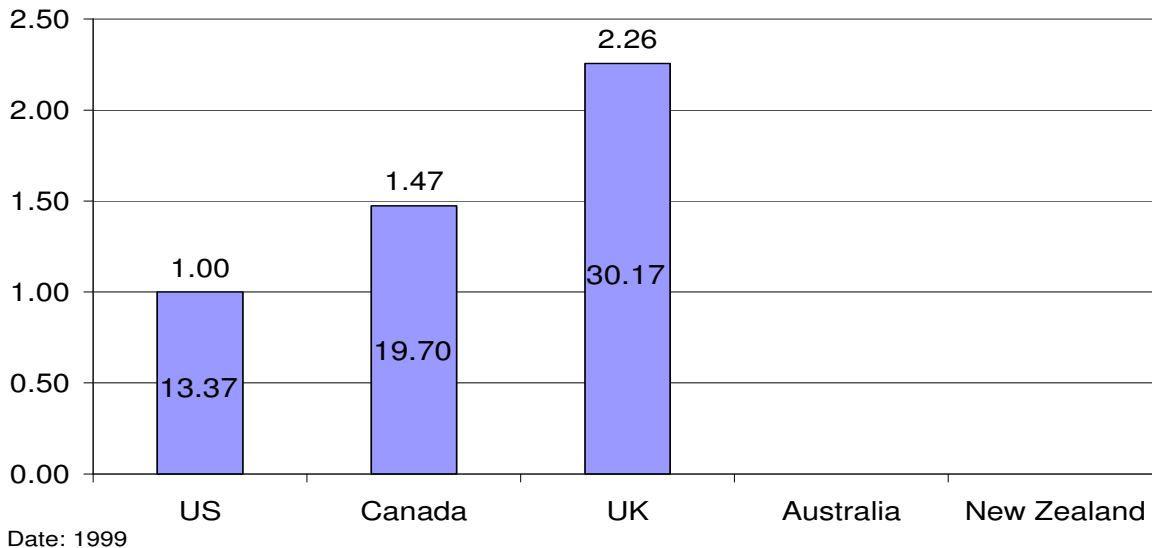
A Key Indicator in both the *Health* and *Safety/Behavioral Concerns Domains* is *teen birth rates* (number of births per 1,000 girls ages 15-19). The rates for Australia (18), the U.K. (20), Canada (28), and New Zealand (30) were all substantially lower than that of the United States (46).

Figure 6. Teenage Birth Rates
(Number of births per 1,000 girls ages 15-19)



A Key Indicator in the *Safety/Behavioral Concerns Domain*, youths ages 11, 13 and 15 who report *ever being drunk two or more times* was more prevalent in Canada (19.7%) and the U.K. (30.2%), as shown in Figure 7. Canada and the U.K. also had higher percentages of youths ages 11, 13, and 15 *smoking cigarettes daily* (figure available on request). No comparable data on drinking and smoking were available for Australia and New Zealand.

Figure 7. Percent Reporting Ever Been Drunk Two or More Times (Ages 11, 13, and 15)



An important set of Key Indicators for *Educational Attainment* are *Reading and Mathematics Test Scores* at age 15 based on international standardized tests from OECD's Programme for International Student Assessment (PISA). Youths in the U.S. score lower on both the Reading (Figure 8) and Mathematics (Figure 9) tests compared with their counterparts in the other countries.

Figure 8. Reading Test Scores
(From OECD standardized tests in the PISA study, Age 15)

