

CONSTRUCTION OF A PERSONALITY TRAIT ADJECTIVE SCALE TO MEASURE BIG FIVE PERSONALITY TRAITS

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Most of the psychometricians who tried to measure personality, tried to evolve a different list of traits. The urge to provide a more accurate measurement only contributed to confusions. The 'Revised NEO Personality Inventory' developed by Costa & McCrae (1985) has been a recent popular addition to the instruments. The authors claimed that it is a concise measure of the five major personality dimensions, or domains of personality. It has five domain scales and 30 facet scales. This tool has been developed and refined by a combination of rational and factor analytic methods. The five domains are neuroticism, extraversion, openness, agreeableness and conscientiousness. Out of these five neuroticism and extraversion have been widely reported as personality factors but it has been difficult for the author to accept the purity of 'openness', agreeableness and conscientiousness'. The six facets for the 'Neuroticism' domain are anxiety, angry hostility, depression, self-consciousness, impulsiveness and vulnerability. The six facets for extraversion are warmth, gregariousness, assertiveness, activity, excitement seeking and positive emotions. The six facets for the 'Openness' domain are fantasy, aesthetics, feelings, actions, ideas and values. The six 'agreeableness' facets are trust, straightforwardness, altruism, compliance, modesty and tender-mindedness. The 'Conscientiousness' facets are competence, order, dutifulness, achievement striving, self-discipline and deliberation. In view of author's experiences, it has been difficult to accept the face validity and definitions for the five domains of personality. Facets for openness appear to be vague. Except modesty none of the facets for 'agreeableness' appears to measure agreeableness. Except order and dutifulness' the acceptance of all other facets related to 'conscientiousness' is questionable. The adjective list for the five domains also suffers from lot of overlapping. So, the author decided to redefine the personality domains after modifying the definitions given by Costa & McCrae.

Definitions of personality traits:

Definitions of personality traits are as follows-

Neuroticism: It points to an individual's tendency to experience negative feelings.

Extraversion: It indicates one's willingness to be with people and be assertive and energetic.

Openness: It points to willingness to consider different viewpoints and inquisitiveness about experiences.

Agreeableness: It indicates the tendency to be negotiating, compromising,

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adaptable, helpful and cooperative.

Conscientiousness: It indicates use of moral principles by an individual.

Construction of items and item analysis:

The author selected sixty adjectives from the "Personality Differential" prepared by the author in 1997. The items in the form of adjectives were selected on the basis of rational approach. Every adjective was analyzed with reference to the definitions of the five personality traits namely- neuroticism, extraversion, openness, agreeableness and conscientiousness. Twelve adjectives belonging to each personality trait were selected. The respondents were asked to indicate the degree to which they possess each trait. The five alternative responses were – 'very much, much, average, less, and very less'. After being satisfied with the rationale underlying classification of all adjectives belonging to each personality trait, the try-out form was prepared.

For performing the item analysis of the FPTAS (i.e. Five Personality Trait Adjective Scale), the tool was administered on a sample of 70 students studying in 9-11 and postgraduate classes. A score of 1, 2, 3, 4 and 5 were assigned for the five responses namely- 'very much, much, average, less, and very less' respectively. Scores for adjectives belonging to each personality trait were added together to get total score for each personality trait. Correlations between score on each adjective and all the five personality traits were computed. The results have been shown in table 1. It was hypothesized that adjectives related to a personality trait will be positively related to the relevant personality trait. Those adjectives which had significant and higher correlations for the relevant personality trait were selected. Significance of correlations was tested at .05 level using two-tailed probability. Nine adjectives could be selected finally for each personality trait. So, the final form of the FPTA Scale consisted of 45 adjectives.

