

Using the Personal Orientation Inventory to measure change in student self-actualisation.

Gerard J. Fogarty

University of Southern Queensland

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Abstract

Access and Equity students meet the requirements of being disadvantaged in some geographical, physical, or financial sense and thus gain entrance to higher education in the absence of normal admission criteria. Aside from educational profile, little is known about other characteristics of this group which may affect performance in a higher educational setting. In this study, Shostrom's (1980) Personal Orientation Inventory (POI), developed to measure factors related to self-actualisation, was administered to a group of 74 Access and Equity students undertaking a university preparatory studies programme. Results showed that at the commencement of the course, the group profile was typical of what Shostrom would describe as a non-self-actualised group. At the end of the programme, however, the profile had shifted towards normal with significant improvements in the areas of Self-acceptance and Spontaneity. The study leaves little doubt that this category of students differs in important ways from the normal student body. It also demonstrates that initial feelings of doubt and inadequacy can be modified quite quickly with the right sort of preparation.

Changes in Personal Value Orientations as a Consequence of Participation in a University Preparatory Studies Programme

In recent times, there has been a concerted effort to enable individuals from disadvantaged backgrounds to participate in tertiary education. These efforts often involve the development of special entry programmes which are designed to help the students catch up with mainstream students before the commencement of formal study. During the summer of 1989-90, as a result of funding from the Australian Federal Government through the Higher Education Equity Programme, the University of Southern Queensland introduced such an "Access-and-Equity" entry scheme with a supporting preparatory studies programme.

The entry scheme was made available to a wide range of disadvantaged persons including those who lived in geographically isolated and rural areas, those who were financially disadvantaged, physically disabled, or of Aboriginal and Torres Strait Islander descent. The preparatory studies programme contained modules on study skills, communication skills, and introductory modules for particular areas of study, such as Mathematics and Physics. These were packaged as largely self-study modules suited to off-campus offering. The background philosophy of the programme stressed the importance of coping in an academic setting. Two of the units in the programme, Study Skills and Communication Skills, focused on the development of skills and attitudes that are very much related to personal growth. The course itself took ten weeks to complete, largely in off-campus mode but with provision for substantial face-to-face contact. Approximately every three weeks throughout the course two university staff members met with the students to assess appropriateness of the curriculum, to make adjustments where necessary, and to counsel students either individually or in small groups to enhance their self-confidence.

Because of the relative novelty of this type of tertiary entrance scheme, the University decided to conduct an evaluation of its success during its first year of running. The evaluation covered such topics as student perceptions of tertiary study before, during, and after the preparatory studies programme; their perceptions of the programme itself; and, at a more objective level, success rates for all participants. The data collected in these aspects of the evaluation are reported elsewhere (Crowther, Gibson, & Fogarty; 1990).

Certain features of the programme, notably its targeting of disadvantaged groups and the opportunity it represented for members of these groups, suggested that it could well enhance aspects of self concept, self esteem, and other constructs that come under the general heading of "personal orientation". In the face of evidence that Access and Equity students return to study with a low self-confidence and a lot of uncertainty about their ability to succeed (Skuja, 1990), the monitoring of changes in self-perception was considered an essential part of the overall evaluation of the project. This study reports on some of the attitudinal changes experienced by the students between the time they were accepted into the special entry scheme and the time they completed the preparatory studies programme some ten weeks later.

The study was of an exploratory nature and focussed on aspects of personal well-being which could be monitored by the use of a standard psychometric instrument capable of being administered through the mail. The assessment instrument chosen for this section of the evaluation was Shostrom's (1963) Personal Orientation Inventory (POI). This inventory consists of 120 pairs of two choice items making up two major scales and ten sub-scales. All scales are designed to tap some aspect of the system of personal values held by an individual. The instrument has been developed around value concepts having broad personal and social relevance and is suitable for use in colleges, business and industrial settings, clinics and counselling agencies (Shostrom, 1980). Apart from its obvious breadth, the POI has a number of general features which make it an ideal candidate for the present evaluation:

