

Cognitive and Personal Styles Questionnaire: Validity and Reliability of the CPS-Q Based on a Russian Sample

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Abstract. *Background.* Cognitive styles are innate functional systems that determine individual differences in how people perceive and process information. These styles act as a bridge between cognition and personality, influencing how we interact with the world around us. However, the measurement of cognitive styles remains fragmented: most instruments treat style dimensions as bipolar continua and rely on laboratory-based sensory-perceptual measures that do not capture holistic behavior in real-life contexts. *Objective.* To conduct psychometric validation of the Cognitive Personality Styles Questionnaire (CPS-Q), a 60-item self-report instrument that operationalizes 12 style dimensions (field dependence, field independence, flexibility of cognitive control, rigidity of cognitive control, narrow range of equivalence, wide range of equivalence, abstract conceptualization, concrete conceptualization, tolerance of unrealistic experience, intolerance of unrealistic experience, impulsivity, and reflectivity) as independent unipolar scales. *Method.* A total of 3,331 respondents (aged 13–60 years) from various cities in Russia participated. Reliability was assessed through internal consistency and test-retest reliability over a two-week interval. Convergent validity was examined via correlations with Witkin's Embedded Figures Test, Kagan's Matching Familiar Figures Test, the Stroop Color-Word Interference Test, and Kolga's Free Word Sorting Task. Discriminant validity was evaluated through correlations with the Elementary Logical Operations test (Rusalov & Volkova, 2022) and through factor analyses with measures of formal-dynamic properties of individuality (Rusalov, 2012), character traits (Rusalov & Manolova, 2003), and motivation. *Results.* The CPS-Q demonstrated high test-retest reliability (Spearman's $\rho = 0.894\text{--}0.982$, all $p < 0.001$) and acceptable internal consistency (Cronbach's $\alpha = 0.559\text{--}0.736$). Convergent validity was supported by significant correlations with established measures: field independence with Embedded Figures Test performance ($\tau = -0.357$, $p < 0.001$); impulsivity with response time in Kagan's test ($\tau = -0.189$, $p = 0.010$); and flexibility of cognitive control with Stroop interference ($\tau = -0.178$, $p = 0.002$). Discriminant validity was confirmed by non-significant correlations with elementary logical operations (all $\tau < 0.08$, $p > 0.05$) and by factor analyses showing that CPS-Q scales formed a separate orthogonal factor from measures of temperament, character, and motivation. *Conclusion.* The CPS-Q is a reliable and valid instrument for assessing cognitive styles at the personality level. Its distinctive feature, measuring each stylistic pole on an independent scale, is consistent with contemporary evidence that style dimensions are better conceptualized as independent psychological dispositions rather than as opposite poles of a single continuum.

Keywords: CPS-Q, Field Dependence, Field Independence, Flexibility of Cognitive Control, Rigidity of Cognitive Control, Narrow Range of Equivalence, Wide Range of Equivalence, Abstract Conceptualization, Concrete Conceptualization, Tolerance of Unrealistic Experience, Intolerance of Unrealistic Experience, Impulsivity, Reflectivity, Cognitive Styles, Reliability, Validity

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1. Introduction

Cognitive styles, defined as innate functional systems that determine individual differences in preferred modes of perceiving, remembering, thinking, and problem-solving (Nosal, 1990), have been studied for more than seven decades (Klimov, 1959; Messick, 1976; Witkin et al., 1977). They are characterized by stability over time, value-neutrality, and pervasiveness across behavioural domains, and have been proposed as a key link between cognition and personality (Kozhevnikov, 2007; Sternberg & Grigorenko, 1997). Despite this theoretical promise, the field remains fragmented. Curry (2000) identified over 100 style terms and measurement methods, and Coffield et al. (2004) catalogued 71 distinct learning styles. This proliferation has made cognitive styles "very vulnerable both for scientists and practitioners" (Rusalov & Volkova, 2015, p. 32) and has led some to question the coherence of the construct (Kozhevnikov, 2007; Sternberg & Grigorenko, 1997).

A major methodological limitation is the traditional reliance on laboratory-based sensory-perceptual tasks such as Witkin's Embedded Figures Test (EFT; Witkin, 1971), Kagan's Matching Familiar Figures Test (MFFT; Kagan, 1966) and the Stroop test (Stroop, 1935). These measures conflate style with ability, as performance correlates significantly with intelligence and spatial ability (MacLeod et al., 1986; McKenna, 1984). They also assess styles primarily at the perceptual level, missing the personality-relevant aspects emphasised by theorists (Klein, 1970; Messick, 1984), and typically treat style dimensions as bipolar continua, assuming that opposing poles are mutually exclusive. Furthermore, these laboratory measures do not capture holistic behavior in real-life contexts, limiting their ecological validity.

This bipolar view has been increasingly challenged. A meta-analysis of 80 studies ($n = 27,501$) showed that intuition and analysis are uncorrelated, supporting their status as independent constructs rather

than opposite ends of a single continuum (Wang et al., 2017). Confirmatory factor analysis further supported two uncorrelated factors. Similarly, research on the Cognitive Style Index (Allinson & Hayes, 1996) has revealed that a two-factor model provides a significantly better fit than the unifactorial bipolar solution (Hayes et al., 2003; Hodgkinson & Sadler-Smith, 2003). These findings indicate that cognitive style dimensions may be better conceptualised as independent unipolar dispositions.

In response, Rusalov and Volkova developed the Cognitive Personality Styles Questionnaire (CPS-Q), a 60-item self-report instrument that assesses 12 cognitive style dimensions (Rusalov & Volkova, 2015; Volkova & Rusalov, 2016). Uniquely, the CPS-Q operationalises each pole of a style dimension as an independent scale (range 5-25 per pole), allowing an individual to simultaneously possess characteristics of both poles. The 12 scales assess: Field Dependence (FD) and Field Independence (FI); Narrow Range of Equivalence (NRE) and Wide Range of Equivalence (WRE); Flexibility of Cognitive Control (FCC) and Rigidity of Cognitive Control (RCC); Impulsivity (IMP) and Reflectivity (REF); Concrete Conceptualization (CC) and Abstract Conceptualization (AC); and Tolerance of Unrealistic Experience (TUE) and Intolerance of Unrealistic Experience (IUE). Each scale comprises five items rated on a 5-point Likert scale from 1 ("Not at all Expressed") to 5 ("Very Pronounced").

The present study aimed to comprehensively evaluate the psychometric properties of the CPS-Q across a large, diverse sample, with particular attention to: (a) reliability (internal consistency and test-retest reliability); (b) convergent validity with established performance-based measures; (c) discriminant validity with respect to cognitive abilities, temperament, character and motivation; and (d) gender differences.

2. Method

2.1. Participants

The study comprised 3,331 respondents (1,436 males, 1,895 females) recruited from multiple Russian cities, including Moscow, Saint Petersburg, Ufa, Perm, Kaluga, Kostroma, Taganrog, Tver, and Tula. Participants were drawn from four age periods: adolescence (13-16 years; N = 197; mean age = 14.2 ± 1.0 years); early youth (17-20 years; N = 1,555; mean age = 18.9 ± 0.8 years); early adulthood (21-30 years; N = 1,275; mean age = 23.6 ± 2.6 years); and middle adulthood (31-60 years; N = 295; mean age = 36.3 ± 4.7 years). Participants were recruited through educational institutions, workplaces, and community organizations. All participants provided informed consent. The study was approved by the Institutional Review Board of the Institute of Psychology, Russian Academy of Sciences.