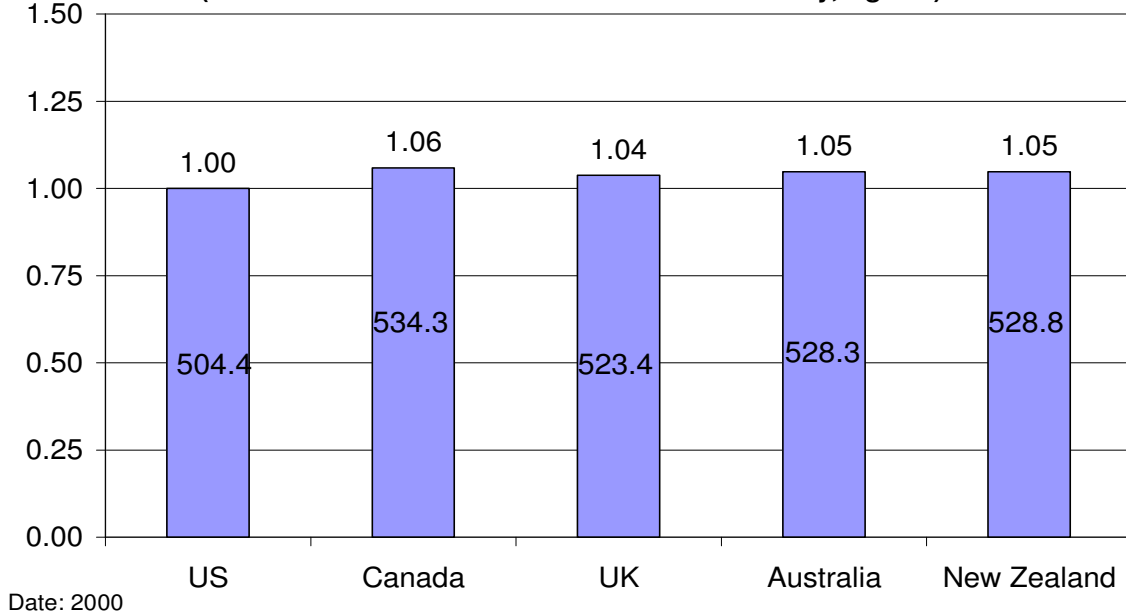
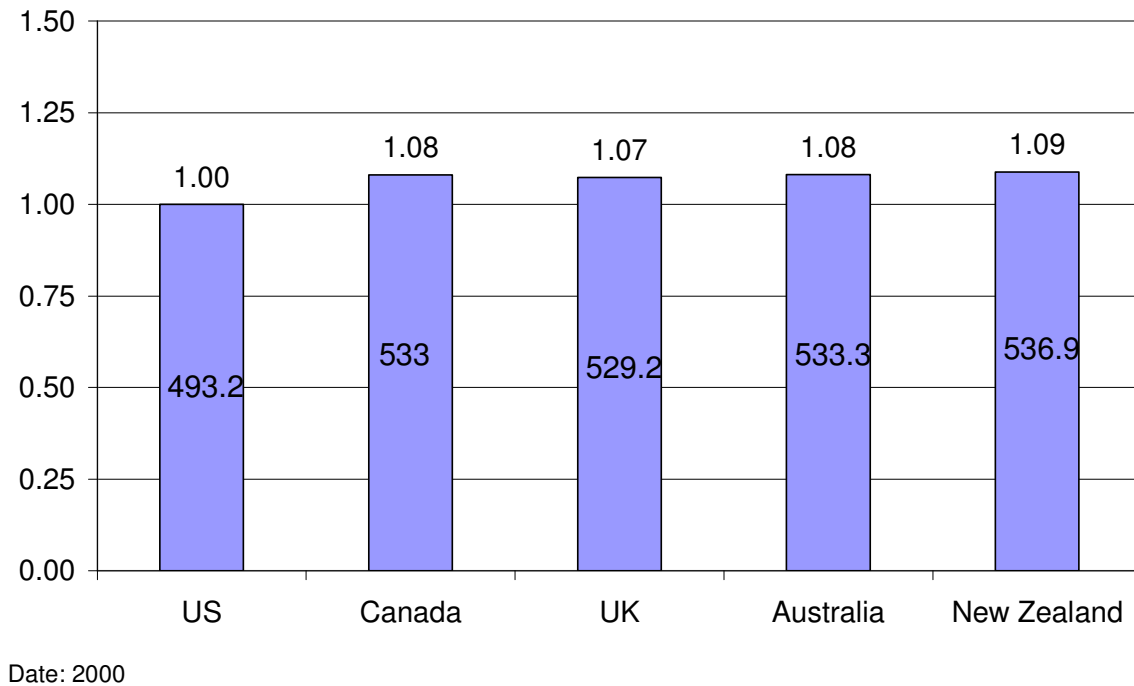
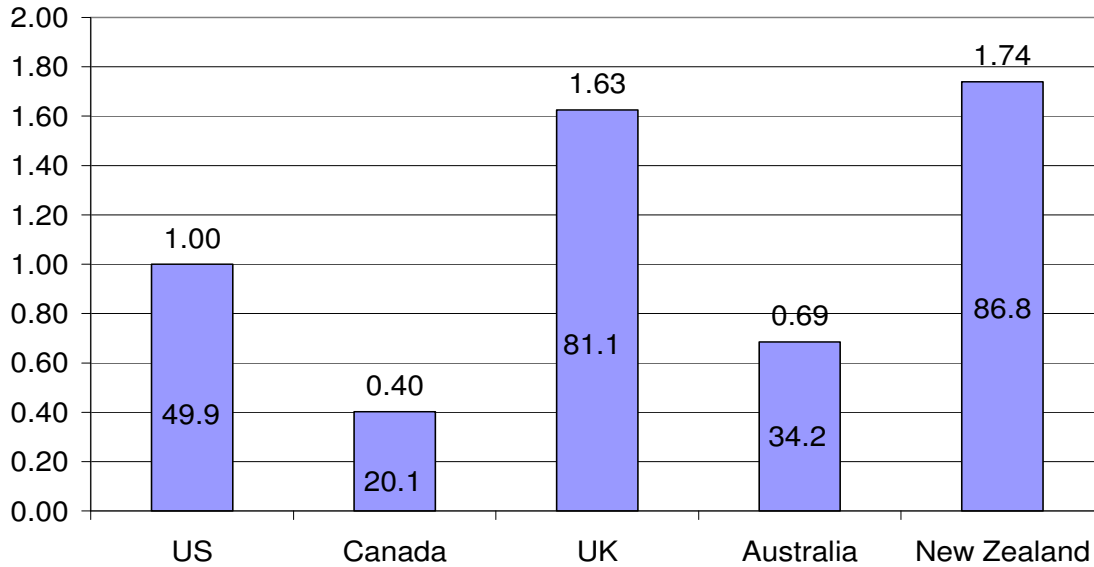


