

Chapter 2

The Basic Diagram of Personality Dimensions

Whereas ordinary mental disorders are state- or symptom-orientated, personality dimensions are traits, i.e. disposition-orientated. They refer to tendencies toward a certain behavior in certain situations. Thus, traits have to be distinguished from states of anxiety, depression, mania, and schizophrenia.

A personality disorder is a chronic dysfunction that begins early in life and is disposition-orientated as traits, not episodic states. It was expected, as discussed by Paris (2013), that the DSM-5 would include a dimensional approach to personality disorders, but the solution was only an appendix in DSM-5 referring to the trait dimensions in the five-factor model (Costa and Widiger 2001; Widiger 2011). The five-factor personality model contains the Eysenck personality dimensions of neuroticism versus psychoticism and extraversion versus introversion as its most distinct factors (Bech 2012). According to the DSM-5, the five-factor personality model is measured by the NEO Personality Inventory (NEO-PI), which was developed by Costa and McCrae (1995). From a psychometric point of view, the NEO-PI, in contrast to the Eysenck Personality Questionnaire (EPQ) (Eysenck and Eysenck 1976), is problematic in its use of items worded in opposite directions. According to the NEO-PI, the positively worded items measuring positive mental health should be reversed in the scoring process. As stated by DeVellis (2012), the disadvantages of items worded in opposite directions outweigh any benefits. We recently analyzed the neuroticism scale from the NEO-PI and demonstrated that the positively worded items constitute a valid scale for the measurement of euthymia or positive mental health, whereas the negatively worded items are an insufficient measure of neuroticism (Bech et al. 2016). In the EPQ, the items are all negatively worded.

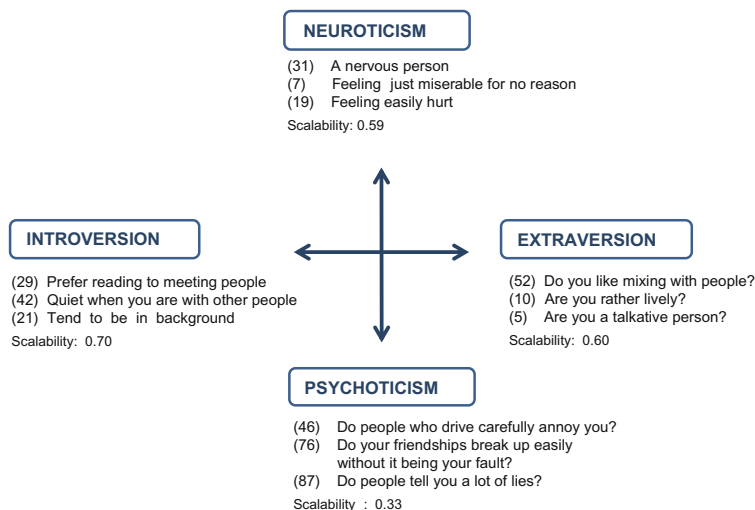


Fig. 2.1 Eysenck dimensions

In Fig. 2.1, the Eysenck dimensions are arranged in a diagram, with neuroticism versus psychoticism on the ordinate and introversion versus extraversion on the abscissa. For each of these four personality dimensions, the three most distinct items in the EPQ are shown. The coefficient of homogeneity, or scalability, is indicated. Concerning the dimension of neuroticism, we previously found that the whole 23-item neuroticism scale from the EPQ had clinical validity when using an experienced psychiatrist's global assessment of neuroticism as an index of validity (Bech et al. 1986). When evaluating the Eysenck Personality Inventory in predicting response to venlafaxine in patients with generalized anxiety disorder, we identified six items as valid by the Rasch analysis (Bech and Rickels 2016). The items selected in Fig. 2.1 are all based on the study by Moeller et al. (2015) with reference to the Mokken analysis. As indicated, we have a six-item neuroticism scale and a six-item extraversion scale with acceptable coefficients of homogeneity, i.e. 0.40 or higher (see Appendix 1). In the EPQ, we only have the three items of introversion shown in Fig. 2.1, but with an acceptable coefficient of scalability. Concerning the psychoticism scale, the coefficients of homogeneity for the full scale and for the six items were low, as was the coefficient for the three most distinct items in Fig. 2.1.

As noted by Eysenck and Fulker (1983), personality traits, to be valid, must be normally distributed, which is the case for the Eysenck dimension of neuroticism versus psychoticism and extraversion versus introversion. When a quite new personality behavior such as type A behavior is suggested as being associated with coronary heart disease (Friedman and Rosenman 1974), the first thing to do, according to Eysenck and Fulker (1983), is to investigate whether type A behavior overlaps with one of the Eysenck dimensions. Eysenck and Fulker (1983) actually

showed that type A behavior (being impatient and aggressive) correlated highly with extraversion.

