

www.testarchive.eu

# Open Test Archive

Repository for Open Access Tests

Test description:

## **B5T® Big Five Personality Test**

Satow, L. (2021)

Satow, L. (2021). B5T®. Big-Five-Persönlichkeitstest [Verfahrensdokumentation, Testdokumentation und Fragebogen deutsch, englisch, französisch, italienisch, spanisch]. In Leibniz-Institut für Psychologie (ZPID) (Hrsg.), Open Test Archive. Trier: ZPID.  
<https://doi.org/10.23668/psycharchives.4611>

*In English:*

Satow, L. (2021). B5T®. Big Five Personality Test [Test description, test documentation, and questionnaire in German, English, French, Italian, Spanish]. In Leibniz Institute for Psychology (ZPID) (Ed.), Open Test Archive. Trier: ZPID.  
<https://doi.org/10.23668/psycharchives.4611>

All information and materials about the test can be found in the Open Test Archive at:  
<https://www.testarchive.eu/en/test/9008218>

---

Leibniz Institute for Psychology  
Universitätsring 15  
54296 Trier, Germany

[www.leibniz-psychology.org](http://www.leibniz-psychology.org)

## Contents

<b>Abstract</b>	<b>3</b>
Diagnostic Scope: .....	3
Procedure:.....	3
Background and Construction: .....	3
Empirical Examination and Criteria: .....	4
Reliability	4
Validity	4
Norms	5
All Items .....	6
Application Ages .....	8
Application Time .....	8
Evaluation	8
References	9

## Abstract

### Diagnostic Scope:

The Big Five Personality Test (B5T®) was developed for assessing the five fundamental personality dimensions of Neuroticism (N), Extraversion (E), Conscientiousness (C), Agreeableness (A), and Openness (O) (Allport, 1937; Cattell, 1957, 1965; Eysenck, 1947; Goldberg, 1981, 1993; Norman, 1963; Tupes & Christal, 1961). With a convincing factorial structure and high reliability (Cronbach's alpha), the B5T® is shorter than previous inventories (McCrae & Costa, 2004) and is also suitable for use in a professional context (e.g., career counseling, personnel selection, personnel development, coaching).

Personality assessment according to the big five factor model and measurement of basic needs. The B5T® can be used in the following areas: Career counseling, coaching, clinical diagnostics, personnel selection, personnel development, and research and teaching.

### Procedure:

The B5T is a psychometric questionnaire with 72 Likert items available as a paper pencil test, Excel test, and Online test. It includes the five fundamental personality dimensions of Neuroticism (N), Extraversion (E), Conscientiousness (C), Agreeableness (A), and Openness (O). To also measure the potential and direction of a person, the inventory was supplemented by three scales for capturing the basic needs for achievement (achievement motive), power (power motive) and security (security motive), and a control scale was included.

### Background and Construction:

The B5T® is a theoretically well-founded, Big Five personality inventory that has been developed based on classical test theory. The first version of the B5T® was constructed by Dr. Satow in 2010 and comprised 70 items (14 per personality dimension). The professional context has been a focus of this measure from its conception. All items were formulated as statements to which respondents indicate their agreement on four-point scales with response options ranging from 1 (*does not apply at all*) to 4 (*applies exactly*). Item formulations were carefully chosen to avoid that they are perceived as too private, inappropriate, or unpleasant. The 2010 version was later included in the Test Archive of the Leibniz Institute for Psychology (ZPID).

In 2012, the version was optimized based on a large sample (N = 5,520; Satow, 2012). In this version, the number of personality items could be reduced from 70 to 50 - with even better psychometric quality criteria.

To measure the potential and direction of a person's development, three scales consisting of 6 items were added to assess an individual's basic motives for achievement, power and influence, and security.

The 2020 version retains the 72 items of the 2012 version in their original formulations except for minor linguistic adjustments. New are a plausibility check to detect suspicious response patterns as well as English, French, Italian, and Spanish language versions of the B5T®. All

language versions and further details are available at [www.drsatow.de](http://www.drsatow.de) and in the Open Test Archive.