1. It was developed specifically to measure the personal values held by self-actualising people.
2. It is a self-report inventory that taps positive aspects of personal functioning rather than negative or pathological aspects and is therefore non-threatening to examinees. It is thus suitable for use in situations where there is little opportunity to develop a counselling relationship between the test taker and the psychologist.
3. The POI usually takes about 30 minutes to complete but has no time limits and does not require supervision. This meant that it could be posted to the participants and completed at their convenience. Shostrom (1980) states that it can be administered in this fashion with the sort of population dealt with in this study.
4. The POI has been used many times in academic settings to measure the effectiveness of therapeutic or didactic interventions (eg. Mullins & Perkins, 1973; Deming, 1980; Thompson, 1986).
5. U.S. norms are available for college students, normal and self-actualised populations. Although Australian figures would have been useful, Shostrom (1980) does claim that the POI is keyed to self-actualisation theory rather than cultural norms. If this is the case, one would not expect to see differences between U.S. and Australian populations.
6. Test-retest reliability coefficients are impressively high for the scales. A coefficient of .96 for a nine week time lapse was reported by Foulds (1969). This is similar to the interval used in the present study.
7. The POI is resistant to the effects of response bias. Socially desirable responses are not obvious and research indicates that subjects find it difficult to respond in such a way that they believe themselves to be "making a good impression" (Knapp, 1976).

Not all scales included in the POI were thought to be relevant for the purpose of this study but the items for the various scales are intermingled and since all scales were administered, for the sake of completeness they are all described below:

- A. Time Competence (Tc). The first of the major scales, it measures the degree to which one is oriented towards what is happening now, rather than what happened yesterday or what might happen tomorrow. The time incompetent person lives primarily in the past, with guilts, regrets, and resentments and/or in the future, with idealised goals, plans, and

expectations. Shostrom considers it healthier to have a present orientation.

- B. Inner Directed (I). The second of the two major scales, it measures the extent to which one draws upon inner resources. Inner-directed individuals are guided primarily by internalised principles and motivations while outer directed persons are to a great extent influenced by their peer group or other external sources.
- a. Self Actualising Values (SAV). Measures the extent to which people hold the values of what Maslow (1954, 1962) called the self-actualising person. The self-actualising person has a high self-concept and a positive view of life.
 - b. Existentiality (Ex). Measures a person's commitment and flexibility in applying such values or principles to life. In a way, it is an estimate of a person's sense of judgement. Low scores indicate that a person is rigid and unable to compromise.
 - c. Feeling Reactivity (Fr). A measure of sensitivity to one's feelings and needs. Low scorers are out of touch with their own emotional reactions to situations and events.
 - d. Spontaneity (S). Measure of ability to express feelings in spontaneous action. Whereas Feeling Reactivity deals with the individual's awareness of how he/she feels, this scale measures the ability to express these feelings in action.
 - e. Self Regard (Sr). A high score measures the ability to like one's self because of perceived strengths as a person. A low score indicates feelings of low self-worth.
 - f. Self Acceptance (Sa). This is a measure of acceptance of one's self in spite of weaknesses and deficiencies.
 - g. Nature of Man (Nc). A high score means that the person sees human nature in a positive light. A low score the converse: people are seen as essentially negative.
 - h. Synergy (Sy). A high score indicates that the individual sees the apparent dichotomies in life as being related, eg. work and play. The person is able to reconcile and accept the many opposing tendencies.
 - i. Acceptance of Aggression (A). Measures the ability to accept anger and aggression within one's self as natural.
 - j. Capacity (C). Measures the ability to develop meaningful, contractual relationships with other human beings.

It was felt that the combination of an offer of a place in a tertiary course, the close contact with university staff over the 10 week period of the programme, and the emphasis placed upon academic coping skills would affect areas of self-perception tapped by the POI. Scores on some scales were not expected to change because they reflect rather narrow personality dimensions which were not addressed in the programme. These were: Nature of Man (Nc), Synergy (Sy), Acceptance of Aggression (A), and Capacity (C). The factors measured by the remaining scales were all reflected to some extent in either the content or process of the Access and Equity programme. Consequently, an upward shift was expected in all other scale scores.

Method

Subjects

The initial sample consisted of 106 students who were accepted into the Access and Equity programme at UCSQ at the end of 1989. Of these, 74 responded to the initial survey and these formed the bases for some of the initial comparisons made in the study. This group comprised 20 males and 54 females, mostly aged between 26-45 years. By definition, all students had hitherto been prevented from attending a tertiary institution because of economic (N=50), geographic (N=16), or personal circumstances (N=8) which enabled them to meet the "disadvantaged" criteria.

Test Materials

Shostrom's (1980) Personal Orientation Inventory was administered along with other questionnaires which are not reported here.

