

Background

The NEO- Five Factor Inventory (NEO-FFI) is a short form of the NEO-Personality Inventory-revised (NEO-PI-R) by Costa & McCrae (1992). The NEO-PI-R contains 240 items and measures the five most important domains of personality with adults (the “Big Five” personality domains). The NEO-FFI contains 60 items. The instrument uses a five-point Likert response format.

Scales of the NEO-FFI

The questionnaire measures the following five domains:

- Neuroticism (anxiety, angry hostility, depression, self-consciousness, impulsiveness, vulnerability),
- Extraversion (warmth, gregariousness, assertiveness, activity, excitement seeking, positive emotions),
- Openness (fantasy, aesthetics, feelings, actions, ideas, values),
- Agreeableness (trust, straightforwardness, altruism, compliance, modesty, tender-mindedness) and
- Conscientiousness (competence, order, dutifulness, achievement striving, self-discipline, deliberation).

Each domain is measured using 12 items. N: (1,6,11,16,21,26,31,36,41,46,51,56), E: (2,7,12,17,21,27,31,37,41,47,51,57), O: (3,8,13,18,23,28,33,38,43,48,53,58), A: (4,9,14,19,24,29,34,39,44,49,54,59), C: (5,10,15,20,25,30,35,40,45,50,55,60). Saucier (1998) suggests subdomains for each of the five domains, resulting in 13 or 14 domains: Negative Affect (1,11,16,31,46) and Self-reproach (6,21,26,36,41,51,56) as sub-domains of N. Positive Affect (7,12,37,42), Sociability (2,17,27,57) and Activity (22,32,47,52) as sub-domains of E. Aesthetic interests (13,23,43), Intellectual interests (48,53,58) and Unconventionality (3,8,18,38) as sub-domains of O. Non-antagonistic orientation (9,14,19,24,29,44,54,59) and Pro-social orientation (4,34,39,49) as sub-domains of A. Orderliness (5,10,15,30,55), Goal-Striving (25,35,60) and Dependability (20,30,45,50) as sub-domains of C. Alternative sub-domains of N could be: Anxiety (1,21,31), Depression (16,41,46) and Self-Reproach2 (6,11,26,51,56).

Validity and reliability

Several studies have drawn dissimilar conclusions about the internal reliability of factor scores from the NEO-FFI. Three non-clinical studies (Holden (1994), Tokar (1999) and Murray (2003)) find the factor structure of the NEO-FFI adequate. Egan (2000) identified 14 problematic items when executing exploratory factor analysis and concluded the NEO-FFI requires modification. Parker and Stumpf (1998) found problems with some O and A items and concluded that consideration should be given to replacing these problematic items. Costa (2003) states that, considering the studies of Egan,

Parker, Holden and item analyses of translations of the instrument into German (Borkenau, 1993), Czech, Polish and Slovak (Hřebíčková, 2002), for each case the five intended factors were clearly recovered although some items had less than optimal loadings. In general the same items tended to be weak across different studies; the most problematic items were from the O and A scales. Costa (2004) analyzed a revision of the NEO-FFI (NEO-FFI-R) in which 14 items were replaced with other items from the NEO-PI-R. Improvements over the original model are modest and for most purposes the original model will continue to suffice. In a non-clinical study of the Dutch translation of the questionnaire (Hoekstra et al., 1996) internal consistency is considered adequate except for O and A, stability is good. The Five Factor structure was clearly present. N, E and C were not independent. For construct-validity several positive clues were found. Test-retest reliabilities were significant and had large effect in an Australian non-clinical sample across administrations up to 30 months (Murray, 2003). Saucier (1998) developed a model with 13 subscales of the original 5 and concluded that the model of 13 scales was, to some degree, reliable. Murray (2003) found scores in a non-clinical British sample that showed adequate internal reliability for the 13 item clusters.

The NEO-FFI has been used for older adults in a primary care setting (Lyness et al., 1998; Duberstein et al., 2003; Chapman et al. 2007), and in an elderly Medicare sample (Weiss et al., 2005).