2.2 Measures

2.2.1 Cognitive Personality Styles Questionnaire (CPS-Q)

The CPS-Q (Rusalov & Volkova, 2015; Volkova & Rusalov, 2016) consists of 60 items (5 items per scale) assessing 12 cognitive style dimensions. Items are rated on a 5-point Likert scale ranging from 1

("Not at all Expressed") to 5 ("Very Pronounced"). The questionnaire was developed based on the theoretical descriptions of cognitive styles provided by Kholodnaya (2002) and operationalized through self-report items that capture behavioral and cognitive manifestations of each style.

The full questionnaire is presented below.

Cognitive Personality Styles Questionnaire (CPS-Q)*

Instruction: You are offered a list of the main characteristics of human behavior, presented in the form of statements. Some characteristics of your behavior may be more pronounced, others less. Rate the severity of each of the characteristics on a 5-point scale. In the column "answers" put the number from 1 to 5, which most accurately characterizes your behavior at the present time:

- 1 – Not at all Expressed;
- 2 – Rather Not Expressed;
- 3 – Expressed;
- 4 – Markedly Pronounced;
- 5 – Very Pronounced.

Try to answer as quickly as possible, do not linger on one question. There are no good or bad answers.

No	Statements	Answer
1	When buying clothes, I trust the advice of the seller.	
2	I find it easy to switch from solving one problem to solving others.	
3	I often make decisions at first impression.	
4	I like games with simple and clear rules.	
5	I am ready to listen to the opinion of another person, even if it contradicts mine.	
6	As a rule, I make decisions independently.	
7	Retelling the events, I omit the details.	
8	It is difficult for me to pass from image to an abstract word and vice versa.	
9	I get down to solving problems after careful consideration of all conditions.	
10	I immediately notice a change in the situation around me.	

* Volkova E.V. & Rusalov V.M. Cognitive Personality Styles Questionnaire (CPS-Q)

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11	I memorize equally well both pictures and texts.	
12	I am ready to get involved in solving any problem without hesitation.	
13	My own experience is more important for me than the opinion of friends.	
14	I easily divide people into good and bad.	
15	I am always expressing my opinion very carefully.	
16	I can easily establish the chain of events on separate fragmented facts.	
17	People who think differently annoy me.	
18	I easily agree with my friends' opinion.	
19	When retelling the content of the movie, I like to describe it in detail.	
20	I like reading fiction as well as technical literature.	
21	I often buy the first thing I like without hesitation.	
22	I can't work without clear instructions.	
23	I like to get information from different sources.	
24	I am interested in the meaning and not the details of the event.	
25	I hate it when I have to look for the information on different websites.	
26	I double-check each assumption.	
27	I can easily separate the main thing from the secondary.	
28	I prefer the well-established notions.	
29	When looking at the picture I pay attention to all details.	
30	If I cannot find information on one website, I am looking for it on the others.	
31	I often make judgments without fully understanding the matter.	
32	I like a clear plan and order.	
33	I do not object to listening to other people's ideas.	
34	I used to express openly my opinion.	
35	I am interested in the overall picture, but not in its details.	
36	It's difficult for me to pass from one kind of activity to another.	
37	I carefully think through each step of the solution.	
38	I am always interested in the crux of the matter.	
39	I avoid watching TV-programs giving different interpretation of events.	
40	When making a complicated decision, I rely on my friends' advice.	
41	I need detailed instructions for a new task.	
42	I often take my job without proper thinking.	
43	I often find unusual non-standard solutions to a problem.	
44	I do not consider other methods of solving problems if I already have a ready-made method.	
45	I can easily make a short conclusion of the text.	
46	I communicate only with those people whose opinion coincides with mine.	
47	I often turn to others for advice.	

48	I like to describe events in all details.	
49	I can easily switch from one kind of activity to another.	
50	Until I finish one thing, I find it hard to start another one.	
51	I rely on my own strength.	
52	I am open to new experiences.	
53	I am a particular person and do not like empty arguments.	
54	I carefully check and recheck all the facts before making any decision.	
55	In any situation, I seek the help of other people.	
56	I prefer performing tasks, which have clear-cut instructions.	
57	Detailed instructions annoy me.	
58	I rely mainly on my own skills and knowledge.	
59	I suggest many versions of solving complex problems.	
60	I am not a supporter of innovation; I like the way I live.	

Keys

Scales	Items*
Field Dependence (FD)	1, 18 , 40, 47, 55
Field Independence (FI)	6, 13 , 34, 51, 58
Narrow Range of Equivalence (NRE)	10, 19 , 29, 41, 48
Wide Range of Equivalence (WRE)	7, 14 , 24, 35, 57
Flexibility of Cognitive Control (FCC)	2, 11 , 20, 30, 49
Rigidity of Cognitive Control (RCC)	8 , 25, 36 , 44, 50
Impulsivity (IMP)	3, 12 , 21, 31, 42
Reflectivity (REF)	9 , 15, 26, 37, 54
Concrete Conceptualization (CC)	4, 22, 32, 53, 56
Abstract Conceptualization (AC)	16, 27, 38, 45, 59
Tolerance of Unrealistic Experience (TUE)	5 , 23, 33 , 43, 52
Intolerance of Unrealistic Experience (IUE)	17 , 28, 39, 46 , 60

*Item numbers marked in bold are included in the shortened Cognitive Personality Style Questionnaire (CPS-Q Shortened).

The raw score for each scale is calculated as the sum of the scores for each item according to the Key.

Scale Interpretation

Field Dependence (FD) expresses person's orientation to the external world when solving problems. The people of this type trust more in external impressions.

Field Independence (FI) reflects individual's ability to rely on one's own

knowledge and experience, ignoring the other people's opinion.

Narrow Range of Equivalence (NRE) is characteristic of the individuals who orient themselves to the differences between objects of activity. These people are highly sensitive to details and nuances.

Wide Range of Equivalence (WRE) reflects personal bent to find a general strategy, general evaluation of the objects of activity (black/white, good/bad), to

classify objects based on certain generalized foundations.

Flexibility of Cognitive Control (FCC) shows person's easiness of passing from some cognitive functions to others (from abstract-verbal to imaginary ones), which ensures a high degree of automation of analysis of the complex environmental influences.

Rigidity of Cognitive Control (RCC) characterizes a degree of individual's difficulty in changing the ways of information processing in situations of solving complex problems.

Impulsivity (IMP) points out a spontaneous and high tempo of decision making in complex and uncertain situations and his/her orientation to emotionally meaningful attributes. Such persons quickly put forward a great number of hypotheses in choice situations and, as a rule, commit many erroneous solutions.

Reflectivity (REF) indicates a slow decision-making tempo, individual's inclination to a careful systematic check-up of facts, as well as use of more elaborate and balanced solving problem strategies.