Figure 9. Math Test Scores
(From OECD standardized tests in the PISA study, Age 15)



We next compare three Key Indicators in the *Educational Attainment/Community Connectedness Domains*. First, as shown in Figure 10, the United Kingdom and New Zealand had higher rates of preschool enrollments for children ages 3 to 4, whereas the Canadian rate was 40 percent and the Australian rate was 69 percent that of the U.S.

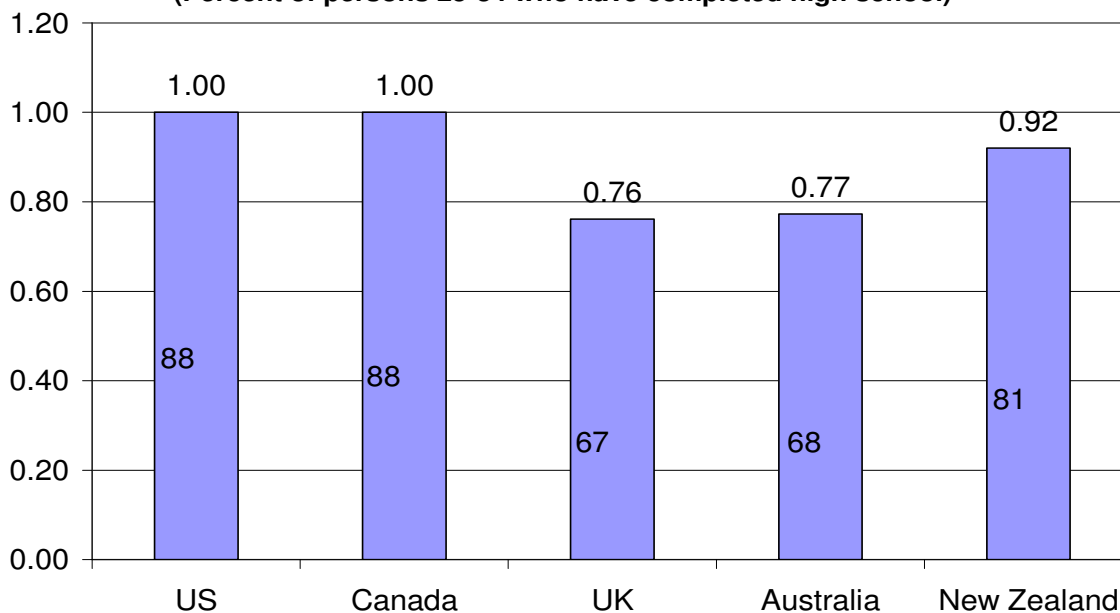
Figure 10. Preschool Enrollment Rates
(Percent of children ages 3-4 enrolled in preschool programs)



Date: 2000

Second, the U.S. and Canada had comparable high school completion rates (Figure 11) for ages 24 to 34 (88%), and the rate for New Zealand was almost as high (81%). The high school completion rates in the U.K. and Australia were approximately 75 percent that of the U.S. and Canada.