### Empirical Examination and Criteria:

Between June 2019 and July 2020, the B5T<sup>®</sup> was carried out a total of 23,912. After the gradual exclusion of non-usable cases, 21,048 data records remained in the validation sample. Most cases ( $n = 2,702$ ) were excluded because people indicated that they “only wanted to try the test” or because they had already taken the test several times. Most of the persons in the validation sample were female ( $n = 13,123$ ), between 20 and 30 years old ( $n = 7,547$ ), had a high school diploma ( $n = 9,275$ ), and were employed ( $n = 8,758$ ). To validate the inventory, psychometric scale parameters (selectivity, Cronbach's alpha) and the interscale correlations were determined. The factorial structure of the Big Five scales and the motive scales was then validated using confirmatory factor analysis. Finally, the relationships between the scales and occupational status were analyzed.

**Reliability:** The reliability (Cronbach's alpha) for the Big Five scales ranged between  $\alpha = .76$  and  $.90$  and for the motive scales between  $\alpha = .71$  and  $.81$ . Overall, there were hardly any deviations from the values determined in 2012. The exclusion of items would not have led to a further improvement in reliability for any scale.

Table 1. Psychometric parameters of B5T<sup>®</sup> scales

Scale	Items	M	SD	Median	Min	Max	Cronbach's Alpha	$\sigma_c$
Neuroticism (N)	10	26.01	6.62	26	10	40	.90 (.90)	2.09
Extraversion (E)	10	25.84	5.81	26	10	40	.86 (.87)	2.17
Conscientiousness (C)	10	26.78	4.62	27	10	40	.76 (.77)	2.26
Openness (O)	10	28.66	4.93	29	10	40	.76 (.76)	2.42
Agreeableness (A)	10	30.92	3.94	31	15	40	.78 (.76)	1.85
Need for Achievement (NA)	6	14.71	3.85	15	6	24	.81 (.82)	1.68
Need for Power (NP)	6	12.74	3.65	12	6	24	.77 (.78)	1.75
Need for Security (NS)	6	17.90	3.52	18	6	24	.83 (.84)	1.45

*Note:* In parentheses values from 2012.

**Validity:** Interscale correlations. The interscale correlations provided indications of the validity of the B5T<sup>®</sup> scales. The highest correlations were found between the scales of achievement motive and power motive ( $r = .57$ ) and between Neuroticism and the security motive ( $r = .45$ ): Achievement-motivated people often also have a higher need for power and influence. Anxious, unstable people have a greater need for security and peace.

**Structural validity.** The scale model of the B5T<sup>®</sup> was validated with the strictest conceivable confirmatory factor analysis: Five factors, with each item being assigned to exactly one factor and the measurement errors (residuals) being uncorrelated. This model already achieved a good fit (CFI = .84; RMSEA = .07; SRMR = .07). DWLS was used as the fit function due to the four-level response options. Almost all items achieved factor loadings of  $\alpha_{jk} = .30$  and higher. Four items achieved lower loadings. Overall, just as the exploratory factor analysis in 2012, the confirmatory factor analysis again confirmed the scale model of the B5T<sup>®</sup>.

In addition to the five Big Five scales, which are each measured with 10 items, the B5T<sup>®</sup> also includes three scales for the three basic motives: need for achievement (NA), need for power

(NP), and need for security (NS). Strict confirmatory factor analysis was used to examine the scale model of these basic motives. The model achieved an exceptionally good fit (CFI = .96; RMSEA = .06; SRMR = .05). All items, except for one, exhibited factor loadings of  $\alpha_{jk} = .30$  and higher on their respective scales. Also, the scale model of the basic motives was confirmed by a strict test (3 factors; one-to-one assignment of the items; uncorrelated residuals).

Relationship with occupation and income. As in 2012, with the current sample we found significant relationships with education, occupation, and income for all B5T® scales (figure 1). All differences were verified by analyses of variance and are highly significant, with  $p < 0.01$ . The differences are particularly characteristic (e.g., self-employed achieved the highest values for Openness (O) and the lowest for Neuroticism (N)). Students achieved the second highest values for Openness (O). Civil servants had the highest scores for Conscientiousness (C) and the second lowest scores for Neuroticism (N). Blue-collar workers and unemployed showed high scores for Neuroticism (N) but only low scores for Openness (O) and Extraversion (E).

