

Underlying personality traits during a job interview: a factor analysis

ABSTRACT: Thirty-two participants were asked to evaluate applicants after hearing a portion of a job interview. The participants assessed the applicant on 25 personality items based on the Big Five Personality Inventory. The results show that four factors represented the personality items and not five factors as expected.

In the United States, many immigrants and non-native English speakers can easily provide an anecdote that suggests that accents draw attention in the workplace. However, very few studies have specifically looked at the impact of accents in the workplace. Because accents are easily noticed upon talking to someone, accents may also trigger stereotypes in the same way that visual cues do for race and sex. During job interviews, employers are asked to evaluate applicants on a number of factors that will influence their hiring decision. Some of those factors are personality traits; if people with accents are evaluated differently on certain personality traits because of stereotypical assumptions these differences may explain whether or not a person will be hired.

Big Five Personality Traits

The Big Five factor representation was originally discovered by Tupes and Christal (1961), on the basis of reanalyzes of various data sets using bipolar variables conducted by Cathell in 1957 (Goldberg, 1990 & 1992). The big five factors have been traditionally been labeled as follows:

1. Extraversion: This trait includes characteristics such as excitability, sociability, talkativeness, assertiveness, and high amounts of emotional expressiveness
2. Agreeableness: This personality dimension includes attributes such as trust, altruism, kindness, affection, and other prosocial behaviors.
3. Conscientiousness: Common features of this dimension include high levels of thoughtfulness, with good impulse control and goal-directed behaviors. Those high in conscientiousness tend to be organized and mindful of details.
4. Neuroticism: Individuals high in this trait tend to experience emotional instability, anxiety, moodiness, irritability, and sadness.
5. Intellect or Openness: This trait features characteristics such as imagination and insight, and those high in this trait also tend to have a broad range of interests.

The present study used items from the Big Five Personality Inventory to evaluate applicants during a job interview. Based on previous research, it is expected that the 25 items will represent the five facets of the Big Five Personality inventory.

H1: The 25 items will represent five underlying factors.

Method

Participants

The sample consisted of 32 participants. The mean age was 25.28 years old, 62.5% were females and 65.6% white.

Procedure

This study was part of a larger study on accents; participants were asked to make a hiring decision as well as to evaluate personal characteristics of the applicant based on hearing a

portion of an interview. Each participant heard a segment of an audio taped interview between a male interviewer and a male applicant. The audiotape lasted between 5 and 7 minutes.

Results

The dimensionality of the 25 items of personality traits was analyzed using the principal component analysis. Based on the hypothesis that the measure had five factors, five factors were extracted. After extraction, it seemed that based on the scree plot and the percent of variance explained by the factors that the five-factor solution was incorrect. Extraction was conducted with a four-factor solution. The four-factor factor solution explained 73.2% of the variance. Even though the four-factor model gave a better solution, it was noticed that the item “envious” was the only item that loaded on the fourth factor therefore it was decided that “envious” would be removed from the analysis. Four factors were rotated using the Direct Oblimin rotation procedure. Eight key loadings associated with the first factor (see Table 1) ranged from .57 to .87. Four key loadings associated with the second factor ranged from .52 to .85. Four key loading associated with the third factor ranged from .47 to .93 and eight key loading associated with the fourth factor ranged between .45 to .78.

Discussion

It was the hypothesis of this study that a factor analysis of a measure based on the Big Five Personality inventory would yield five factors. Goldberg (1990, 1992) measure identified five dimensions: agreeableness, neuroticism, openness to experience, conscientiousness and extraversion. Based on the exploratory factor analysis conducted in the present study, only four factors were identified. Based on the content of the items and their factor loadings one may define these factors as conscientiousness, openness to experience, extraversion, and reflective .

The practical implication of the present study is in viewing items from the Big Five Personality inventory in a different light. The items were picked from different studies and was also done in a job interview situation which could have affected the way people evaluated personality traits since certain traits are seen as more positive in a job situation. Ultimately, future research should address the dimensionality of personality on a broader scale and in different situations.

Table 1. Factor loadings from principal component analysis of Big Five Personality inventory (Oblimin rotation).

Measure	Factor				<u>h</u> ²
	Consciousness	Openness to experience	Extraversion	Reflective	
Extroversion	-.13	-.06	.26	.77*	.69
Outgoing	-.19	-.00	.93*	.11	.85
Bold	.21	-.16	.82*	-.06	.84
Energetic	.19	.10	.42	.53*	.76
Friendly	.29	.16	.05	.72*	.80
Kind	.47	.03	-.21	.62*	.80
Cooperative	.59*	-.02	-.16	.45	.75
Trusting	.66*	-.11	.02	.28	.79
Organized	.87*	-.09	.09	-.03	.84
Hardworking	.79*	-.13	.16	.05	.86
Practical	.79*	.09	.38	-.02	.87
Thorough	.76*	-.31	-.14	.12	.88
Relaxed	.09	.01	-.04	.73*	.58
Stable	-.02	-.31	-.09	.74*	.68
Predictable	.35	.12	.24	.45*	.61
Intelligent	.40	-.52*	-.05	.23	.73
Educated	.57*	-.36	.35	-.11	.76
Creative	.22	.08	.51*	.37	.69
Imaginative	.26	.02	.48*	.32	.63
Literate	.26	-.70*	.03	-.09	.65
Confident	-.06	-.10	.19	.78*	.73
Wealthy	-.19	-.85*	.03	.12	.68
Ambitious	.68*	.00	-.07	.28	.71
Competent	.44	-.64*	.06	-.03	.80
%Variance	41%	17%	20%	36%	

Note. % Variance indicates the percentage of variance in the data accounted for by the rotated factor solution. Asterisks indicate items used to define factor labels.

Table 2. Correlation among factors obtained through principal component analysis with oblique rotation.

Factor	Consciousness	Openness to experience	Extraversion	Reflective
Consciousness	1.00	-.34	.28	.51
Openness to experience	-.34	1.00	-.10	-.18
Extraversion	.28	-.10	1.00	.32
Reflective	.51	-.18	.32	1.00

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