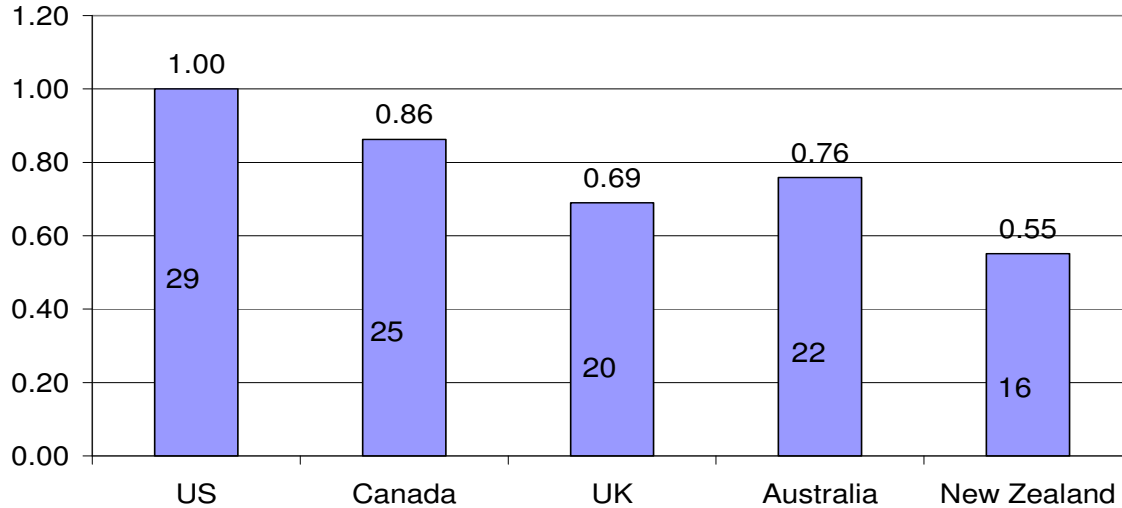
Figure 11. High School Completion Rates
(Percent of persons 25-34 who have completed high school)



Date: 2000

Third, Figure 12 shows the U.S. has higher rates of *baccalaureate degrees*, another Key Indicator in the *Educational Attainment/Community Connectedness Domains*, compared to the four other countries. The rate for New Zealand is almost half that of the United States.

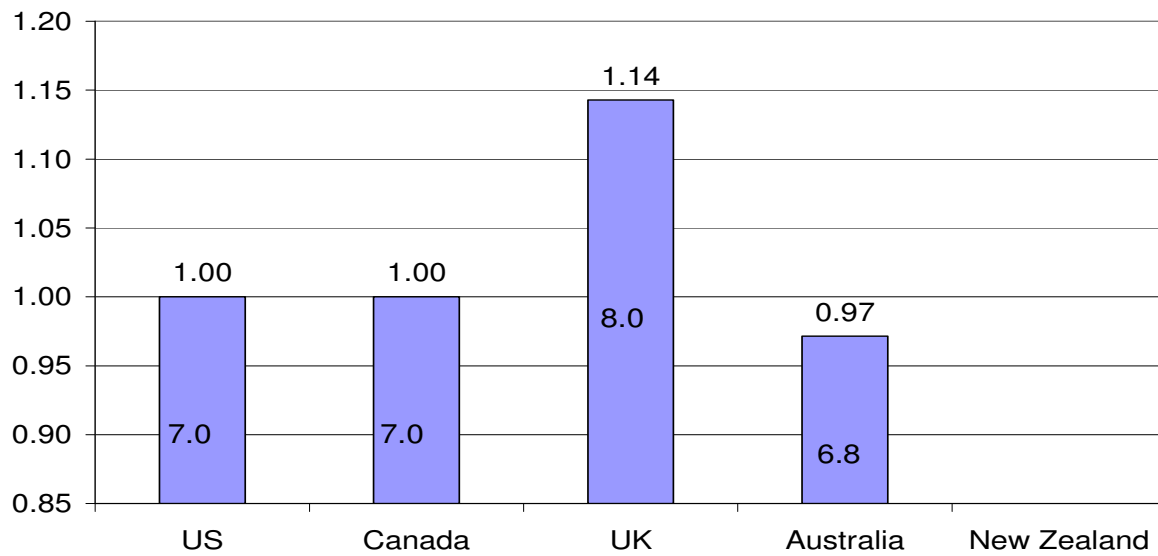
Figure 12. Baccalaureate Degree Rates
(Percent of persons ages 25-34 who have received a baccalaureate degree)