Concrete Conceptualization (CC) reflects a person's preference for clear-cut instructions in performing complex tasks.

Abstract Conceptualization (AC) expresses an individual's tendency to cross the limits of the instruction. The persons of this type choose unusual ways of solving problems and easily establish various interrelationships between different objects of reality.

Tolerance of Unrealistic Experience (TUE) means the individual's inclination to be open to new information. The person evaluates the environment primarily according to its factual characteristics, even if these characteristics contradict or do not correspond to the earlier acquired notions.

Intolerance of Unrealistic Experience (IUE) expresses individual's tendency to perceive information primarily in terms of the expected and the usual. Such persons, as a rule, block the unexpected and controversial elements of information.

2.2.2 Convergent Validity Measures

To assess convergent validity, participants completed established measures of corresponding cognitive style constructs.

Embedded Figures Test (EFT). The original Embedded Figures Test (Witkin, 1971) was used to assess field dependence-independence. The test comprises a series of complex figures in which simple geometric shapes are embedded. Participants are required to locate and trace simple figures within complex figures as quickly as possible. The total number of correct identifications and response times were recorded as measures of field independence, with faster and more accurate performance indicating greater field independence.

Matching Familiar Figures Test (MFFT). The MFFT-20 (Cairns & Cammock, 1978; Kagan, 1966) was used to assess reflectivity-impulsivity. Participants view a target figure and must select the matching figure from among six alternatives. Response time to first selection and number of errors were recorded. The MFFT has been extensively validated and is the standard measure of conceptual tempo (Viator et al., 2022).

Stroop Color-Word Interference Test. The classic Stroop task (Stroop, 1935) was used to assess cognitive control flexibility-rigidity. Participants name the ink color of color words presented in incongruent colors (e.g., the word "RED" printed in blue ink). The interference effect (difference in response time between color-naming and word-reading conditions) was calculated, with smaller interference indicating greater flexibility of cognitive control.

Free Word Sorting Task. This task (Kolga, 1992) assesses range of equivalence. Participants are presented with a list of words belonging to the semantic category "time" and asked to sort them into groups based on perceived similarities. The number of groups created and the coefficient of categorization were recorded, with fewer groups indicating a wider range of equivalence.

2.2.3 Discriminant Validity Measures

To assess discriminant validity, participants completed measures of elementary logical operations, temperament, character, and motivation.

Elementary Logical Operations (ELO). A test of basic logical reasoning abilities, including syllogistic reasoning, classification, and analogical reasoning, developed by Rusalov and Volkova (2021). This measure assesses general cognitive abilities that should be conceptually distinct from cognitive styles.

Formal-Dynamic Properties of Individuality Questionnaire. This questionnaire (Rusalov, 2012) assesses temperamental properties, including ergicity (endurance), plasticity, speed, and emotionality across three domains: psychomotor, intellectual, and communicative. The questionnaire has demonstrated satisfactory psychometric properties (Rusalov, 2012).

Character Traits Questionnaire. This questionnaire (Rusalov & Manolova, 2003) assesses character traits based on Leonhard's typology, including hyperthymia, rigidity, emotivity, pedantry, anxiety, cyclothymia, demonstrativeness, excitability, dysthymia, and exaltation. The shortened version (CTQ-A-20) was used, which has demonstrated high correlations with the full version ($r \geq 0.60$; Rusalov, 2012).

Motivation Measures. Participants completed measures of achievement motivation, career choice motivation, and value motivation (Rusalov, 2012).

2.3 Procedure

Data were collected across multiple testing sessions. For the main sample ($N = 3,331$), participants completed the CPS-Q along with demographic information. For the validation subsamples, participants completed the CPS-Q and the corresponding validation measures in counterbalanced order.

Test-retest subsample ($N = 100$, aged 18-23 years, 61% female). Participants completed the CPS-Q on two occasions separated by a two-week interval.

Convergent validity subsamples:

MFFT validation ($N = 132$, aged 18-22 years, 68% female)

EFT validation ($N = 127$, aged 18-22 years, 65% female)

Stroop validation ($N = 198$, aged 18-22 years, 65% female)

Free Word Sorting validation ($N = 198$, aged 18-22 years, 65% female)

Discriminant validity subsample ($N = 330$, aged 18-22 years, 65% female). Participants completed the CPS-Q, the ELO test, temperament measures, character measures, and motivation measures.

All testing was conducted in group settings under standardized conditions. Participants were instructed to respond honestly and to complete all items. No time limits were imposed.

2.4 Statistical Analysis

Statistical analyses were conducted using SPSS (Version 22.0). Reliability was assessed using Cronbach's α and Spearman's rho correlations. Convergent and discriminant validity were assessed using Kendall's tau-b (τ) correlations due to the ordinal nature of the data. Factor structure was examined using principal component analysis with Varimax rotation. Gender differences were assessed using independent-samples t-tests.

3. Results

3.1 Descriptive Statistics

Means and standard deviations for the CPS-Q scales across the full sample are presented in Table 1. Scores on all scales were normally distributed, with means ranging from approximately 10 to 15 on a 5–25-point scale (5 items $\times$ 5-point scale).

Table 1. Descriptive Statistics for CPS-Q Scales (N = 3,331)

Scale	Mean	SD	Range
Field Dependence (FD)	11.24	4.52	5-25
Field Independence (FI)	14.86	5.42	5-25
Narrow Range of Equivalence (NRE)	13.42	5.18	5-25
Wide Range of Equivalence (WRE)	11.87	4.76	5-25
Flexibility of Cognitive Control (FCC)	13.41	5.16	5-25
Rigidity of Cognitive Control (RCC)	10.86	4.72	5-25
Impulsivity (IMP)	11.23	4.85	5-25
Reflectivity (REF)	13.48	5.28	5-25
Concrete Conceptualization (CC)	13.78	6.12	5-25
Abstract Conceptualization (AC)	13.63	5.61	5-25
Tolerance of Unrealistic Experience (TUE)	14.65	6.05	5-25
Intolerance of Unrealistic Experience (IUE)	10.21	4.43	5-25

3.2 Reliability

3.2.1 Internal Consistency

Cronbach's α coefficients for the 12 CPS-Q scales are presented in Table 2. Alpha values ranged from 0.559 (Rigidity of Cognitive Control) to 0.736 (Field Independence), with a median of 0.673.

While the Rigidity of Cognitive Control scale showed somewhat lower internal consistency ($\alpha = 0.559$), the majority of scales (10 out of 12) demonstrated acceptable internal consistency ($\alpha \geq 0.60$), and several scales showed good internal consistency ($\alpha \geq 0.70$).

Table 2. Internal Consistency (Cronbach's α) of CPS-Q Scales

Scale	α
Field Dependence (FD)	0.709
Field Independence (FI)	0.736
Narrow Range of Equivalence (NRE)	0.693
Wide Range of Equivalence (WRE)	0.642
Flexibility of Cognitive Control (FCC)	0.639
Rigidity of Cognitive Control (RCC)	0.559

Impulsivity (IMP)	0.609
Reflectivity (REF)	0.715
Concrete Conceptualization (CC)	0.623
Abstract Conceptualization (AC)	0.714
Tolerance of Unrealistic Experience (TUE)	0.630
Intolerance of Unrealistic Experience (IUE)	0.637

Note: Values represent Cronbach's α based on 5 items per scale.