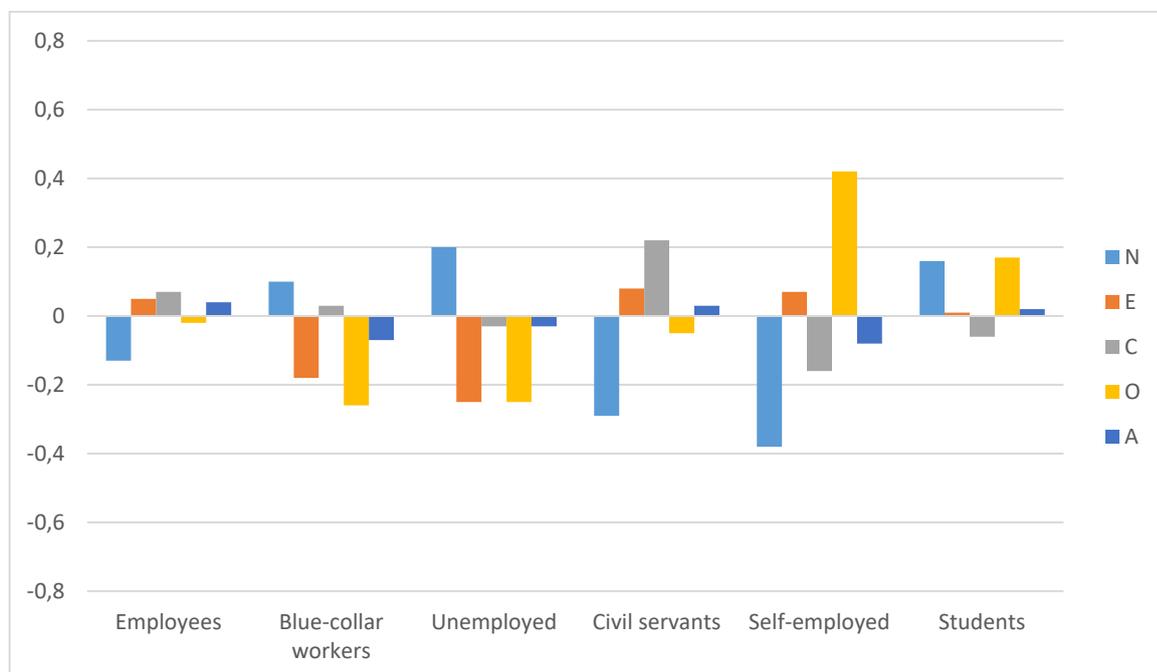


Figure 1. Big Five Factors (z transformed) and Occupation

Typical patterns were also found for the basic motives, speaking for the validity of these scales. For instance, the self-employed have the highest values for the power motive (NP) and the lowest for the security motive (NS). Students scored the highest for achievement motive (NA). Unemployed people showed the highest values for the security motive (NS) and the lowest for the achievement motive (NA).

Norms: Norms were calculated in 2020 based on a large sample and are available by gender and age for all language versions. The most recent norms can be found at [www.drsatow.de](http://www.drsatow.de).

### All Items

For responding to all items, a four-point Likert format is used. The four-point Likert scale has the advantage that it does not allow participants the possibility to choose a “neutral,” middle response option. In addition, the four-point scale is easy to understand and can be answered quickly:

1. Does not apply at all
2. Rather does not apply
3. Rather applies
4. Applies exactly

### Neuroticism scale (N)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I am a fearful person.	2.4	0.83	.69
I often feel insecure.	2.5	0.93	.81
I often feel an inner restlessness.	2.6	0.96	.73
I often worry unnecessarily.	2.9	0.93	.74
I think a lot about my future.	3.1	0.86	.57
I often feel overwhelmed by my feelings.	2.7	0.93	.69
I am often sad for no reason.	2.3	1.01	.75
I am often nervous.	2.5	0.89	.75
I am often torn apart by my feelings.	2.6	0.92	.74
I often feel uncertain about my decisions.	2.6	0.92	.72