Date: 2000

As shown in Figure 13, three of the four comparison countries had data on a *Community Connectedness* Key Indicator, the *percent of youths aged 15 to 19 not working or in school*. The rate for Canada (7.0%) was equivalent to the U.S., and Australia was just below (6.8%) that of the U.S. The U.K. had a higher rate (8.0%) of youths who are not connected to the schooling or economic institutions.

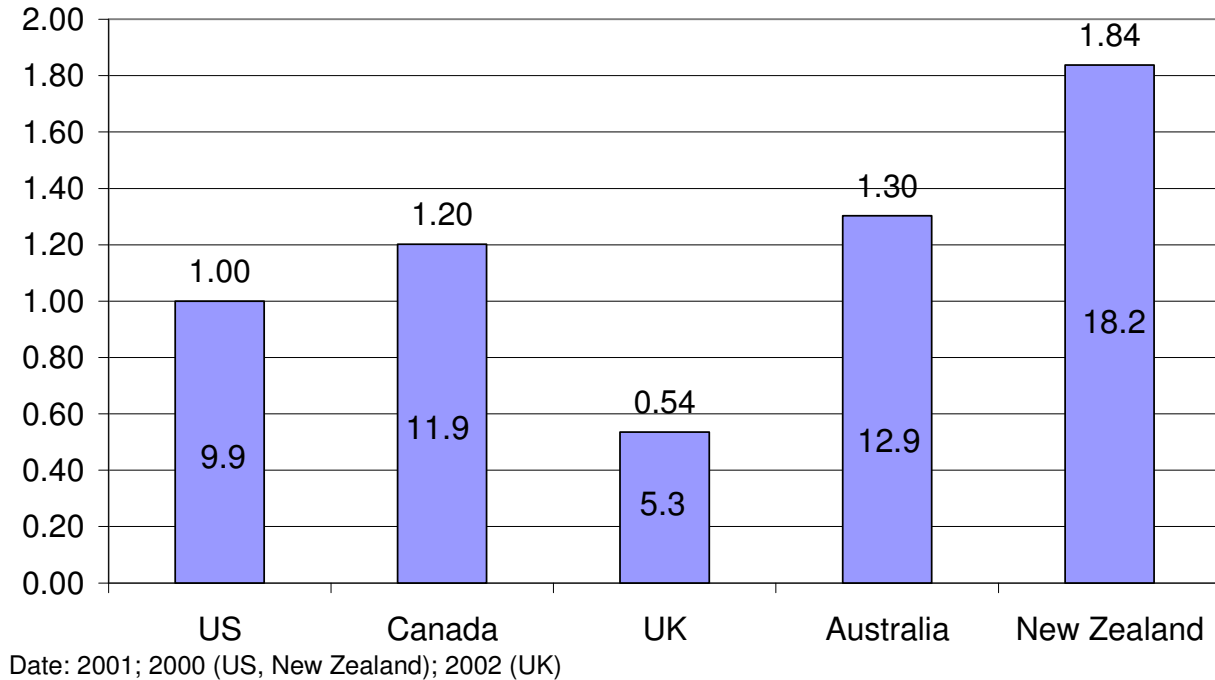
Figure 13. Percent Not Working or in School (Ages 15-19)



Date: 2000

In the CWI, *suicide rates* are a Key Indicator of *Emotional Well-Being*. International comparisons of suicide rates for persons aged 5 to 24 (per 100,000 persons aged 15-24) are presented in Figure 14. Of the countries under study, only the United Kingdom has suicide rates lower than the U.S. Suicide rates for New Zealand youths are almost double that of youths in the U.S.