Table-1- Correlations between adjectives and personality traits

ADJECTIVE		PERSONALITY TRAIT CODE				
		A	O	N	C	E
ADAPTABLE	A	.492**	.223	.035	.212	.176
EXPERIMENTING	O	.373**	.554**	-.051	.408**	.337**
CASUAL	N	.012	-.125	.356**	-.185	-.118
RESPONSIBLE	C	.069	.067	-.409**	.381**	.134
SOCIAL	E	.455**	.212	-.124	.156	.306*
DEMOCRATIC	A	.700**	.326**	-.046	.279*	.296*
OPENMINDED	O	.201	.372**	-.253*	.251*	.179
DISSATISFIED	N	-.315**	-.419**	.401**	-.247*	-.068
IMPARTIAL	C	-.104	.073	.010	.343**	-.142
RELAXED	E	.124	.154	-.145	.050	.535**
LIBERAL	A	.471**	.332**	-.105	.215	.161
OBJECTIVE	O	.110	.326**	-.045	.184	.114
PUZZLED	N	.034	-.127	.584**	-.236*	-.109
UNSELFISH	C	.123	-.051	.152	.163	.056

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ADVENTUROUS	E	.214	.196	-.150	.265*	.352**
SYMPATHETIC	A	.566**	.188	-.112	.257*	.286*
CURIOUS	O	.364**	.571**	-.162	.380**	.507**
SERIOUS	N	.283*	.352**	.018	.323**	.262*
RELIABLE	C	.346**	.357**	-.043	.326**	.138
AUTHORITARIAN	E	.091	.215	-.030	.127	.499**
COMPROMISING	A	.486**	.255*	.055	.301*	.086
CREATIVE	O	.238*	.501**	-.236*	.373**	.156
WORRIED	N	.085	-.010	.496**	-.152	-.093
STRAIGHTFORWARD	C	.340**	.436**	-.239*	.482**	.493**
DOMINANT	E	.058	.123	.075	.184	.453**
ADJUSTIVE	A	.680**	.432**	-.120	.305*	.151
INDEPENDENT	O	-.022	.291*	-.189	.091	.166
PESSIMIST	N	-.136	-.180	.613**	-.325**	-.150
RULE-BOUND	C	.044	.397**	-.086	.455**	.282*
FRIENDLY	E	.273*	.433**	-.286*	.490**	.369**
CHANGE-ORIENTED	A	.365**	.171	.004	.050	.253*
CONSIDERATE	O	.263*	.404**	-.051	.254*	.205
IMPULSIVE	N	.210	.048	.208	.140	.079
CAUTIOUS	C	.148	.408**	-.234	.457**	.245*
AGGRESSIVE	E	.086	-.041	.256*	-.157	.341**
GROUP DEPENDANT	A	.507**	.130	.233	.039	.026
RECEPTIVE	O	.306*	.335**	-.070	.418**	.093
IRRITABLE	N	-.029	-.184	.652**	-.255*	-.152
DECISIVE	C	.183	.279*	-.185	.533**	-.069
ASSERTIVE	E	.207	.249*	-.101	.253*	.529**
TOLERANT	A	.374**	.309**	-.050	.228	.240*
PRACTICAL	O	.276*	.442**	-.046	.389**	.378**
ANNOYED	N	-.028	-.093	.699**	-.245*	-.092
TRUTHFUL	C	.061	.104	-.126	.447**	.126
STUBBORN	E	.026	-.002	.357**	-.206	.374**
OTHER-DIRECTED®	A	.278*	-.054	.174	.021	.246*
REVIEWER	O	.282*	.357**	-.020	.214	.024
SAD	N	.004	-.193	.568**	-.151	-.058
JUST	C	.297*	.325**	-.186	.582**	.026
CONVERSABLE	E	.158	.206	-.126	.082	.312**
SELF CONTROLLED	A	.518**	.375**	-.208	.340**	.198
STUBBORN	E	.026	-.002	.357**	-.206	.374**
OTHER-DIRECTED®	A	.278*	-.054	.174	.021	.246*
REVIEWER	O	.282*	.357**	-.020	.214	.024
SAD	N	.004	-.193	.568**	-.151	-.058
JUST	C	.297*	.325**	-.186	.582**	.026
CONVERSABLE	E	.158	.206	-.126	.082	.312**
SELF CONTROLLED	A	.518**	.375**	-.208	.340**	.198
RESPECTS EVIDENCE	O	.019	.412**	.045	.069	.051
LONELY	N	-.008	-.156	.526**	-.158	-.049
REGULAR	C	.232	.379**	-.138	.556**	.308*
SELF DIRECTED	E	.257*	.445**	-.011	.168	.401**
FLEXIBLE	A	.415**	.221	-.019	.130	.042
TRANSFORMER	O	.111	.465**	-.104	.057	.107
WORKLESS	N	-.133	-.129	.252*	-.025	.087
HUMANIST	C	.391**	.394**	-.119	.401**	.072
POPULAR	E	-.104	.235	-.281*	.172	.355**

