

## **The Intelligence of East Asians: A Thirty-Year Controversy and its Resolution**

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During the last 30 years there has been controversy concerning whether the intelligence of East Asians (Chinese, Japanese, Koreans) is higher than that of Europeans. Despite counter-arguments, studies of indigenous East Asians in China, Japan, South Korea, Hong Kong, Taiwan, and Singapore have shown that the average IQ of these peoples is 105, compared with 100 of Europeans. In North America, early studies showed that East Asians had about the same IQ as Europeans, but 5 post-1990 studies have found that their average IQ is 105, the same as that of their indigenous cousins.

**Key Words:** Intelligence; East Asians.

Virtually nothing was known about the intelligence of East Asians (Chinese, Japanese, Koreans) until 30 years ago. For instance, there was no mention of this in either of Jensen's two books on race and intelligence published in 1972 and 1973. It was in 1977 that this question first came to prominence with the publication of papers on intelligence in Japan and Singapore (Lynn, 1977a, 1977b). The first of these claimed that the mean IQ in Japan was 106.6 (in relation to an American mean of 100), while the second claimed that the mean IQ of the Chinese in Singapore was 110.

These claims did not go unchallenged. The first of these challenges came from Stevenson and Azuma (1983). The Japanese IQ had been calculated from the Japanese standardization samples of WPPSI, WISC and WAIS, and Stevenson and Azuma (1983) asserted that these samples were biased in favour of the middle class, thereby giving the Japanese spuriously higher IQs. A second challenge was mounted by Stevenson and his colleagues who carried out their own study in which they gave a battery of tests to samples of 6 and 11 year olds drawn from the cities of Minneapolis in the United States, Sendai in Japan and Taipei in Taiwan (Stevenson, Stigler, Lee, Lucker, Kitanawa and Hsu, 1985). They concluded that there were no differences in the overall means obtained by children in the three cities and therefore that they had refuted the claim

that East Asians have a higher mean IQ than Europeans.

Unhappily, while Sendai and Taipei may be acceptable as reasonably representative for urban children in Japan and Taiwan, the same cannot be said of Minneapolis as representative of American cities. Minneapolis is the principal city in Minnesota and there is considerable evidence that the intelligence level is higher in Minnesota than in the United States as a whole. In the military draft in World War I, the whites from Minnesota obtained the highest score on the Army Beta Test of all American States (Montagu, 1945). In the military draft for the Korean War the percentage found unacceptable for military service on account of low intelligence in Minnesota was the second lowest among the American states (Jensen, 1973, p.107), indicative of a high average intelligence level. In the NAEP (National Assessment of Educational Progress) math test of 8<sup>th</sup> grade school students in 2003 Minnesota achieved the highest score of all the American states (National Centre for Education Statistics, 2003). Flynn (1980, p. 107) has calculated that the mean IQ of whites in Minnesota is 105 and Flynn's calculations are generally correct. If this is accepted, for a comparison with an American white IQ of 100, 5 IQ points need to be added to the samples from Japan and Taiwan, giving them an IQ of 105. With this correction, the Stevenson et al. (1985) study indicated that East Asians have a higher mean IQ than Europeans by around 5 IQ points. This conclusion has been confirmed in my recent compilation of 59 studies of indigenous East Asians in which the median IQ was 105, in relation to an IQ of 100 of American and British Europeans (Lynn, 2006). The IQs of 106.6 for Japan and 110 for Chinese in Singapore reported in my first two studies were a little higher because they were not adjusted for the secular rise of intelligence known as Flynn effects.

### **Intelligence of East Asians in the United States and Canada**

In 1982 Philip Vernon (1982) published his summary of studies interested in the intelligence of East Asians in the United States and Canada. He concluded that these have a verbal IQ of 97 and non-verbal and spatial IQs of 110 (p.28). If these are regarded as three abilities and averaged they give an IQ of 105.7 and are consistent with the IQs of indigenous East Asians. However, Vernon's conclusion was disputed by Flynn (1991) on

the grounds that it took no account of the secular increase of test norms that have come to be known as the Flynn effect. This effect is that groups tested with a test normed at some earlier date have inflated IQs, as compared with the comparison group, and that in a number of studies this gave spuriously high means for East Asians. Flynn adjusted American ethnic East Asian IQs for the secular increases in norms and concluded that American ethnic Chinese and Japanese have a verbal IQ of 95.3 and a “non-verbal IQ” of 99.6, and he averaged these to give an “overall IQ” of 97.6 (Flynn, 1991, p.65). Flynn therefore claimed that the IQ of East Asians in the United States and Canada was actually lower than that of Europeans, contrary to the results claimed by Vernon and for indigenous East Asians.

While Flynn was undoubtedly right to correct East Asian means for the Flynn effect, his treatment was not wholly satisfactory because “non-verbal IQ” is not generally accepted today as a meaningful concept. It can include any ability that is not verbal, including abstract reasoning and perceptual, numerical, spatial and visualization abilities. Furthermore, his averaging the two concepts of verbal and non-verbal intelligence gave verbal ability the same weight as all other abilities in calculating the “overall IQ” of East Asians, and as East Asians are relatively weak on verbal ability this spuriously reduces their “overall IQ”. Despite this conceptual weakness Flynn apparently showed convincingly that American ethnic East Asians did not have higher average IQs than Europeans but that their IQ was about the same or possibly fractionally lower.