### Extraversion scale (E)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I enjoy being with other people.	3.0	0.81	.78
I can quickly spread a good mood.	2.8	0.82	.64
I am an adventurous person.	3.0	0.79	.68
I like to be the center of attention.	2.1	0.88	.55
Usually, I prefer to be by myself. (-)	2.5	0.88	.71
I am a loner. (-)	2.7	0.93	.70
I like to go to parties.	2.4	0.99	.62
I am active in many clubs.	1.6	0.83	.45
I am a talkative and communicative person.	3.0	0.86	.73
I am very sociable.	2.8	0.89	.81

### Conscientiousness scale (C)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I am a very dutiful person.	3.2	0.78	.67
I always complete my tasks very accurately.	3.1	0.71	.70
Even as a child I was very neat.	2.2	0.96	.56
When I do things, I always take a systematic approach.	2.7	0.81	.66
I have my principles and stick to them.	2.9	0.75	.49
Even small fines make me uncomfortable.	2.6	1.06	.38
Even small sloppiness bothers me.	2.5	0.85	.59
I make sure the rules are being followed.	2.8	0.79	.65
Once I make a decision, I stick with it.	2.6	0.76	.44
I never make careless mistakes.	2.2	0.76	.51

## Openness scale (O)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I always want to try new things.	2.9	0.81	.63
I am a curious person.	3.3	0.69	.60
I travel a lot to get to know new cultures.	2.4	1.01	.49
I would prefer everything to stay as it is. (-)	2.7	0.85	.48
I like to discuss things.	2.9	0.90	.49
I always enjoy learning new things.	3.3	0.69	.67
In my free time, I love to spend time with art, music, and literature.	2.6	0.98	.54
I am very interested in philosophical questions.	2.8	1.01	.57
I read a lot about scientific topics, new discoveries, or historical events.	2.6	1.02	.58
I have many ideas and a vast imagination.	3.1	0.80	.58

## Agreeableness scale (A)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I make sure that I am always friendly.	3.3	0.68	.67
I am a polite person.	3.5	0.60	.64
I help others, even if it is not appreciated.	3.2	0.70	.60
I am frequently engaged in disputes with others. (-)	3.2	0.77	.52
I am a selfish person. (-)	3.0	0.84	.58
I always show gratitude if somebody helps me.	3.5	0.59	.57
I would never let my bad mood affect others.	2.5	0.82	.48
I can easily put my needs aside for others.	2.8	0.80	.58
I am very good at putting myself in somebody's position.	3.3	0.75	.55
I get along well with others, even if they do not share my opinion.	2.9	0.71	.62

## Need for Achievement scale (NA)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I have always felt the strong need to be the best according to my own standards.	2.9	0.90	.63
I have always felt a strong need for recognition and admiration.	2.6	0.89	.81
I would give up a lot for more admiration.	2.0	0.78	.69
I am happiest when many people admire me and like what I do.	2.6	0.86	.73
Deep inside, I long to be the best.	2.7	0.99	.77
I often dream of being famous.	2.0	0.96	.65

## Need for Power scale (NP)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I often dream of making important decisions for politicians or other powerful people.	1.8	0.92	.74
If I had the choice, I would like to make decisions of great importance in my life.	2.5	0.95	.73
Deep inside, I long for power and influence.	2.2	0.93	.75
To have more influence, I would give up a lot of things.	2.0	0.74	.76
I am happiest when I can take responsibility and make important decisions.	2.6	0.86	.64
I understand people who say that there are things, that are more important than power and politics. (-)	1.7	0.75	.48

### Need for Security scale (NS)

Items	<i>M</i>	<i>SD</i>	<i>r<sub>it</sub></i>
I have always felt a strong need for safety and quietness.	3.0	0.80	.74
If I had the choice, I would choose to live in security and peace.	3.2	0.76	.75
I would give up a lot for a safe life without any bad surprises.	2.5	0.81	.71
Deep inside, I long for safety and peacefulness.	3.2	0.76	.79
Often, I dream of a peaceful life without any unpleasant surprises.	2.8	0.94	.71
I am happiest when I feel safe.	3.2	0.74	.68

### Application Ages

16 years or older.

### Application Time

15 to 20 minutes.

