
Overseas Development Workers: 'Big Five' Personality Scores

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To test hypotheses formulated by Ones and Viswesvaran (1997), a cohort of 47 selected volunteer overseas development workers from New Zealand completed the NEO PI-R 'Big Five' personality inventory. In line with hypotheses, these workers were significantly higher than population norms on *openness* and its six subfacets, and on *agreeableness* and the subfacet of *tender-mindedness*, but contrary to hypotheses, they were not significantly different on either *neuroticism* or *conscientiousness*. The article argues for further research in this field.

Web sites list details of 280 United Kingdom-based not-for-profit aid organisations and 29,500 worldwide aid organisations which offer development and aid jobs overseas (<http://www.sussex.ac.uk>). What kinds of people choose to take up development work overseas, frequently in trying conditions and unpaid? This study considers the personality profiles of a sample of overseas development workers selected by the New Zealand government-funded aid program, Volunteer Service Abroad (VSA).

Characteristics of Expatriate Workers

Tung's (1981) landmark study on the selection and training of personnel in business organisations for overseas assignments has been followed by many such studies, summarised by Saunders and Aycan (1997), which consider the antecedents of successful expatriate assignments — including selection, training, orientation, acculturation and support. Could it be that characteristics of expatriates predicted to facilitate assignee adjustment and success (Ones & Viswesvaran, 1997) may be similar to those which aid organisations seek in their volunteer selection processes?

Personality testing was conducted for the Peace Corps' selection process until 1970, when it was abandoned because of its poor record of predicting success. After reviewing Peace Corps recruitment and outcome results, Harris (1973) concluded that personality-based assessments of potential expatriates were not likely to be fruitful. Yet, over the years that the Peace Corps used a process of 'self-selection' (Adler, 1991) the outcomes did

not improve, and there were increased early returns of volunteers.

Selection for development workers has been given little attention, except in the Canadian International Development Agency (Kealey, 1990). Research on expatriate assignments generally has focused on different aspects of personality including: patience, tolerance, interpersonal cultural sensitivity, open-mindedness, dogmatism, self-efficacy, ability to relate, extraversion (Armes & Ward, 1989; Black, Mendenhall, & Oddou, 1991; Parker & McEvoy, 1993). But problems with the design of instruments, and with varying conceptualisations of personality, have meant that these studies failed to produce any unifying framework — most authors had concluded that measured personality traits are not good predictors of overseas assignment success.

The development of the Five Factor Model of personality (the 'Big Five' taxonomy) has provided a potential organising framework (Costa & McCrae, 1995a). Meta-analyses using this model have demonstrated relationships between personality variables and job performance (Barrick & Mount, 1991; Ones & Viswesvaran, 1993). The evidence from this literature suggests that a more optimistic view may be taken concerning the potential of personality variables in general, and the Five Factor model in particular, in prediction (Ones & Viswesvaran, 1997).

In domestic selection, the Five Factor Model has made great strides (Ones & Viswesvaran, 1997). However, it has been less successful in expatriate selection due to the difficulty of operationalising 'success' and 'failure' of the expatriate (Arthur & Bennett, 1997;

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Caligiuri, 1997). Ones and Viswesvaran (1997) called for further empirical studies using the Five Factor model in selection for expatriate assignments. These authors used expert opinion to link the model to expatriate success criteria, as in Table 1.

Based on the analysis by Ones and Viswesvaran (1997), and on the authors' perception of the role of overseas volunteers, this study reports on measurement of personality characteristics of those who were accepted as volunteers. Exploration of 'adjustment' and 'completion' was also done using qualitative techniques and is reported elsewhere (Hudson, 2005, Hudson & Inkson, 2005). The authors' working experience with overseas volunteers suggested a group who choose to interrupt their careers and take on new challenges typically very different from what they have done before, work cooperatively with others from different cultural backgrounds and complete difficult tasks without becoming over-emotional.

Thus both literature and practice informed the following hypotheses:

1. Development volunteers will have higher *openness* than the general population.
2. Development volunteers will have higher *agreeableness* than the general population.
3. Development volunteers will have lower *neuroticism* than the general population.
4. Development volunteers will have higher *conscientiousness* than the general population.

Empirical Study

Volunteer Service abroad (VSA) is a development agency based in New Zealand that recruits skilled New Zealanders to work with local communities and organisations in developing countries in the Pacific, Asia and Africa. Since its establishment in 1962, VSA has sent more than 2000 volunteers to work with partner organisations in 30 countries (<http://www.vsa.org.nz>).

VSA advertises development positions nationally. To fit with western human resources processes and applicant requests, VSA has precise job descriptions relating to

the skills and experience required to meet the local in-country partner organisation's requirements for the job. These job descriptions typically indicate requirements for technical or professional qualifications and/or expertise related to the specific nature of the project. In addition, VSA states on its new web site that it will be looking for 'people with personal attributes such as flexibility, and the tenacity to adjust to what will be a major change in every aspect of your life' (<http://www.vsa.org.nz>).