References

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NEO-Five Factor Inventory

Instructions: Using the scale below as a guide, write a number from beside each statement to indicate how much you agree with it.

1	2	3	4	5	6	7
<i>Not True</i>			<i>Somewhat</i>			<i>Very True</i>
_____ 1.						
_____ 2.						
_____ 3.						
_____ 4.						
_____ 5.						
_____ 6.						
_____ 7.						
_____ 8.						
_____ 9.						
_____ 10.						
_____ 11.						
_____ 12.						
_____ 13.						
_____ 14.						
_____ 15.						
_____ 16.						
_____ 17.						

- _____ 18. I believe letting students hear controversial speakers can only confuse and mislead them.
- _____ 19. I would rather cooperate with others than compete with them.
- _____ 20. I try to perform all the tasks assigned to me conscientiously.
- _____ 21. I often feel tense and jittery.
- _____ 22. I like to be where the action is.
- _____ 23. Poetry has little or no effect on me.
- _____ 24. I tend to be cynical and skeptical of other's intentions.
- _____ 25. I have a clear set of goals and work toward them in an orderly fashion.
- _____ 26. Sometimes I feel completely worthless.
- _____ 27. I usually prefer to do things alone.
- _____ 28. I often try new and foreign foods.
- _____ 29. I believe that most people will take advantage of you if you let them.
- _____ 30. I waste a lot of time before settling down to work.
- _____ 31. I rarely feel fearful or anxious.
- _____ 32. I often feel as if I am bursting with energy.
- _____ 33. I seldom notice the moods or feelings that different environments produce.
- _____ 34. Most people I know like me.
- _____ 35. I work hard to accomplish my goals.
- _____ 36. I often get angry at the way people treat me.
- _____ 37. I am a cheerful, high-spirited person.
- _____ 38. I believe we should look to our religious authorities for decisions on moral issues.
- _____ 39. Some people think of me as cold and calculating.
- _____ 40. When I make a commitment, I can always be counted on to follow through.
- _____ 41. Too often, when things go wrong, I get discouraged and feel like giving up.
- _____ 42. I am not a cheerful optimist.
- _____ 43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.
- _____ 44. I'm hard-headed and tough-minded in my attitudes.
- _____ 45. Sometimes I'm not as dependable or reliable as I should be.
- _____ 46. I am seldom sad or depressed.
- _____ 47. My life is fast-paced.
- _____ 48. I have little interest in speculating on the nature of the universe or the human condition.
- _____ 49. I generally try to be thoughtful and considerate.
- _____ 50. I am a productive person who always gets the job done.
- _____ 51. I often feel helpless and want someone else to solve my problems.
- _____ 52. I am a very active person.
- _____ 53. I have a lot of intellectual curiosity.
- _____ 54. If I don't like people, I let them know it.
- _____ 55. I never seem to be able to get organized.
- _____ 56. At times I have been so ashamed I just wanted to hide.

- _____ 57. I would rather go my own way than be a leader of others.
- _____ 58. I often enjoy playing with theories or abstract ideas.
- _____ 59. I necessary, I am willing to manipulate people.
- _____ 60. I strive for excellence in everything I do.

Scoring key:

Note: averages for an typical undergraduate class are in square brackets [] after each.

Openness = (13+28+43+53+58) – (3+8+18+23+33+38+48) [44]

Conscientiousness = 5+10+20+25+35+40+50+60) – (15+30+45+55) [40]

Extroversion = (3+7+17+22+32+37+47+52) – (12+27+42+57) [42]

Agreeableness = (4+19+34+49) – (9+14+24+29+39+44+54+59) [42]

Neuroticism = (6+11+21+26+36+41+51+56) – (1+16+31+46) [36]

Baseline descriptives Big Five personality domains

	N	Minimum	Maximum	Mean	Std. Deviation
Neuroticism: total score	476	12	58	35,32	9,333
Extraversion: total score	475	16	55	35,85	7,225
Openness: total score	472	14	46	29,55	5,332
Agreeableness: total score	473	26	60	44,50	5,378
Conscientiousness: total score	475	20	53	38,01	5,930
Valid N (listwise)	467				