Procedure

All questionnaires for the pretest were mailed out to students, along with the material for other parts of the evaluation. Additional instructions attached to the front of the standard POI form advised students how to complete and return the questionnaire. Ten days were allowed for return of forms. A total of 74 pre-test questionnaires were returned.

After the administration of the pretest, the subjects took part in the preparatory studies programme which ran for 10 weeks. Posttest forms were distributed by hand at the time of final examination ten weeks later with a seven day interval allowed for mailing of completed returns. Only 37 students returned usable forms. At no stage were they given any feedback about their scores on the first administration of the POI.

Results

Baseline comparisons

As mentioned earlier, 74 students returned the pretest form. Preliminary analyses were conducted on these data to gain some idea of the profile of students likely to gain admittance via the Access and Equity scheme. Shostrom (1980, p. 24) gives norms for a number of different reference groups, including self-actualizing adults, normal adults, and non-self-actualizing adults. Since the average age of the participants in the present study is between 25 and 35 years, it was felt that comparisons with all three of these norm groups would be of interest at the outset of the study. Comparative data are presented in Table 1.

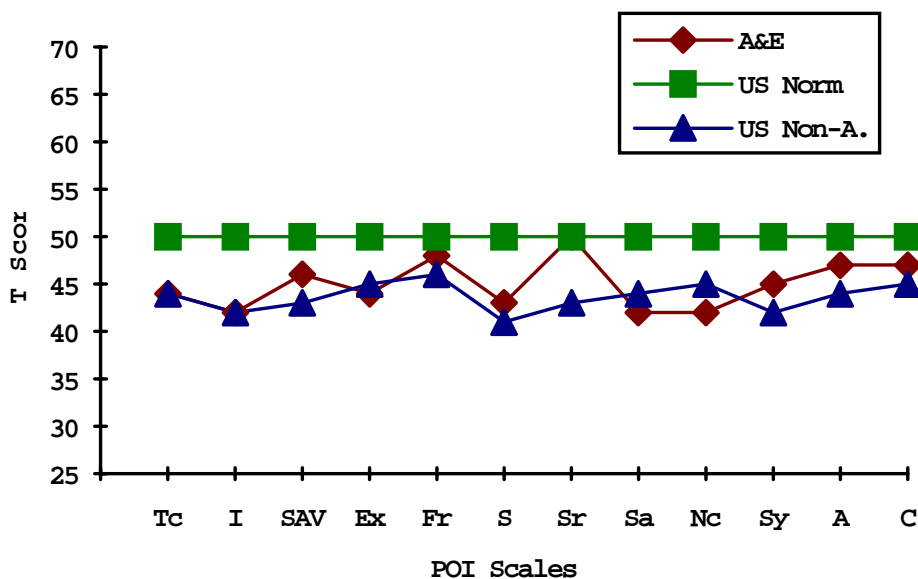
Table 1

Comparison of Access and Equity Students with U.S. Norms

POI Scales	USQ		U.S. Norms					
	Access and Equity (N=74)		Self-Actualising (N=29)		Normal (N=158)		Non-Self-Actualising (N=34)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Tc	16.1	3.1	18.9	2.5	17.7	2.8	15.8	3.6
I	75.0	14.8	92.9	11.5	87.2	13.6	75.8	16.2
SAV	19.1	3.5	20.7	3.6	20.2	3.0	18.0	3.7
Ex	18.6	4.6	24.8	3.5	21.8	5.1	18.9	5.4
Fr	15.1	2.8	16.3	2.8	15.7	3.3	14.3	3.8
S	11.5	2.5	12.7	2.9	11.6	3.0	9.8	3.4
Sr	12.0	2.5	12.9	1.9	12.0	2.7	10.2	3.3
Sa	13.9	3.6	18.9	3.5	17.1	4.0	14.2	4.0
Nc	10.8	2.3	12.3	2.2	12.4	1.9	11.3	2.0
Sy	6.6	1.6	7.6	1.2	7.3	1.2	6.2	1.9
A	15.5	3.7	17.6	3.1	16.6	3.7	14.7	3.5
C	17.5	4.4	20.2	3.4	18.8	4.6	16.5	4.3