The initial selection process is much like that of any other employer. Candidates with suitable qualifications and experience are short-listed for interviews. Forms are sent to four named referees and the candidate is asked to attend a 2-day interview process, which includes two full interviews and workshops relating to VSA, the assignments and volunteering. The application process to volunteer is so rigorous that there is considerable self-selection and, at the final point of decision, there are not many applicants (a maximum of three applicants to be interviewed for one position).

Relevant data were gathered as part of a wider study of the experiences of overseas development volunteers and the effects of overseas service on their careers (Hudson, 2005). The sample was the cohort of 48 workers who were selected by VSA and departed on their assignments during 2001. These assignments were for a minimum of 1 year and were for 2 years in 83% of cases. As part of a predeparture orientation process (administered only after volunteers had been selected and assigned) the volunteers were invited to take part in two parts of the study: Part A, which involved the NEO PI-R personality questionnaire; and Part B, which involved a semistructured pre-assignment interview. Only the NEO results are reported in this article. One volunteer refused to complete the questionnaire, giving a study sample of 47 and a response rate of 98%.

Fifty-six per cent of the sample was female. In contrast with the 'youthful' image of overseas aid workers derived from early Peace Corps experiences, the mean age of the sample on departure was 49 years, and 50% were 50 or over. In terms of occupations, 25% of the participants had been in legal or managerial positions; 40% in professional roles such as teachers, economists, doctor or IT consultants; 25% had been in other health professional roles or occupations such as journalism or desktop publishing. Smaller groups comprised 4% who were in agriculture or forestry and 6% in trades such as plumbing, carpentry or metalwork. The assignments were in the Pacific region (50%), Asia (37.5%) or Africa (12.5%) and involved volunteers going to Papua New Guinea, Bougainville, Solomon Islands, Vanuatu, Tokelau, Bhutan, Laos, Cambodia, Viet Nam, Zimbabwe and South Africa. Most assignments required the volunteer to train local people in the skills of the occupation, rather than just doing the job themselves.

Table 1
Potentially Useful Personality Predictors of Expatriate Success

Criterion	Potentially useful Big Five dimension predictors
Acceptance of overseas assignment	Emotional stability, extraversion, openness to experience, conscientiousness
Adjustment	Emotional stability, openness to experience
Completion of overseas assignment	Conscientiousness, emotional stability

Adapted from Ones and Viswesvaran (1997).

Research Instrument

The NEO PI-R assesses the factors in a 5-factor model of personality based on ratings using ordinary trait vocabulary (Digman, 1990). It consists of 240 items that define 30 8-item facet subscales over the five domains: neuroticism (N), extraversion (E), openness (O), agreeableness (A) and conscientiousness (C). Thus, there are six facet subscales within each of the five major domains (see Table 2) Responses to each item are made on a 5-point scale from *strongly disagree* to *strongly agree*. The United States norms are based on an original randomly sampled group of 1000 (500 male and female) selected from three large-scale studies of the NEO PI-R. The normative sample was stratified to match 1995 United States Census projection for age, gender and race. These five traits or dimensions have proved to be replicable over different theoretical frameworks, using different instruments, with ratings from different sources, a variety of samples and with a high degree of generality (Barrick & Mount, 1991; Costa & McCrae, 1980, 1984, 1989, 1992; Costa et al, 1991).

Results

The means and standard deviation for the NEO PI-R domains and subfacets were computed and are presented in Table 2. Mean scores on each personality domain and subfacet were compared with the reported means for the domains and subfacets for the adult population in general (Costa & McCrae, 1992). The differences were tested by *t* test.

The results provide strong support for hypothesis 1, moderate support for hypothesis 2, but little support for hypotheses 3 and 4. In respect of *openness* (hypothesis 1), the volunteer sample scored very significantly higher than population norms, not only on the overall domain score but also on each of the six subfacet scores. In respect of *agreeableness* (hypothesis 2), the volunteer sample scored significantly higher than population norms on the overall domain score and one of the sub-facet scores (*tender-mindedness*). In respect to *neuroticism* (hypothesis 3), the results were in the predicted direction for the domain scores and for all six subfacets except one, but none of the differences were statistically significant. In the case of *conscientiousness* (hypothesis 4), there was no pattern in the results and none of them were statistically significant.

The results for *openness* suggest that the selected volunteers are more open to new experiences, have wide interests and are more imaginative than the average persons of the United States norm sample. They may also have more differentiated emotional states, more willingness to try different activities or go to new places, and be more open-minded and willing to consider new and perhaps unconventional ideas and to re-examine social, political and religious values (Costa & McCrae, 1992).

The results for *agreeableness* might be expected of a sample of selected volunteers involved in humanitarian/development work, though it is surprising that the difference for altruism was not greater. The results for *neuroticism* and *conscientiousness* are not statistically significant, although we do not have high statistical power.