3.2.2 Test-Retest Reliability

Test-retest reliability was assessed over a two-week interval ($n = 100$). Spearman's rho correlations between Time 1 and Time 2 scores are presented in Table 3. All

correlations were highly significant ($p < 0.001$) and ranged from 0.894 to 0.982, indicating excellent temporal stability of the CPS-Q scales.

Table 3. Test-Retest Reliability of CPS-Q Scales ($N = 100$, 2-week interval)

Scale	Spearman's ρ
Field Dependence (FD)	0.968***
Field Independence (FI)	0.972***
Narrow Range of Equivalence (NRE)	0.937***
Wide Range of Equivalence (WRE)	0.949***
Flexibility of Cognitive Control (FCC)	0.974***
Rigidity of Cognitive Control (RCC)	0.956***
Impulsivity (IMP)	0.930***
Reflectivity (REF)	0.919***
Concrete Conceptualization (CC)	0.894***
Abstract Conceptualization (AC)	0.905***
Tolerance of Unrealistic Experience (TUE)	0.982***
Intolerance of Unrealistic Experience (IUE)	0.960***

*** $p < 0.001$

3.3 Convergent Validity

3.3.1 Field Dependence-Independence

Convergent validity for the Field Dependence and Field Independence scales was assessed through correlations with the Embedded Figures Test (EFT) ($N = 127$). As shown in Table 4, Field

Independence showed a strong negative correlation with EFT performance ($\tau = -0.357$, $p < 0.001$), indicating that individuals with higher Field Independence scores performed better on the EFT (i.e., were faster at identifying embedded figures). Field Dependence

showed a moderate positive correlation with EFT performance ($\tau = 0.245$, $p < 0.001$), consistent with the interpretation that field-dependent individuals have greater difficulty with the

task. The correlation between Field Dependence and Field Independence was negative but modest ($\tau = -0.108$, $p = .032$), supporting the conceptualization of these as distinct but related dimensions.

Table 4. Correlations Between CPS-Q Scales and Embedded Figures Test (n = 127)

	EFT (Mean Time)	EFT (Total Time)	Field Dependence	Field Independence
EFT (Mean Time)	1.000	0.993***	0.245***	-0.357***
EFT (Total Time)	0.993***	1.000	0.247***	-0.349***
Field Dependence	0.245***	0.247***	1.000	-0.108*
Field Independence	-0.357***	-0.349***	-0.108*	1.000

*** $p < 0.001$, * $p < 0.05$

3.3.2 Reflectivity-Impulsivity

Convergent validity for the Impulsivity and Reflectivity scales was assessed through correlations with the Matching Familiar Figures Test (MFFT) (N = 132). As shown in Table 5, Impulsivity showed a significant negative correlation with total response time ($\tau = -0.189$, $p = 0.010$) and mean response time ($\tau = -0.187$, $p = 0.011$),

indicating that individuals scoring higher on Impulsivity responded more quickly on the MFFT. Reflectivity showed non-significant negative correlations with response times, which may reflect the more complex relationship between self-reported reflectivity and behavioral performance on this task.

Table 5. Correlations Between CPS-Q Scales and Matching Familiar Figures Test (N = 132)

	MFFT Total Time	MFFT Mean Time	N Errors	Impulsivity	Reflectivity
MFFT Total Time	1.000	0.997***	-0.138	-0.189*	-0.098
MFFT Mean Time	0.997***	1.000	-0.146*	-0.187*	-0.102
N Errors	-0.138	-0.146*	1.000	0.095	0.047
Impulsivity	-0.189*	-0.187*	0.095	1.000	-0.019

	MFFT Total Time	MFFT Mean Time	N Errors	Impulsivity	Reflectivity
Reflectivity	-0.098	-0.102	0.047	-0.019	1.000

*** $p < 0.001$, * $p < 0.05$

3.3.3 Cognitive Control Flexibility-Rigidity

Convergent validity for the Flexibility and Rigidity of Cognitive Control scales was assessed through correlations with the Stroop Color-Word Interference Test ($N = 198$). As shown in Table 6, the Flexibility of Cognitive Control scale showed a significant negative correlation

with the Stroop interference effect ($\tau = -.178$, $p = 0.002$), indicating that individuals who report greater flexibility in cognitive control show less interference in the Stroop task. The Rigidity of Cognitive Control scale did not show a significant correlation with the Stroop measure, which may reflect the more complex nature of rigidity as a construct.

Table 6. Correlations Between CPS-Q Scales and Stroop Test ($N = 198$)

	Flexibility	Rigidity	Flexibility-Rigidity
Flexibility	1.000	-0.045	-0.178**
Rigidity	-0.045	1.000	-0.018
Flexibility-Rigidity	-0.178**	-0.018	1.000

** $p < 0.01$

3.3.4 Range of Equivalence

The Wide Range of Equivalence scale showed a significant positive correlation with the coefficient of categorization from the Free Word Sorting Task ($\tau = 0.258$, $p < 0.001$), indicating that individuals with a wider range of equivalence (i.e., tendency to form broader categories) showed higher categorization coefficients.

3.4 Discriminant Validity

3.4.1 Independence from General Cognitive Abilities

As shown in Table 7, correlations between CPS-Q scales and a measure of elementary logical operations (ELO) were uniformly non-significant (all $\tau < 0.08$, all $p > 0.05$), supporting the discriminant validity of the CPS-Q with respect to general cognitive abilities.

Table 7. Correlations Between CPS-Q Scales and Elementary Logical Operations ($N = 330$)

CPS-Q Scale	τ with ELO	p
Field Dependence	-0.010	0.829
Field Independence	0.019	0.684
Narrow Range of Equivalence	-0.021	0.651

CPS-Q Scale	τ with ELO	p
Wide Range of Equivalence	0.034	0.469
Flexibility of Cognitive Control	0.083	0.077
Rigidity of Cognitive Control	0.019	0.671
Impulsivity	0.075	0.106
Reflectivity	-0.002	0.965
Concrete Conceptualization	0.010	0.830
Abstract Conceptualization	0.073	0.121
Tolerance of Unrealistic Experience	0.046	0.332
Intolerance of Unrealistic Experience	0.012	0.807

3.4.2 Independence from Temperament

An exploratory factor analysis (principal component analysis with Varimax rotation) was conducted on the 12 CPS-Q scales and the temperament scales from the Formal-Dynamic Properties of Individuality Questionnaire (N = 664). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.952, indicating excellent suitability for factor analysis (according to Kaiser's criteria, values above 0.90 are considered "marvellous"). Bartlett's test of sphericity was significant ($\chi^2 = 10,842.658$, $df = 153$, $p < 0.001$), confirming that the correlation matrix was suitable for factor extraction.