### Evaluation

The B5T® was developed to measure the five basic personality dimensions (Big Five). The inventory was later expanded to include three scales to capture the basic needs for achievement, security, and power. After an initial validation in 2012, the inventory was subjected to another validation in 2020 using a large sample (N = 21,048). The scales achieved convincing psychometric parameters for reliability (Cronbach's alphas between .76 and .90), which hardly differed from the parameters from 2012. Both the most selective items and the interscale correlations underline the content validity. The factorial structure could also be confirmed in confirmatory factor analyses. There were clear associations with education, occupation, and income, which also suggest that the inventory is suitable for use in a professional context. The self-employed, for example, achieved the highest values for Openness and need for power, but the lowest for Neuroticism (N). Civil servants had the highest scores for Conscientiousness (C) and the second lowest scores for Neuroticism (N). Students scored the highest for achievement motive (NA). Unemployed people had the highest values for the security motive (NS) and the lowest for the achievement motive (NA).

In summary, the B5T® has been successfully validated, and its scales have been confirmed in a sample of more than 21,000 respondents. The inclusion of three further scales for assessing the basic needs for achievement, security, and power makes it possible to measure not only the phenotypic structure of personality (Big Five factors), but also the inner drive and thus the direction of individuals' development as well as their potential.

The B5T® is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. All language versions and further details are also available from [www.drSATOW.de](http://www.drSATOW.de).

B5T® is a registered trademark of Dr. Lars Satow in Germany.

## References

- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Henry Holt.
- Cattell, R. B. (1957). *Personality and Motivation Structure and Measurement*. New York: World Book.
- Cattell, R. B. (1965). *The Scientific Analysis of Personality*. London: Penguin.
- Eysenck, H. J. (1947). *Dimensions of Personality*. London: Routledge & Kegan Paul.
- Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. In Wheeler (Ed.), *Review of Personality and social psychology*, Vol. 1, 141–165. Beverly Hills, CA: Sage.
- Goldberg, L. R. (1993). The Structure of Phenotypic Personality Traits. *American Psychologist*, 48(1), 26-34.
- Maslow, A. H. (1971). *The farther reaches of human nature* (Vol. 197111). New York: Viking Press.
- McClelland, D. C. (1987). *Human motivation*. CUP Archive.
- McCrae, R. R., & Costa Jr, P. T. (2004). A contemplated revision of the NEO Five-Factor Inventory. *Personality and individual differences*, 36(3), 587-596.
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, 66, 574–583.
- Reiss, S. (2008). *The Normal Personality: A New Way of Thinking about People*. Cambridge University Press.
- Satow, L. (2011). Big-Five-Persönlichkeitstest (B5T®). In Zentrum für Psychologische Information und Dokumentation (ZPID) (Hrsg.), *PSYNDEX (Online-Datenbanksegment PSYNDEX Tests Dok.-Nr. 9006357)*. Trier: ZPID. Satow, L. (2012). Big-Five-Persönlichkeitstest (B5T): Test- und Skaldokumentation. Verfügbar unter <http://www.drstatow.de>.
- Satow, L. (2012). Skala zur Erfassung von Testverfälschung durch positive Selbstdarstellung und sozialerwünschte Antworttendenzen (SEA). Skaldokumentation und Normen sowie Fragebogen mit Instruktion [PSYNDEX Tests-Nr. 9006446]. In Leibniz-Zentrum für Psychologische Information und Dokumentation (ZPID) (Hrsg.), *Elektronisches Testarchiv*. Trier: ZPID.
- Satow, L. (2018). Big-Five-Persönlichkeits- Assessment für die gezielte Personalentwicklung. In S. Laske, A. Orthey & M. J. Schmid (Hrsg.), *PersonalEntwickeln* (235. Erg.-Lfg., November 2018, S. 1-27). Köln: Wolters Kluwer. [PDF]
- Satow, L. (2020). B5T® Big-Five-Persönlichkeitstest: Test- und Skaldokumentation. <https://www.drstatow.de/tests/persoenlichkeitstest/>
- Satow, L. (2021). Reliability and Validity of the Enhanced Big Five Personality Test (B5T). <https://doi.org/10.31234/osf.io/wsugv>
- Tupes, E. C., & Christal, R. E. (1961). Recurrent personality factors based on trait ratings (USAF ASD Tech. Rep. No. 61-97). Lackland Air Force Base, TX: U.S. Air Force.