Flynn’s literature review ended in 1990 and we now look at five more recent studies on the IQ of American ethnic East Asians. These are summarized in Table 1. In all of these the IQs of the East Asians were obtained at the same time and as part of the same investigation as those of Europeans. The study in row 1 gives an IQ of 104 for a Californian Chinese sample. Row 2 gives an IQ of 103 from the nationally representative sample of adolescents reported in *The Bell Curve*. Row 3 gives an IQ of 104 for American Asians obtained in the national standardization sample of the Differential Ability Scale. Row 4 gives an IQ of 109 for a sample of East Asians obtained from the National Collaborative Perinatal Project.

Row 5 gives an IQ of 107 for the East Asians obtained in the standardization sample of French’s (2001) Pictorial Test of

Intelligence. This is a pictorial test for 3 to 8 year olds. It consists of three subtests measuring *verbal abstractions* (vocabulary), *form discrimination* (matching and discriminating forms, recognizing incomplete pictures, locating embedded shapes, and reasoning with abstract shapes and patterns) and *quantitative concepts* (counting and arithmetic problems). The test therefore measures the three major second order factors of verbal comprehension, spatial-visualization, and quantitative ability identified by Carroll (1997) and others in taxonomies of cognitive abilities. In a critical evaluation of the test Madle (2003, p. 299) has written that it “follows Spearman’s classical theory, with the general factor as its keystone”. The IQ obtained from the test can be regarded as a good measure of Spearman’s

**Table 1**  
*IQs of American Ethnic East Asians*

|   | <i>Sample</i> | <i>Age</i> | <i>N</i> | <i>Test</i> | <i>IQ</i> | <i>Reference</i>          |
|---|---------------|------------|----------|-------------|-----------|---------------------------|
| 1 | Chinese       | 10         | 155      | SPM         | 104       | Jensen & Whang, 1994      |
| 2 | E Asian       | 14/22      | 42       | AFQT        | 103       | Herrnstein & Murray, 1994 |
| 3 | Asian         | 6/17       | 48       | DAB         | 104       | Lynn, 1996                |
| 4 | E Asian       | 7          | 63       | WISC        | 109       | Rushton, 1997             |
| 5 | Asian         | 3-8        | 18       | PTI         | 107       | French, 2001              |

Note on tests: SPM- Standard Progressive Matrices; AFQT- Armed Forces Qualification Test; DAB- Differential Ability Test; WISC- Wechsler Intelligence Scale for Children; PIT – Picture Intelligence Test.

g. Factor analysis showed the presence of a single “general mental ability” with factor loadings of 0.79 for *verbal abstractions*, 0.78 for *form discrimination* and 0.77 for *quantitative concepts*. The IQ has a high reliability with a Cronbach’s alpha of 0.94. The standardization sample was tested in 1998-99 and consisted of 970 children from 15 states. Stratification was based on the 1997 census and was approximately representative of the US population in terms of geographical region, race, ethnicity, educational attainment of parents, and disability status. The European Americans (n= 668) obtained a mean IQ of 100.8 and the Asian Americans (n= 18) a mean IQ of 107.9. Thus, the Asian Americans exceeded the European Americans by 7.1 IQ

points. It is evident that in all five studies the American East Asian IQ or, more strictly in the case of rows 3 and 5, the American Asian IQ, is higher than the European. The average of the five studies is 105.4 and very closely similar to the IQ of 105 of indigenous East Asians.

### Discussion

We have to reconcile three conclusions. First, the average IQ of indigenous East Asians is 105. Second, the average IQ of American East Asians pre-1990 was approximately 97.6, as calculated by Flynn (1991). Third, the average IQ of American East Asians post-1990 was approximately 105, as shown in Table 1. There is a problem in reconciling the difference between Flynn's estimates of an American East Asian IQ of 97.6 with the IQs of 105 of indigenous East Asians and of post-1990 American East Asians. There are three possible explanations for the discrepancy. The first is that many of the East Asians in the earlier studies reviewed by Flynn spoke Chinese, Japanese or Korean as their first language in their homes. These would have been handicapped on verbal tests, and even on non-verbal tests that involve understanding the instructions given in English. Second, most of the East Asians immigrants were poor and likely had some degree of sub-optimal nutrition which numerous studies have shown impairs intelligence (Lynn, 1990). Third, there may have been a tendency for the East Asians who migrated to the United States to have been a little below the average intelligence of those who remained in East Asia. The Chinese and Japanese who migrated to the United States in the second half of the nineteenth century were largely peasants who came to do unskilled work on the construction of the railways and other building work. These and others who emigrated to the United States in the twentieth century may have been a little less intelligent than average. Migration to a new country would probably not have seemed an attractive option for the more intelligent who would generally have been doing sufficiently well in their own countries. Once these early migrants had settled in the United States, their children would have shown some regression upwards, possibly of as much as 7-8 IQ points, towards the East Asian mean of 105.

It should be noted that a distinction should be drawn between East Asian Americans consisting of ethnic Chinese,

Japanese, Koreans and some Vietnamese, and South Asians who include Filipinos, Vietnamese, Thais, and Cambodians. The American censuses of 1980-2000 have shown that approximately half of American Asians are East Asian and half are South Asian. Flynn (1991) estimates the mean IQ of Filipinos in the United States at 87. The IQs in rows 3 and 5 of Table 1 are for Asians, combining East Asians and South Asians. Since the IQ of South Asians is substantially lower than that of East Asians, it can be inferred that the IQ of East Asians in the samples in rows 3 and 5 of Table 1 must be somewhat higher than those given.

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