The number of factors to retain was determined based on the scree plot

(Cattell's scree test) and the Kaiser-Guttman criterion (eigenvalues > 1.0). The scree plot revealed a sharp decline in eigenvalues after the first factor, with a clear elbow at the second factor, suggesting that a three-factor solution was most appropriate based on the interpretability of the factors and the scree plot. The analysis yielded three factors accounting for 72.95% of the variance. As shown in Table 8, all 12 CPS-Q scales loaded strongly on Factor 1 (loadings ranging from 0.836 to 0.935), while temperament scales loaded on Factors 2 and 3. This clear separation between CPS-Q scales and temperament measures supports the discriminant validity of the CPS-Q.

Table 8. Factor Structure of CPS-Q and Temperament Measures (N = 664, 3-factor solution)

Variable	Factor 1	Factor 2	Factor 3
Tolerance of Unrealistic Experience	0.935	-0.029	0.076
Concrete Conceptualization	0.930	0.099	-0.059

Variable	Factor 1	Factor 2	Factor 3
Abstract Conceptualization	0.928	-0.030	0.108
Flexibility of Cognitive Control	0.906	-0.077	0.113
Narrow Range of Equivalence	0.904	0.081	0.065
Field Independence	0.902	-0.071	0.069
Reflectivity	0.900	0.021	-0.016
Wide Range of Equivalence	0.894	0.065	-0.022
Impulsivity	0.876	0.080	0.088
Rigidity of Cognitive Control	0.874	0.129	-0.121
Intolerance of Unrealistic Experience	0.842	0.127	-0.073
Field Dependence	0.836	0.153	-0.016
Emotional Excitability	0.035	0.819	0.034
Emotional Instability	-0.002	0.787	0.048
Emotionality (Motor)	0.092	0.574	-0.083
Intellectual Activity	-0.042	-0.178	0.763
Psychomotor Activity	0.036	-0.001	0.748
Communicative Activity	0.066	0.141	0.725

Note: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Factor loadings > 0.40 are shown in bold.

3.4.3 Independence from Character Traits

A similar factor analysis was conducted on the CPS-Q scales and character traits (N = 664). The KMO measure was 0.938, indicating excellent sampling adequacy. Bartlett's test of sphericity was significant ($\chi^2 = 11,832.017$, $df = 231$, $p < 0.001$). The scree plot indicated a four-factor solution, which accounted for 70.79% of the total variance. All 12 CPS-Q scales loaded on Factor 1 (loadings ranging from 0.835 to 0.935), while character traits loaded on

Factors 2-4. This clear separation supports the discriminant validity of the CPS-Q with respect to character.

3.4.4 Independence from Motivation

A factor analysis of CPS-Q scales and motivation measures (N = 664) yielded three factors accounting for 81.13% of the variance. The KMO measure was 0.958, and Bartlett's test of sphericity was significant ($\chi^2 = 10,390.254$, $df = 105$, $p < 0.001$). The scree plot confirmed a three-factor solution. All 12 CPS-Q scales loaded on Factor 1 (loadings ranging from

0.845 to 0.933), while motivation measures loaded on Factors 2 and 3, further supporting discriminant validity.

3.5 Age Differences

Age-related differences in cognitive style scores were examined across the full sample (N = 3,948, 48% male). One-way analyses of variance (ANOVA) were conducted with age group as the independent variable (adolescence: 13-16 years; early youth: 17-20 years; early

adulthood: 21-30 years; middle adulthood: 31-60 years) and each CPS-Q scale as the dependent variable. As shown in Table 9, significant age effects were observed for all scales except Intolerance of Unrealistic Experience (IUE). Effect sizes (η^2) ranged from small to moderate, with the largest effects observed for Narrow Range of Equivalence ($\eta^2 = 0.155$), Field Independence ($\eta^2 = 0.112$), Abstract Conceptualization ($\eta^2 = 0.104$), and Rigidity of Cognitive Control ($\eta^2 = 0.095$).

Table 9. Age Differences in CPS-Q Scales (N = 3,948)

Scale	F	Sig.	Eta-squared (η^2)
Field Dependence (FD)	61.876	< .001	.045
Field Independence (FI)	165.728	< .001	.112
Narrow Range of Equivalence (NRE)	240.877	< .001	.155
Wide Range of Equivalence (WRE)	112.421	< .001	.079
Flexibility of Cognitive Control (FCC)	30.970	< .001	.023
Rigidity of Cognitive Control (RCC)	138.743	< .001	.095
Impulsivity (IMP)	7.743	< .001	.006
Reflectivity (REF)	74.871	< .001	.054
Concrete Conceptualization (CC)	7.820	< .001	.006
Abstract Conceptualization (AC)	152.229	< .001	.104
Tolerance of Unrealistic Experience (TUE)	18.173	< .001	.014
Intolerance of Unrealistic Experience (IUE)	1.852	.136	.001

Note: Degrees of freedom (3, 3944) for all analyses.

Post-hoc comparisons (Tukey HSD) revealed that scores on most scales increased progressively with age, particularly from adolescence to early adulthood, with the largest increases observed for Field Independence, Narrow Range of Equivalence, Abstract Conceptualization, and Rigidity of Cognitive Control. These findings suggest that cognitive style characteristics

continue to develop across the lifespan, with the most pronounced changes occurring during the transition from adolescence to early adulthood.

3.5 Gender Differences

Significant gender differences were observed on all 12 CPS-Q scales (N = 527, 144 males, 383 females). As shown in Table 10, females scored significantly higher on all scales, with effect sizes

ranging from small to moderate. The largest differences were observed for Concrete Conceptualization ($p < 0.001$),

Tolerance of Unrealistic Experience ($p < 0.001$), and Impulsivity ($p < 0.001$).

Table 10. Gender Differences on CPS-Q Scales (N = 527)

Scale	Males (N = 144)	Females (N = 383)	p
Field Dependence	8.79 ± 4.13	10.09 ± 4.59	0.002
Field Independence	12.47 ± 6.28	14.08 ± 6.38	0.009
Narrow Range of Equivalence	10.94 ± 5.49	13.17 ± 5.68	< 0.001
Wide Range of Equivalence	9.89 ± 4.90	11.08 ± 4.75	0.013
Flexibility of Cognitive Control	10.83 ± 5.42	12.77 ± 5.38	< 0.001
Rigidity of Cognitive Control	9.22 ± 4.91	10.47 ± 4.72	0.009
Impulsivity	9.01 ± 4.31	10.48 ± 4.72	< 0.001
Reflectivity	11.36 ± 5.83	12.76 ± 5.41	0.013
Concrete Conceptualization	11.52 ± 6.47	13.66 ± 6.24	< 0.001
Abstract Conceptualization	11.93 ± 6.03	13.50 ± 5.50	0.007
Tolerance of Unrealistic Experience	12.30 ± 6.43	14.58 ± 6.12	< 0.001
Intolerance of Unrealistic Experience	8.65 ± 4.46	9.84 ± 4.42	0.007

4. Discussion

This study provides comprehensive psychometric evidence for the Cognitive Personality Styles Questionnaire (CPS-Q), a 60-item self-report instrument designed to assess 12 cognitive style dimensions as independent unipolar scales. The results demonstrate that the CPS-Q possesses sound psychometric properties, including excellent test-retest reliability, acceptable internal consistency, convergent validity with established behavioral measures, and discriminant validity with respect to cognitive abilities, temperament, character, and motivation.