Figure 14. Suicide Rates
(Number of suicides per 100,000 persons ages 15-24)



Summary of International Comparisons of Child and Youth Well-Being

As noted, the 19 Key International Indicators can be classified into the seven domains of well-being used to organize indicators in the CWI: *Family Economic Well-Being*, *Social Relationships*, *Health, Safety/Behavioral Concerns*, *Educational Attainment*, *Community Connectedness*, and *Emotional Well-Being*. Using all 19 indicators, Table 1 presents a “report card” comparison of child and youth well-being by domain for the United States and the four Anglophone countries. The table indicates the measures used within each domain. The ‘**B**’ [‘**W**’] sign indicates the rates for the U.S. are **better** [**worse**] than that of the comparison country, and an ‘=’ sign means the rates are equal. A blank cell indicates no country-level Key International Indicator was available. A tally x/y in the row for each domain and for the entire table indicates the number (x) of the total (y) Key Indicators available for comparison in which the U.S. rate is better than the comparison country.

Major Findings:

- Regarding *Family Economic Well-Being* indicators, poverty rates are lower in Canada, Australia, New Zealand, and the United Kingdom, compared with that of the United States, and the percent of households with unemployed parents is higher in all four countries as compared to the U.S.
- U.S. children are faring better in the *Social Relationships domain* as compared to the United Kingdom.
- Canada, Australia, New Zealand, and the United Kingdom have better outcomes in the *Health domain*.
- Girls in Canada, the U.K, Australia, and New Zealand score lower than the U.S. on *teen birth rates*, a Key Indicator for the *Safety/Behavioral Concerns domain*.
- Only two countries had comparable data for several indicators in the *Safety/Behavioral Concerns domain*. Children and youths in Canada and the United Kingdom had higher rates of smoking and drinking as compared to their counterparts in the United States.
- *Educational Attainment* is based on scores on standardized tests in mathematics and reading that are administered internationally. The U.S. 15-year old students scored lower than students in Canada, Australia, New Zealand, and the United Kingdom.

Table 1. Comparison of Child and Youth Well-Being in US and Four English-Speaking Countries: Canada, UK, Australia and New Zealand.

Countries	Canada	United Kingdom	Australia	New Zealand
Domains				
Family Economic Well-Being	1/2	1/2	1/2	1/2
<ul style="list-style-type: none"> • <i>Poverty Rate: All Children (Age 0-17)</i> • <i>Percentage of Working Age Households with Children Without An Employed Parent</i> 	W B	W B	W B	W B
Social Relationships	0/1	1/1	0/1	
<ul style="list-style-type: none"> • <i>Percent of All Children Ages 0-17 Living in Single Mother Families</i> 	W	B	W	
Health	0/5	1/5	0/4	0/3
<ul style="list-style-type: none"> • <i>Low Birth Weight</i> • <i>Infant Mortality</i> • <i>Child and Youth Mortality (Age 1-19)</i> • <i>Overweight (Age 13 and 15)</i> • <i>Self-rated "poor or fair health" (Age 11, 13, & 15)</i> 	W W W W W	= W W W B	W W W W	W W = =
Safety/Behavioral Concerns	3/4	3/4	0/1	0/1
<ul style="list-style-type: none"> • <i>Teenage Birth Rate (Age 15-19)</i> • <i>Smoking Daily (Age 11, 13, & 15)</i> • <i>Drunk Twice or More (Age 11, 13, & 15)</i> • <i>Having Used Cannabis (Age 15)</i> 	W B B B	W B B B	W	W
Educational Attainment	0/2	0/2	0/2	0/2
<ul style="list-style-type: none"> • <i>Reading (Age 15)</i> • <i>Math (Age 15)</i> 	W W	W W	W W	W W
Educational Attainment/Community Connectedness	2/4	3/4	3/4	2/3
<ul style="list-style-type: none"> • <i>High School Completion (Age 25-34)</i> • <i>Not Working or In School (Age 15-19)</i> • <i>Bachelor's Degree (Age 25-34)</i> • <i>Preschool Enrollment Rate (Age 3-4)</i> 	= = B B	B B B W	B W B B	B =
Emotional Well Being	1/1	0/1	1/1	1/1
<ul style="list-style-type: none"> • <i>Suicide Rate (Age 15-24)</i> 	B	W	B	B
Overall Tally	7/19	9/19	5/15	4/12

- The *Educational Attainment/Community Connectedness* domain is composed of measures of attending and completing various levels of education, as well as the inactivity of teens. Overall, the U.S. scored higher than the Canada, U.K., Australia, and New Zealand primarily due to higher proportion of young adults with high school and baccalaureate degrees. But the U.S. lags in preschool enrollment at ages 3 to 4.
- For the *Emotional Well-Being* domain, the only Key Indicator available for our international comparisons is the *suicide rate*. Only the United Kingdom had suicide rates that were lower than that of the United States.

