# Brief Report The Relevance of the Eysenck Personality Questionnaire in a New Zealand Student Population\*

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The E.P.Q. was administered to 104 male and 219 female undergraduates in a first year course at a New Zealand university. Obtained scores were reasonably compatible with the British norms.

In a large-scale survey of the professional practice characteristics of New Zealand psychologists (McKerracher & Walker, 1980; Walker, McKerracher & Edwards, 1982; McKerracher & Walker, 1982) it was found that two-thirds of the sampled population reported using psychometric techniques sometimes (males) or frequently (females) on a seven-point Likert Scale. In spite of this rate of use, comparatively little effort has been made to establish New Zealand norms for personality measures in any systematic fashion. The New Zealand Council for Educational Research was unable to supply New Zealand norms for the Eysenck Personality Questionnaire. Sporadic publications about some other techniques have appeared from time to time in a few New Zealand journals to our knowledge. Some of those noted were the AAMD Adaptive Behaviour Scale (Godfrey et al., 1986); the Crown and Crisp Experiential Index (Knight & Waal-Manning, 1983; Knight & Godfrey, 1984); the Junior E.P.Q. (Saklofske, McKerracher & Eysenck, 1978; Saklofske & McKerracher, 1982); the E.P.I. (McKerracher, McGee & Silva, 1984); the Frost Self-Description Questionnaire (Saklofske, McKerracher & Cameron, 1982); the Eight State Questionnaire (Boyle, 1986); and the Rathus Assertiveness Schedule (McCormick, 1982; McCormick, Hahn & Walkey, 1984). A search of Psychological Abstracts over the last three years produced

no information about New Zealand test norms in articles published abroad. In view of the new emphasis on cognition that is emerging in personality measurement and applied psychology (Blatt, 1986), it seems appropriate to report further information about the E.P.Q. in a New Zealand adult student population, to add to the E.P.Q. data already available for New Zealand children. The important influence of Eysenckian personality theory upon applied psychology is increasingly acknowledged (Costa & McCrae, 1986; Claridge, 1986). The E.P.Q. is one of the more robust personality assessment techniques devised so far. Its norms and factor stability have been widely tested across different cultures and its validity and reliability are wellestablished (Eysenck, 1987).

# Method

In the course of a larger study of prediction of academic achievement in New Zealand students, a group administration of the E.P.O. test (Eysenck & Eysenck, 1975) was carried out with a sample of 323 undergraduate Arts students who were taking a paper in Education at Otago University, Dunedin. There were 219 females and 104 males. There was no significant gender difference in age distribution. The mean age for the whole group was 19.45 years, with a standard deviation of 4.82 (S.E.=0.269). The z-statistic was used instead of a t-test of differences between means because the only information available for the published E.P.Q. norms was in terms of means and standard deviations, from which standard errors of the means could be calculated for comparison with the NZ results.

### Results

In the general British population data (Eysenck & Eysenck, 1975), males report

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Table 1: E.P.Q. scores of NZ university students compared with relevant British norms\*

		E.P.Q. scores											
		Psychoticism			Extraversion			Neuroticism			Lie Scores		
			S.D.		M	S.D.	S.E.	M	S.D.	S.E.	M	S.D.	S.E
New Zealand University male students University female students	(N=104)	5.87	3.34	0.33	13.47	4.33	0.42	9.02	5.31	0.52	4.04	2.40	0.24
	(N=219)	3.37	2.30	0.16	13.76	4.48	0.30	10.93	4.74	0.32	4.87	3.23	0.22
U.K. General male students General female students British male	(N=231)	4.84	3.33	0.22	13.80	4.24	0.28	9.93	5.08	0.333	_	_	_
	(N=203)	3.02	2.54	0.18	13.49	4.74	0.33	12.16	5.85	0.41			
	(N=2312)	3.78	3.09	0.06	13.19	4.91	0.10	9.83	5.18	0.11	_		_
population British female population	(N=3262)	2.63	2.36	0.04	12.60	4.83	0.08	12.74	5.20	0.09			

<sup>\*</sup>Eysenck & Eysenck (1975).

themselves to be more Extraverted and Psychotic, but less Neurotic then females. The British male students are more Psychotic than the average British male (z=4.64, p<.01) whilst British female students are more Extraverted (z=2.59, p<.01) and Psychotic (z=2.13, p<.05) than British females in general.

British students mirror the general British population sex trends, in that male students describe themselves as being more Psychotic and less Neurotic than female

students (see Table 1).

New Zealand results show exactly the same pattern: males are significantly more Psychotic (z=6.90, p<.01) and less Neurotic (z=3.12, p<.01) than females. As in Britain, there are no gender differences in Extraversion scores. New Zealand male students have lower Lie scores than their female counterparts (z=2.59, p<.01). No comparative data is available for British students, although in general a cut-off of less than 8 and more than 7 is recommended in the test manual for distinguishing high L from low L scorers. This criterion would place the New Zealand students firmly in the low L range.

Because of the cross-cultural consistency of differences between male and female students in Psychoticism and Neuroticism, their scores were considered separately. New Zealand male students appear to be higher in Psychoticism (z=2.61, p<.01) than British male students but show no difference in Neuroticism. New Zealand female students were very similar to British female students in all E.P.Q. measures, except that they had somewhat lower Neuroticism scores than the British sample (z=2.36, p<.05).

# Discussion

Extraversion seems to be a stable dimension across the two cultures compared, with no significant differences within or between both student populations. The fact that the differences between sexes in Psychoticism and Neuroticism are similar in trend in both countries for the student and for the general population is a further reassuring indicator of comparability.

The finding that New Zealand male and female students are slightly lower in Neuroticism than their British peers and that New Zealand male students are higher in Psychoticism than British male students, may reflect a cultural difference in personality characteristics. However, the differences are practically and clinically of little importance, amounting to a separation of one point or less in most of the mean scores. The test would therefore seem to be relevant for use in a New Zealand setting.

<sup>1.</sup> The term 'Psychotic' is used by the authors to refer to the personality dimension of Psychoticism and should not be taken to equate with serious mental illness.

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