The test-retest reliability coefficients (Spearman's $\rho = 0.894-0.982$ over a two-week interval) are excellent and compare favorably with those reported for other cognitive style measures. For instance, the Cognitive Style Index (CSI) has shown test-retest correlations in the range of 0.70–0.80 (Allinson & Hayes, 1996), while the Cognitive Style Analysis (CSA) has been criticized for poor test-retest reliability, with correlations as low as 0.20 on some dimensions (Peterson et al., 2003). The high temporal stability of the CPS-Q supports the theoretical

conceptualization of cognitive styles as relatively stable individual characteristics (Kozhevnikov, 2007; Messick, 1976).

The internal consistency of the CPS-Q scales (Cronbach's $\alpha = 0.559\text{--}0.736$) is acceptable for most scales, though the Rigidity of Cognitive Control scale ($\alpha = 0.559$) falls below the commonly recommended threshold of 0.70. This may reflect the complexity of rigidity as a construct or the relatively small number of items (5) per scale. Similar alpha values have been reported for other cognitive style measures. For example, the Thinking Styles Inventory has shown alpha coefficients ranging from 0.70 to 0.80 (Sternberg et al., 2007), while the Cognitive Style Questionnaire has shown alphas ranging from 0.68 to 0.84. The median alpha of 0.673 for the CPS-Q is within the acceptable range for research purposes, though further refinement of the Rigidity scale may be warranted.

The convergent validity findings provide strong support for the CPS-Q as a measure of cognitive styles. The correlations between CPS-Q scales and established behavioral measures were consistent with theoretical expectations.

Field Independence showed a strong negative correlation with Embedded Figures Test performance ($\tau = -0.357$, $p < 0.001$), indicating that individuals who report greater independence from external cues perform better on a task requiring disembedding of figures from complex backgrounds. This is consistent with Witkin's (1962) conceptualization of field independence as the ability to overcome the influence of the surrounding perceptual field. The magnitude of this correlation is comparable to those reported in previous validation studies of field dependence-independence measures (McKenna, 1984; Witkin et al., 1977).

Impulsivity showed a significant negative correlation with Matching Familiar Figures Test response time ($\tau = -0.189$, $p = 0.010$), indicating that individuals who report impulsive decision-making tendencies respond more quickly on a behavioral task requiring careful

discrimination. This supports the validity of the Impulsivity scale as a measure of conceptual tempo, consistent with Kagan's (1966) original conceptualization. The correlation is somewhat modest, which may reflect the distinction between self-reported impulsivity and behavioral performance on laboratory tasks, as noted by previous researchers (Glow et al., 1983; Viator et al., 2022).

Flexibility of Cognitive Control showed a significant negative correlation with Stroop interference ($\tau = -0.178$, $p = 0.002$), indicating that individuals who report greater cognitive flexibility show less interference in a task requiring inhibition of prepotent responses. This supports the validity of the Flexibility scale as a measure of cognitive control, consistent with the extensive literature on the Stroop task as a measure of executive function (Stroop, 1935; MacLeod, 1991).

Wide Range of Equivalence showed a significant positive correlation with the coefficient of categorization in the Free Word Sorting Task ($\tau = 0.258$, $p < 0.001$), indicating that individuals who report a tendency to form broad categories indeed create fewer, more inclusive groups when sorting words. This supports the validity of the Wide Range of Equivalence scale as a measure of conceptual categorization style.

The discriminant validity findings are particularly important for establishing the CPS-Q as a measure of cognitive style rather than cognitive ability or personality. The non-significant correlations between CPS-Q scales and elementary logical operations (all $\tau < 0.08$) demonstrate that the CPS-Q is not simply measuring general cognitive ability. This is consistent with the theoretical distinction between styles (preferred ways of processing) and abilities (maximum performance capacity; Messick, 1976; Sternberg & Grigorenko, 1997).

The factor analyses showing clear separation between CPS-Q scales and measures of temperament, character, and motivation provide strong evidence for the discriminant validity of the CPS-Q. Across

three separate factor analyses, all 12 CPS-Q scales consistently loaded on a single factor, while temperament, character, and motivation measures loaded on separate factors. This pattern supports the conceptualization of cognitive styles as a distinct psychological construct, separate from but related to temperament and personality.

The significant age differences observed across most CPS-Q scales provide important insights into the developmental trajectory of cognitive styles. The largest age effects were found for Narrow Range of Equivalence ($\eta^2 = 0.155$), Field Independence ($\eta^2 = 0.112$), Abstract Conceptualization ($\eta^2 = 0.104$), and Rigidity of Cognitive Control ($\eta^2 = 0.095$), suggesting that these dimensions are particularly sensitive to developmental changes across the lifespan. The progressive increase in scores with age, especially from adolescence to early adulthood, is consistent with the broader developmental literature indicating that cognitive and metacognitive abilities continue to mature well into early adulthood (Craik & Bialystok, 2006; Salthouse, 2012). These findings support the view that cognitive styles are not static traits but rather develop in concert with general cognitive maturation and life experience. The lack of significant age differences for Intolerance of Unrealistic Experience (IUE) is notable and may suggest that resistance to unconventional information is a more stable dispositional characteristic, possibly rooted in personality rather than developmental cognitive changes.

The finding that females scored higher on all CPS-Q scales is noteworthy. Previous research has documented gender differences in specific cognitive styles, with females often showing greater field dependence (Witkin et al., 1977) and greater verbal processing preferences (Kraemer et al., 2009). However, the present finding that females score higher on both poles of each dimension suggests that gender differences may reflect overall differences in self-reported stylistic

awareness or response tendencies rather than differences along specific stylistic dimensions. Alternatively, these findings may reflect genuine gender differences in cognitive style, consistent with the broader literature on sex differences in cognition (Halpern, 2000).

The findings of this study have several theoretical implications for the study of cognitive styles.

First, the strong convergent validity of the CPS-Q with established behavioral measures supports the view that self-reported cognitive styles are meaningfully related to actual cognitive processing. This addresses a common criticism of self-report measures: that they may reflect self-perceptions rather than actual behavior. The correlations between CPS-Q scales and performance on the EFT, MFFT, and Stroop tasks suggest that individuals' self-reports of their stylistic tendencies are grounded in real cognitive differences.

Second, the discriminant validity findings support the conceptualization of cognitive styles as distinct from cognitive abilities and personality traits. The non-significant correlations with logical reasoning and the clear factor separation from temperament and character measures indicate that the CPS-Q is measuring something unique. This supports the theoretical view that cognitive styles represent a distinct level of analysis in understanding individual differences, bridging cognition and personality without being reducible to either (Messick, 1984; Sternberg & Grigorenko, 1997).