In terms of the *overall tally*, the US is doing better than Canada in 7 out of 19 indicators, better than the UK in 9 out of 19 indicators, better than Australia in 5 out of 15 indicators, and better than New Zealand in 4 out of 12 indicators.

Table 2 presents a different perspective on these international comparisons, namely, a summary of the relative ranking of the five Anglophone countries based on each of the seven child and youth well-being domains and indicators therein. The domain-specific rankings are based on the averages of the rankings of the indicators within each domain and range from ‘1’, the highest ranking of child well-being, down to ‘5’ (or ‘4’ for social relationships), which indicates the lowest ranking of child well-being among the five countries. Two composite averages are given at the bottom of the table – one based on the average for each country of its ranks across the seven domains and one based on a direct average across all 19 indicators. The relative orderings of the countries is the same under the two methods of averaging. The Average Ranks show that the United States ranks in the middle on child and youth well-being, lower than Canada and Australia and higher than New Zealand and the United Kingdom.

Table 2. Relative Ranking of Five English-Speaking Countries for Child and Youth Well-Being by Each Domain and Across All Domains and All Indicators

Domain	Canada	Australia	United States	New Zealand	United Kingdom
Family Economic Well-Being	1	2	2	2	5
Social Relationships	1	2	3		4
Health	1	3	5	4	2
Safety/Behavioral Concerns	3	1	2	5	4
Educational Attainment	1	3	5	1	4
Educational Attainment/Community Connectedness	2	3	1	3	5
Emotional Well-Being	3	4	2	5	1
Average Rank Across All Domains	1.7	2.6	2.9	3.3	3.6
Average Rank Across All Indicators	2.0	2.6	2.9	3.0	3.1

Conclusion

Although no country outcores the United States on *all* domains of child and youth well-being, our comparison of five Anglophone countries show deficiencies in U.S. child well-being, particularly in *Health*, and *Educational Attainment* domains. On the other hand, the U.S. does relatively well on several indicators in the *Safety/Behavioral Concerns*, *Community Connectedness*, and *Emotional Well-Being* domains. Our analysis of average rankings on all domains and indicators of child and youth well-being for all of the five Anglophone countries shows that the U.S. falls in the middle of the group, after Canada and Australia on the better side and ahead of New Zealand and the United Kingdom.

Regarding *Family Economic Well-Being*, there again is a mixed picture. While the U.S. has higher percentages of children living in households with at least one employed parent, U.S. child poverty rates are among the highest of all industrialized countries. The consequences of poverty during childhood are far-reaching, resulting in potential deprivation of basic necessities, poorer health outcomes, and behavioral and educational problems. This report highlights the need for continuing public and private sector efforts to support and enhance the well-being children and youth living in households with limited economic resources in the United States.

Acknowledgements and Contact Information

The **Foundation for Child Development Child and Youth Well-Being Index Project** at Duke University is coordinated by Kenneth C. Land, Ph.D., John Franklin Crowell Professor, Department of Sociology and Center for Demographic Studies, P.O. Box 90088, Duke University, Durham, NC 27708-0088 (e-mail: kland@soc.duke.edu). Other researchers involved in the project include Vicki L. Lamb, Ph.D. (North Carolina Central University and Duke University), Sarah O. Meadows, Ph.D. (Princeton University), and Hui Zheng, M.A. (Duke University). The Project is supported by grants from the Foundation for Child Development (<http://www.fcd-us.org/>). We especially acknowledge the support and encouragement of Ruby Takanishi, President, and Fasaha Traylor, Senior Program Officer, Foundation for Child Development. We also thank Kristin A. Moore, Ph.D. and Brett Brown, Ph.D. of Child Trends, Inc. (<http://www.childtrends.org>) and Donald Hernandez, Ph.D. of the State University of New York at Albany for invaluable advice and assistance in this project.