In summary, we need to consider the Eysenck dimensions (Fig. 2.1) as basic personality traits. Kline (1991) found that intelligence is also a fundamental personality dimension which is normally distributed in the general population, like the Eysenck dimensions, but clearly separate from them. Kline (1991) concluded that the dimension of intelligence—again, like the Eysenck dimensions—was known long before the establishment of scientific psychology, but that modern psychometric analyses have permitted a much more precise measure of these dimensions.

Among the personality traits that describe enduring differences between people the Eysenck dimensions of neuroticism versus psychoticism and extraversion versus introversion are the most distinct. The Eysenck Personality Questionnaire (EPQ) with its 90 items should be considered as an item bank for personality traits (Bech P. How to measure the personality. In: Personality and Disease: scientific proof vs. wishful thinking. Christoffer Johansen (ed). Elsevier Inc. San Diego 2016 in press).

Appendix 1: Personality Dimensions of the Eysenck
Subscales Shown in Fig. 2.1

Neuroticism Scale

When answering the following questions with ‘YES’ or ‘NO’ please try to disregard your state over the past days to indicate how you feel or behave when you are your usual self.

		YES =1	NO =0
(31)	Would you call yourself a nervous person?	<input type="checkbox"/>	<input type="checkbox"/>
(19)	Are your feelings easily hurt?	<input type="checkbox"/>	<input type="checkbox"/>
(3)	Does your mood often go up and down?	<input type="checkbox"/>	<input type="checkbox"/>
(7)	Do you ever feel "just miserable" for no reason?	<input type="checkbox"/>	<input type="checkbox"/>
(27)	Are you often troubled about feelings of guilt?	<input type="checkbox"/>	<input type="checkbox"/>
(54)	Do you suffer from sleeplessness?	<input type="checkbox"/>	<input type="checkbox"/>

A score of 4 or more indicates neuroticism

Total score ☐

Extraversion Scale

When answering the following questions with ‘YES’ or ‘NO’ please try to disregard your state over the past days to indicate how you feel or behave when you are your usual self.

		YES =1	NO =0
(5)	Are you a talkative person?	<input type="checkbox"/>	<input type="checkbox"/>
(10)	Are you rather lively?	<input type="checkbox"/>	<input type="checkbox"/>
(17)	Do you enjoy meeting new people?	<input type="checkbox"/>	<input type="checkbox"/>
(40)	Do you usually take the initiative in making new friends?	<input type="checkbox"/>	<input type="checkbox"/>
(52)	Do you like mixing with people?	<input type="checkbox"/>	<input type="checkbox"/>
(60)	Do you like doing things in which you have to act quickly?	<input type="checkbox"/>	<input type="checkbox"/>

A score of 4 or more indicates extraversion

Total score ☐

Introversion Scale

When answering the following questions with ‘YES’ or ‘NO’ please try to disregard your state over the past days to indicate how you feel or behave when you are your usual self.

		YES =1	NO =0
(21)	Do you tend to keep in the background on social occasions?	<input type="checkbox"/>	<input type="checkbox"/>
(29)	Do you prefer reading to meeting people?	<input type="checkbox"/>	<input type="checkbox"/>
(42)	Are you mostly quiet when you are with other people?	<input type="checkbox"/>	<input type="checkbox"/>

A score of 2 or more indicates introversion

Total score ☐

Psychoticism Scale

When answering the following questions with ‘YES’ or ‘NO’ please try to disregard your state over the past days to indicate how you feel or behave when you are your usual self.

		YES =1	NO =0
(46)	Do people who drive carefully annoy you?	<input type="checkbox"/>	<input type="checkbox"/>
(76)	Do your friendships break up easily without it being your fault?	<input type="checkbox"/>	<input type="checkbox"/>
(87)	Do people tell you a lot of lies?	<input type="checkbox"/>	<input type="checkbox"/>
(30)	Do you have enemies who want to harm you?	<input type="checkbox"/>	<input type="checkbox"/>
(33)	Do you enjoy practical jokes that can sometimes really hurt people?	<input type="checkbox"/>	<input type="checkbox"/>
(50)	Do most things taste the same to you?	<input type="checkbox"/>	<input type="checkbox"/>

A score of 4 or more indicates psychoticism

Total score ☐

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