Third, and most importantly, the CPS-Q's distinctive feature of treating each stylistic pole as an independent unipolar scale is strongly supported by the present findings. The modest negative correlations between opposing poles (e.g., FD and FI: $\tau = -0.108$, $p = 0.032$) indicate that these dimensions are not simply opposite ends of a single continuum. This is consistent with the growing body of evidence that intuition and analysis (Wang et al., 2017), field dependence and independence (McKenna, 1984; Witkin et al., 1977), and

related style dimensions are better understood as independent constructs rather than bipolar opposites. The CPS-Q's unipolar approach allows for the possibility that individuals may simultaneously possess characteristics of both poles, which is a more accurate reflection of real-world cognitive functioning.

The CPS-Q has several practical applications. In educational settings, it can inform instruction tailored to students' preferred processing modes, consistent with the extensive literature on aptitude-treatment interactions (Cronbach & Snow, 1977). In organizational settings, it can support personnel selection, team composition, and leadership development. In clinical settings, it may be useful for understanding cognitive vulnerabilities and strengths, consistent with the growing interest in cognitive styles as risk factors for psychopathology (Alloy et al., 1999).

The self-report format of the CPS-Q makes it practical for large-scale administration and for use in contexts where behavioral testing is impractical. The short length (60 items, approximately 15–20 minutes to complete) and the clear, accessible language of the items make it suitable for use with diverse populations.

Several limitations should be acknowledged. The sample was drawn primarily from Russian populations, which may limit the generalizability of the findings to other cultural contexts. Cross-cultural validation studies are needed to establish the equivalence of the CPS-Q across different linguistic and cultural groups.

The internal consistency of some scales, particularly Rigidity of Cognitive Control ($\alpha = 0.559$), was below the recommended threshold of 0.70, suggesting the need for item refinement. Future research should consider expanding the item pool for scales with lower reliability and conducting item response theory analyses to identify poorly functioning items.

The convergent validity correlations, while significant, were moderate in

magnitude. This may reflect the distinction between self-reported styles and behavioral performance, as noted above. Future research should examine the predictive validity of the CPS-Q for real-world outcomes, such as academic achievement, job performance, and mental health.

The cross-sectional design of the study limits conclusions about the stability of cognitive styles over longer time periods. While the two-week test-retest reliability was excellent, longer-term longitudinal studies are needed to establish the stability of cognitive styles across developmental periods and life transitions.

The CPS-Q compares favorably with other self-report measures of cognitive styles. Unlike the Cognitive Style Analysis (Riding, 1991), which has shown poor reliability, the CPS-Q demonstrates excellent test-retest reliability. Unlike the Thinking Styles Inventory (Sternberg & Wagner, 1991), which has shown mixed psychometric evidence, the CPS-Q demonstrates consistent convergent and discriminant validity.

The CPS-Q also addresses a gap in the field by providing a comprehensive assessment of cognitive styles at the personality level. While many existing measures focus on specific styles (e.g., field dependence-independence, reflectivity-impulsivity) or on styles in specific domains (e.g., learning styles, thinking styles), the CPS-Q provides a broad assessment of multiple cognitive style dimensions within a single instrument. This makes it particularly useful for research examining the relationships among different styles and their combined effects on behavior.

5. Conclusion

This study provides comprehensive evidence for the reliability and validity of the Cognitive Personality Styles Questionnaire (CPS-Q). The instrument demonstrates excellent test-retest reliability, acceptable internal consistency, strong convergent validity with established behavioral measures of

cognitive styles, and clear discriminant validity with respect to cognitive abilities, temperament, character, and motivation.

The main result of this study is the validation of the CPS-Q as a reliable and valid self-report instrument that operationalizes 12 cognitive style dimensions as independent unipolar scales. The distinctive feature of the CPS-Q is the treatment of each stylistic pole as an independent psychological disposition, which is strongly supported by the present findings. The modest negative correlations between opposing poles and the single-factor structure of the instrument indicate that these dimensions are not simply opposite ends of a single continuum, but rather reflect different aspects of a broader stylistic tendency. This is consistent with the growing body of evidence that intuition and analysis, field dependence and independence, and related style dimensions are better understood as independent constructs rather than bipolar opposites (McKenna, 1984; Wang et al., 2017; Witkin et al., 1977).

The CPS-Q offers a practical, theoretically grounded tool for assessing cognitive styles at the personality level, addressing a critical gap in the measurement of this important psychological construct. The findings support the theoretical conceptualization of cognitive styles as stable, pervasive individual differences in preferred ways of processing information that are distinct from both cognitive abilities and personality traits. The CPS-Q provides a valuable instrument for research in educational, organizational, and clinical contexts, and for advancing our understanding of the role of cognitive styles in human behavior.

Future research should focus on cross-cultural validation of the CPS-Q, examination of its predictive validity for real-world outcomes, investigation of the developmental trajectories of cognitive styles across the lifespan, and refinement of scales with lower internal consistency. With continued validation and refinement, the CPS-Q has the potential to

become a standard instrument for the assessment of cognitive styles in both research and applied settings.

Conflict of Interest: The authors declare no conflicts of interest. All authors have read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

Ethics Approval: The study was conducted in accordance with the ethical standards of the institutional and national research committees and with the 1964 Helsinki Declaration and its later amendments. All participants provided written informed consent prior to their inclusion in the study. Participants were informed of their right to withdraw at any time without consequence, and all data were anonymized to ensure confidentiality.

Author Contributions: V.M. Rusalov: Conceptualization, methodology, development of the CPS-Q, theoretical framework, supervision, writing – review and editing. E.V. Volkova: Conceptualization, methodology, development of the CPS-Q, data curation, formal analysis, validation, writing – original draft preparation; writing – review and editing; project administration. T.A. Dudnikova: Investigation; data collection; data curation.

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Highlights:

- The CPS-Q is a 60-item self-report instrument assessing 12 cognitive style

dimensions as independent unipolar scales.

- Excellent test-retest reliability was demonstrated (Spearman's $\rho = 0.894-0.982$).
- Convergent validity was confirmed with EFT, MFFT, Stroop, and Free Word Sorting Task.
- Discriminant validity was established with respect to cognitive abilities, temperament, character, and motivation.
- Each stylistic pole is treated as an independent psychological disposition, consistent with contemporary evidence.