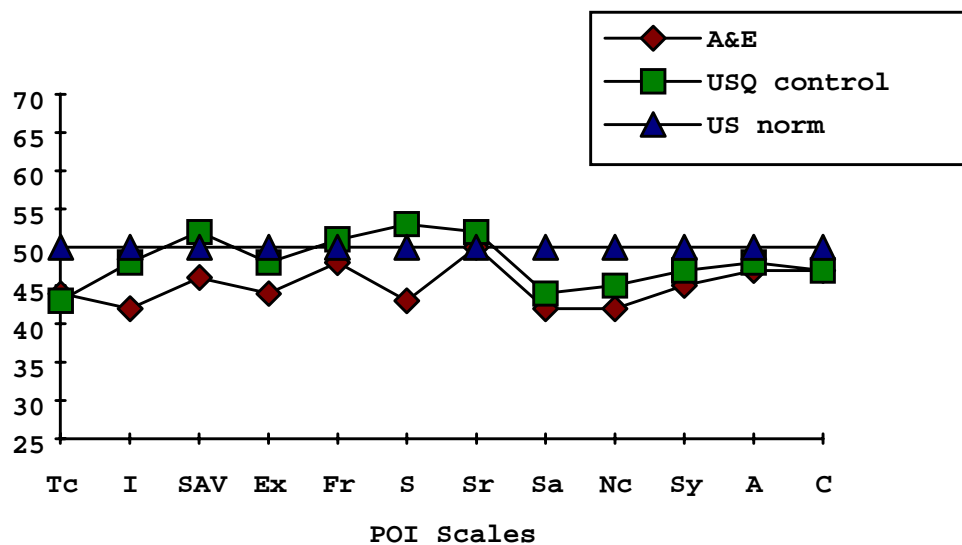
It can be seen from this table that the initial group of 74 Access and Equity (A&E) students are very similar in profile to what Shostrom calls non-actualising adults. Figure 1 shows this more clearly with its profiles of non-actualising adults, normal adults, and the Access and Equity students. Note that in this graph raw scores have been converted to T scores using the US adult norms as a basis for comparison.

Figure 1. Comparison of Access & Equity (A&E) group with U.S. normal and U.S. non-actualising groups



It could be argued at this point that the profile for a normal US Adult is not likely to be identical to that of a first-year university student in Australia and that the sort of comparison made in Figure 1 is misleading. In order to check this possibility, data was collected on 110 first year students who gained entrance by normal selection processes. Their profile, along with profiles for the 74 Access and Equity students and the normal U.S. group, is shown in Figure 2.

Figure 2. Comparison of Access and Equity (A&E) with USQ control group and U.S. normal group



It is clear from these graphs that the Access and Equity group is most similar to the non-actualising group and that the 110 students who entered via traditional procedures are somewhat closer to the normal U.S. population. This is not surprising, given that the Access and Equity students had to meet the requirement of being in some sense "disadvantaged" before selection in the course. The lower scores are likely to reflect a real sense of dissatisfaction with their situation.

Pretest-Posttest Comparisons

Although these data were important for the purpose of establishing baseline differences in self-actualisation for the Access and Equity group, the major aim of the present study was to look for signs of positive change as a consequence of the preparatory studies programme. Accordingly, the second stage of data analysis involved the comparison of pretest and posttest scores for the Access and Equity students.

Of the pre-test sample of 74 students, only 36 returned usable posttest forms. The analyses which follow are based on this group of 36. Summary statistics and results of paired t-tests are reported in Table 2.

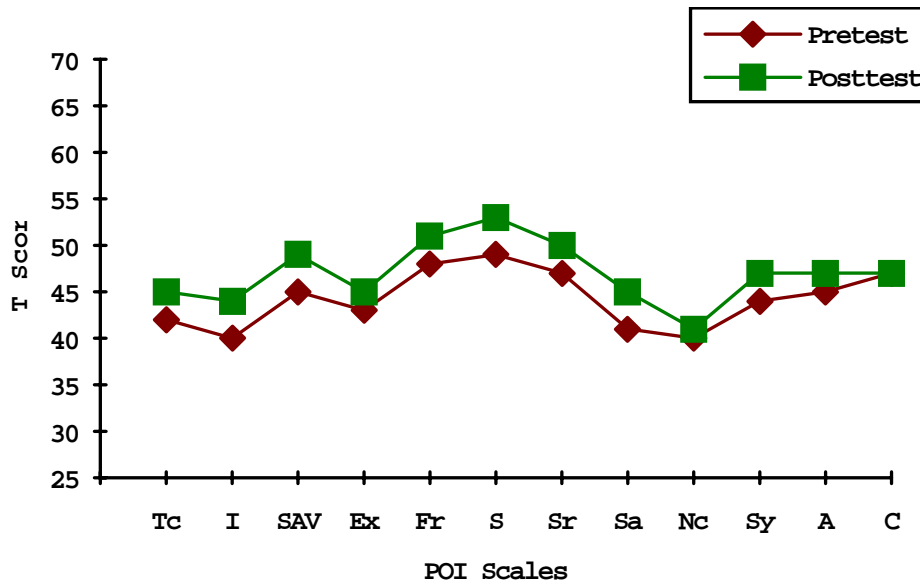
Table 2
Comparisons of Pretest and Posttest Scores