**/* significant at .01/.05 level (2-tailed).

®: Not included in the final form

Reliability and validity of the scale

Alpha coefficients were calculated to find out the reliability of the FPTA Scale. The values of these coefficients are .761, .520, .586, .719 and .604 for five personality traits namely- neuroticism, extraversion, openness, agreeableness and conscientiousness.

For finding out the validity of the scale, efforts were made to find out correlations among various personality traits as measured by the Five Personality Trait Inventory and the scale both of these tools were constructed by the author. The criterion related validity coefficients for the five personality traits namely- neuroticism, extraversion, openness, agreeableness and conscientiousness are .490, .317, .354, .404 and .184. Correlations among various personality traits as measured by both tools have been given in the table 2. They reveal nearly similar relationships among the personality traits. This indicates the construct validity of both the tools.

Table 2- Correlations among various personality traits as measured by PFTI and PFTAS

TOOL	Code	AA	OA	NA	CA	EA	C	O	N	A
FPTAS	AA									
	OA	.492**								
	NA	.007	-.158							
	CA	.280*	.511**	-.383**						
	EA	.141	.319**	-.053	.098					
FPTI	C	.330**	.174	-.034	.184	.301*				
	O	.514**	.354**	-.090	.224	.236	.647**			
	N	-.044	-.181	.490**	-.137	-.137	-.185	-.235		
	A	.404**	.328**	-.070	.219	.179	.265*	.458**	.149	
	E	.266*	.281*	-.218	.177	.317**	.113	.225	.025	.513**

**/* / significant at the 0.01/.05 level

Norms

Norms have been prepared for the entire group of students from 9th to postgraduate classes. Means, standard deviations, skewness and kurtosis for the five personality traits have been shown in table 3 and percentile norms have been given in table 4.

Table 3- Descriptive Statistics for the FPTA Scale

Personality trait	Mean	Std. Deviation	Skewness	Kurtosis
A: agreeableness	32.4000	5.6451	-.742	.529
O: openness	34.6857	4.4381	-.411	.275
N: neuroticism	21.6000	5.2514	.596	.852
C: conscientiousness	34.5286	4.9188	-.514	.768
E: extraversion	30.4706	4.8391	.040	-.241

Table 4- Percentile Norms for the Five Personality Trait – Adjective Scale

Code	Personality trait	Percentiles						
		5	10	25	50	75	90	95
A	Agreeableness	22.45	23.90	29.00	34.00	37.00	38.00	39.55
O	Openness	26.90	30.00	32.25	35.00	37.75	41.00	41.55
N	Neuroticism	14.00	15.00	17.25	22.00	25.00	29.00	31.10
C	Conscientiousness	25.00	27.80	32.00	35.00	38.00	40.00	43.10
E	Extraversion	23.00	24.90	27.00	30.50	34.00	37.00	39.00

References

Costa, P.T., Jr. & Me Crae, R.R. (1992). *Neo PI-R: Professional Manual*. Florida venue: Psychological Assessment Resources.