Conclusion

This study addressed the research objective of identifying personality profiles of selected volunteer development workers. It has identified aspects of personality characteristics that appear significant, namely *openness* and *agreeableness*. Facet scores were consistent with these differences and rounded out a picture of a distinctive personality profile, consistent with, but more limited than, earlier predictions by Ones and Viswesvaran (1997). The high scores in *openness* appear to relate well to the VSA requirement for 'flexibility, and the tenacity to adjust to ... major change', thus suggesting the potential usefulness of the instrument in selection (<http://www.vsa.org.nz>). Such results also suggest that volunteers are likely to experience vocational indecision and to change careers or have the likelihood of an open-minded approach to career development (Costa & McCrae, 1992).

The study is limited by its inability to determine the relative degrees to which distinctive profiles were determined by the nature of the sample of people volunteering and being selected. The small number of volunteers in this study and the lack of valid measures of volunteer performance made tests of effectiveness of the NEO PI-R in predicting performance impossible. The small number tested also gave no statistical power to undertake factorial checks of the NEO PI-R for this sample.

A caveat must also be entered concerning the use of a United States normative sample for comparison with New Zealand volunteers, due to the absence of any normative New Zealand data (McCrae, 2006), although there is considerable support for the crosscultural effectiveness of the instrument (Costa & McCrae, 1992). In recent research within New Zealand, Packman, Englert, Sisarich and Bauer (2005) have suggested some differences within ethnic groups. Other New Zealand research that compared analyses of New Zealand responses to the Big Five factor model and other models showed great similarity with United States findings (Guenole & Chernyshenko, 2005). Recently, means from 51 cultures were compared, including the United States and New Zealand (McCrae, Terracciano, & 79 Members of the Personality Profiles of Cultures Project, 2005) and this study suggested that the two nations have very similar mean levels of the five factors and similar facet profiles. Although these data were observer ratings of personality, 'they suggest that US norms (even for self-reports) ought to be reasonably close to New Zealand norms and could probably be used with

Table 2
NEO PI-R Comparisons of Means

NEO PI-R Scale	NZ VSA Volunteers <i>N</i> = 47		NEO PI-R <i>N</i> = 1000 US Norms		<i>t</i> score
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Neuroticism N	76.2	21.8	79.1	21.2	<i>ns</i>
Anxiety N1	13.7	4.8	14.3	5.3	<i>ns</i>
Angry hostility N2	11.1	4.8	12.4	4.6	-1.82*
Depression N3	12.2	5.2	12.3	5.4	<i>ns</i>
Self-consciousness N4	14.1	4.9	14.3	4.4	<i>ns</i>
Impulsiveness N5	15.9	4.5	15.8	4.4	<i>ns</i>
Vulnerability N6	9.1	3.8	10.0	3.9	<i>ns</i>
Extraversion E	111.7	18.7	109.4	18.4	<i>ns</i>
Warmth E1	23.2	3.8	22.9	4.0	<i>ns</i>
Gregariousness E2	16.8	4.3	16.5	4.8	<i>ns</i>
Assertiveness E3	16.9	5.3	15.8	4.7	<i>ns</i>
Activity E4	18.2	4.6	17.6	4.4	<i>ns</i>
Excitement seeking E5	15.9	4.2	16.4	4.9	<i>ns</i>
Positive emotions E6	21.6	4.8	20.2	4.5	<i>ns</i>
Openness O	125.1	20.2	110.6	17.3	4.84***
Fantasy O1	18.9	4.9	16.6	4.9	3.14***
Aesthetics O2	19.8	5.4	17.6	5.3	2.73**
Feelings O3	22.4	4.1	20.3	4.0	3.43***
Actions O4	19.8	3.6	16.4	3.7	6.32***
Ideas O5	20.6	3.6	19.0	5.0	2.92**
Values O6	23.7	6.1	20.7	4.1	3.34***
Agreeableness A	129.9	13.9	124.3	15.8	2.68**
Trust A1	22.0	3.4	21.3	4.2	<i>ns</i>
Straightforwardness A2	21.9	4.5	21.2	4.4	<i>ns</i>
Altruism A3	24.1	3.0	23.6	3.5	<i>ns</i>
Compliance A4	20.0	4.1	18.9	4.0	1.80*
Modesty A5	19.9	4.6	18.9	4.2	<i>ns</i>
Tender-mindedness A6	21.9	3.0	20.5	3.5	3.11**
Conscientiousness C	123.6	18.2	123.1	17.6	<i>ns</i>
Competence C1	22.4	3.1	22.2	3.5	<i>ns</i>
Order C2	18.3	4.6	19.3	4.2	<i>ns</i>
Dutifulness C3	23.7	3.9	23.2	3.9	<i>ns</i>
Achievement striving C4	19.6	3.5	19.5	4.0	<i>ns</i>
Self-discipline C5	21.4	4.5	21.8	4.3	<i>ns</i>
Deliberation C6	17.9	4.4	17.5	4.1	<i>ns</i>

Note: *** $p < .001$ ** $p < .01$ * $p < .10$

little distortion' (R.R. McCrae, personal communication, June 12, 2006).

The results suggest that the use of personality testing in the selection of expatriates for assignments abroad is an avenue worth pursuing in further research. Whether our findings reflect self-selection, or traits that make a difference in field performance, remains to be seen.

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