POI Scales	Pretest		Posttest		T-TEST	prob.
	Mean	SD	Mean	SD		
Tc	15.50	3.37	16.17	3.57	-1.22	.230
I	73.44	18.32	77.97	12.62	-1.27	.214
SAV	18.61	3.75	19.75	2.91	-1.60	.120
Ex	18.39	4.89	19.06	4.71	-1.10	.280
Fr	15.06	3.19	16.06	2.23	-1.78	.080
S	11.25	2.91	12.44	2.24	-2.35	.025*
Sr	11.25	2.78	12.06	2.52	-1.64	.111
Sa	13.31	3.89	14.97	4.04	-3.33	.002*
Nc	10.53	2.42	10.78	2.54	-0.45	.654
Sy	6.67	1.39	6.89	1.69	-0.94	.353
A	15.00	3.85	15.56	3.90	-0.70	.487
C	17.50	4.37	17.64	3.87	-0.19	.852

The analyses summarised in Table 2 suggest that there has been a significant shift in scores on two of the scales, Spontaneity (S) and Self Acceptance (Sa). The other interesting feature of the data is that although only two of the t-tests led to the rejection of the null hypothesis, sample mean scores for all scales showed an increase after the preparatory studies programme. The chances of all twelve scale scores changing in the same direction on a purely random basis are 0.002.

The overall improvement is more easily seen if pretest and posttest measures are converted to T scores and plotted, as depicted in Figure 3.

Figure 3. Pretest-Posttest comparison



It can be seen from Figure 3 that the improvement, although reasonably consistent across most scales, still leaves the Access and Equity group below the norm on most scales.

Discussion

The preparatory studies programme appears to have been responsible for a positive shift in the personal values of the participants. Shostrom would interpret this as a move towards self-actualisation. Although the changes, with two exceptions, are not significant, they are consistently in the positive direction. It is important to realise that the scale scores reflect highly stable underlying personality dimensions and therefore any upward shift has to be regarded as noteworthy.

The scale that changed most was Self Acceptance (Sa). If nothing else, the participants have come out of the course with a greater knowledge and acceptance of their strengths and weaknesses. The fact that this scale changed most is not surprising: the preparatory studies programme is an introduction to tertiary study and as such seeks to give accurate and helpful feedback to participants. The upward shift is an indication that students have not only been exposed to this feedback but have accepted and internalised it.

The other scale on which there was a significant shift in scores was Spontaneity (S). This scale is not well-described in the manual but in this situation a higher score would most likely reflect the increased willingness of participants to express their own opinions. This is probably a reflection of the high degree of personal restraint they may have felt upon entering the academic environment for the first time, and the lessening of this over the ten week period of the programme.

Accepting the premises upon which the POI is founded, the implications are that the participants have a more positive orientation to life in general and are more likely to be able to take advantage of the opportunities

that it offers. Whether these effects will persist for an appreciable length of time is not known. Similar studies involving didactic intervention suggest that the effects are long term. Goddard (1981), working with a tertiary student population, actually observed further increases in scale scores over an extended period.

To what extent were the changes due to the preparatory studies programme itself, and to what extent were they due to other factors, such as the realisation that these students had been given an opportunity not previously available? It's difficult to say. Certainly the students were aware of the opportunity at the outset of the study, yet their scores were still depressed relative to U.S. norms and the group of 110 "normal entrants" used in the present study. Other data collected during the overall evaluation process indicates that students appreciated the content of the preparatory studies programme and felt that the course had contributed substantially to their personal development.

It is suggested that with the increasing popularity of the general notion of "access", educators should be aware of the different attitudes likely to be held by students gaining admission via alternative entry schemes. It is further suggested that any effort on the educators' part to overcome these negative self-perceptions is likely to be rewarded, at least in part.

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