On the Web: More information about the CWI, its construction, and the scientific papers and publications on which it is based can be found on the World Wide Web:

<http://www.soc.duke.edu/~cwi/>

Appendix A

Key International Indicators of Child and Youth Well-Being

Child Poverty	Percentage of children ages 0-17 living below 50% of the median adjusted disposable income
Secure Parental Employment	Percentage of working-age households with children without an employed parent
Single Parent Families	Percentage of all children ages 0-17 living in single-mother families
Low Birth Weight	Percentage of infants with low birth weight
Infant Mortality	Number of deaths before age 1 per 1,000 live births
Child and Adolescent Mortality	Number of deaths per 1,000 children ages 1-19
Overweight	Percentage of young people who are overweight according to BMI, ages 13 and 15
Subjective Health	Percentage of young people rating their health as “fair or poor”, ages 11, 13 and 15
Teen Births	Number of births per 1,000 girls ages 15-19
Smoking, and Drinking	Percentage of young people reporting smoking daily, ages 11, 13, and 15 Percentage of young people reporting ever been drunk twice or more times, ages 11, 13, and 15
Drugs	Percentage of young people who have used cannabis in the last 12 months, age 15
Reading and Mathematics Achievement	Math and reading score for young people age 15 based on OECD's Programme for International Student Assessment (PISA)
High School Completion	Percentage of persons ages 25-34 who have completed high school
Not Working or in School	Percentage of young people ages 15-19 not working or in school
Bachelor's Degree	Percentage of persons ages 25-34 who have received a bachelor degree
Preschool Enrollment	Percentage of children ages 3-4 enrolled in preschool programs
Suicide	Number of suicides per 100,000 persons, ages 15-24

Appendix B

Sources of Data for the Key International Indicators

Child Poverty	Luxembourg Income Study, www.lisproject.org/keyfigures/childpovrates.htm
Secure Parental Employment	OECD Income Distribution Survey, http://www.oecd.org/dataoecd/48/9/34483698.pdf
Single Parent Families	Luxembourg Income Study, www.lisproject.org/keyfigures/childpovrates.htm
Low Birth Weight	Unicef, Childhood Under Threat, The State of the World's Children 2005, http://www.unicef.org/sowc05/english/Table2_E.xls
Infant Mortality	United Nations Demographic Yearbook, http://unstats.un.org/unsd/demographic/products/dyb/dyb2.htm
Child and Adolescent Mortality	United Nations Demographic Yearbook, http://unstats.un.org/unsd/demographic/products/dyb/dyb2.htm
Overweight	Currie, C., et al (eds) (2004) 'Young People's Health in Context. Health Behavior in School-age Children Study' (HBSC): International Report from the 2001/2002 Study, WHO Regional Office for Europe. [US, Canada, and UK] Booth, M, et al. (2006) NSW School Physical Activity and Nutrition Survey (SPANS) 2004: Full Report. Sidney: NSW Department of Health. [Australia]
Subjective Health	Currie, C., et al (eds) (2004) 'Young People's Health in Context. Health Behavior in School-age Children Study' (HBSC): International Report from the 2001/2002 Study, WHO Regional Office for Europe.
Teen Births	The Clearinghouse on international developments in child, youth and family policies at Columbia University http://www.childpolicyintl.org/
Smoking, and Drinking	WHO Policy Series: Health policy for children and adolescents Issue 4, WHO Regional Office for Europe, Copenhagen, DK. Data from HSBC Survey, 2001/2002. http://www.hbsc.org/publications/reports.html#HEPCAreports
Drugs	Currie, C., et al (eds) (2004) 'Young People's Health in Context. Health Behavior in School-age Children Study' (HBSC): International Report from the 2001/2002 Study, WHO Regional Office for Europe.
Reading and Mathematics Achievement	OECD in figures: Statistics of the member countries. http://www.oecd.org/document/62/0,2340,en_2649_34489_2345918_1_1_1_1,00.html
High School Completion	Education at a Glance: OECD Indicators. http://www.oecd.org/document/34/0,2340,en_2649_34515_35289570_1_1_1_1,00.html
Not Working or in School	Education at a Glance: OECD Indicators. http://www.oecd.org/document/34/0,2340,en_2649_34515_35289570_1_1_1_1,00.html
Bachelor's Degree	Education at a Glance: OECD Indicators. http://www.oecd.org/document/34/0,2340,en_2649_34515_35289570_1_1_1_1,00.html
Preschool Enrollment	Education at a Glance: OECD Indicators. http://www.oecd.org/document/34/0,2340,en_2649_34515_35289570_1_1_1_1,00.html
Suicide	WHO. Suicide Prevention and Special Programmes http://www.who.int/mental_health/prevention/suicide/country_reports/en/index.html