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Опросник когнитивно-личностных стилей: валидность и надежность CPS-Q на российской выборке

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Резюме. *Актуальность.* Когнитивные стили — это врожденные функциональные системы, которые определяют индивидуальные различия в том, как люди воспринимают и обрабатывают информацию. Эти стили служат связующим звеном между познанием и личностью, влияя на то, как мы взаимодействуем с окружающим миром. Вместе с тем измерение когнитивных стилей остаётся фрагментированным: большинство инструментов трактует стилевые измерения как биполярные континуумы и опирается на лабораторные сенсорно-перцептивные методики, не учитывающие целостное поведение человека в реальной жизнедеятельности. *Цель.* Проведение психометрической проверки Опросника когнитивно-личностных стилей (CPS-Q), 60-пунктового самоотчётного инструмента, операционализирующего 12 стилевых измерений (полезависимость, полenezависимость, гибкость познавательного контроля, ригидность познавательного контроля, узкий диапазон эквивалентности, широкий диапазон эквивалентности, абстрактная концептуализация, конкретная концептуализация, толерантность к нереалистическому опыту, нетолерантность к нереалистическому опыту, импульсивность, рефлексивность) в качестве независимых униполярных шкал. *Метод.* В исследовании приняли участие 3 331 респондент (возраст 13–60 лет) из различных городов России. Надёжность оценивалась по показателям внутренней согласованности и ретестовой надёжности с интервалом в две недели. Конвергентная валидность проверялась через корреляции с методиками «Включённые фигуры» Г. Уиткина (Embedded Figures Test), «Сравнение похожих рисунков» Дж. Кагана (Matching Familiar Figures Test), тестом словесно-цветовой интерференции Дж. Струпа (Stroop Color-Word Interference Test) и методикой свободной сортировки слов В. Колги. Дискриминантная валидность оценивалась через корреляции с тестом элементарных логических операций (Русалов и Волкова, 2022), а также посредством факторного анализа с показателями формально-динамических свойств индивидуальности (Русалов, 2012), черт характера (Русалов и Манолова, 2003) и мотивации. *Результаты.* CPS-Q продемонстрировал высокую ретестовую надёжность (ρ Спирмена = 0,894–0,982, все $p < 0,001$) и приемлемую внутреннюю согласованность (α Кронбаха = 0,559–0,736). Конвергентная валидность подтверждена значимыми корреляциями с эталонными методиками: полenezависимость с результатами теста «Включённые фигуры» ($\tau = -0,357$, $p < 0,001$); импульсивность со временем первого ответа в тесте Кагана ($\tau = -0,189$, $p = 0,010$); гибкость познавательного контроля с интерференцией Струпа ($\tau = -0,178$, $p = 0,002$). Дискриминантная валидность подтверждена отсутствием значимых корреляций с элементарными логическими операциями (все $\tau < 0,08$, $p > 0,05$), а также факторным анализом, показавшим, что шкалы CPS-Q образуют ортогональный фактор по отношению к показателям темперамента, характера и мотивации. *Заключение.* CPS-Q является надёжным и валидным инструментом для диагностики когнитивных стилей на личностном уровне. Его отличительная особенность, состоящая в измерении каждого стилевого полюса по независимой шкале, соответствует современным данным о том, что стилевые измерения лучше

рассматривать как независимые психологические образования, а не как противоположные полюса одного континуума.

Ключевые слова: CPS-Q, полезависимость, полenezависимость, гибкость познавательного контроля, ригидность познавательного контроля, узкий диапазон эквивалентности, широкий диапазон эквивалентности, абстрактная концептуализация, конкретная концептуализация, толерантность к нереалистическому опыту, нетолерантность к нереалистическому опыту, импульсивность, рефлексивность, когнитивные стили, надёжность, валидность

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Supplementary materials

Опросник когнитивно-личностных стилей (CPS-Q)

Вам предлагается список основных характеристик поведения человека, представленных в виде утверждений. Некоторые характеристики поведения у Вас могут быть более выраженными, другие – менее. Укажите степень выраженности каждой из предъявляемых характеристик. В графе «ответы» поставьте цифру от 1 до 5, которая наиболее точно характеризует Ваше поведение в настоящее время:

- 1 - совсем не выражено,
- 2 - скорее не выражено,
- 3 - выражено,
- 4 - заметно выражено,
- 5 - очень выражено.

Постарайтесь отвечать как можно быстрее, не задерживайтесь на одном вопросе. Хороших или плохих ответов нет.

	УТВЕРЖДЕНИЯ	ответ
1	Покупая одежду, я доверяю советам продавца.	
2	Мне легко переключиться с решения одной проблемы на решение других.	
3	Я часто принимаю решения по первому впечатлению.	
4	Мне нравятся игры с простыми и четкими правилами.	
5	Я готов выслушать мнение другого, даже если оно противоречит моему собственному.	
6	Как правило, я принимаю решения самостоятельно.	
7	Пересказывая события, я опускаю подробности.	
8	Мне трудно подобрать образ к абстрактным словам.	
9	Перед решением задачи я тщательно перепроверяю ее условия.	
10	Я замечаю малейшие изменения ситуации.	
11	Я одинаково хорошо запоминаю как картинки, так и тексты.	
12	Я готов, не раздумывая, включиться в решение любой задачи.	
13	Мой собственный опыт для меня важнее, чем мнение друзей.	
14	Я легко делю людей на хороших и плохих.	
15	Я всегда осторожен в изложении собственного мнения.	
16	По отдельным разрозненным фактам мне легко установить цепь событий.	
17	Люди, которые думают не так, как я, меня сильно раздражают.	
18	Я легко соглашаюсь с мнением друзей.	
19	Я люблю подробно пересказывать содержание фильма.	
20	Я люблю читать как художественную, так и техническую литературу.	
21	Я часто покупаю первую понравившуюся мне вещь, не задумываясь.	
22	Мне трудно работать без четкого задания.	
23	Я люблю получать информацию из разных источников.	
24	Меня интересует смысл, а не детали события.	
25	Я ненавижу искать информацию на разных сайтах.	
26	Я многократно проверяю каждое предположение.	
27	Я легко отделяю главное от второстепенного.	
28	Я предпочитаю устоявшиеся представления.	
29	Рассматривая картину, я обращаю внимание на все детали.	
30	Если мне не удастся найти информацию на одном сайте, я ищу ее на других сайтах.	
31	Я часто высказываю суждения, не разобравшись в сути дела.	
32	Мне нравится четкий план и порядок.	
33	Я не возражаю выслушать суждения других людей.	
34	Я привык открыто выражать свое мнение.	
35	Меня интересует картина в целом, а не ее детали.	
36	Мне трудно переключаться с одного вида деятельности на другой.	
37	Я приступаю к решению задачи, тщательно продумав ход ее решения.	
38	Меня всегда интересует суть дела.	

39	Я избегаю ТВ-программы, дающие разную интерпретацию событиям.	
440	Принимая сложное решение, я советуюсь с друзьями.	
41	Для нового задания мне требуется подробная инструкция.	
42	Я часто берусь за дело, не задумываясь, смогу ли его выполнить.	
43	Я часто нахожу необычные, нестандартные решения задачи.	
44	Я не рассматриваю другие методы решения задач, если у меня уже есть готовый.	
45	Я легко могу сделать краткий вывод из прочитанного.	
46	Я общаюсь только с людьми, мнение которых совпадает с моим.	
47	Я часто обращаюсь за советом к другим людям.	
48	Мне нравится описывать событие во всех подробностях.	
49	Мне легко переключаться с одного вида деятельности на другой.	
50	Пока я не закончу одно дело, мне трудно приступить к выполнению другого.	
51	Я человек самостоятельный.	
52	Я открыт к новым впечатлениям и новому опыту.	
53	Я - человек конкретный и не люблю пустых рассуждений.	
54	Перед принятием решения я тщательно перепроверяю все факты.	
55	В любой ситуации я ищу помощи у других людей.	
56	Я предпочитаю задания, к которым прилагаются четкие инструкции.	
57	Подробные инструкции раздражают меня.	
58	Я опираюсь преимущественно на собственный опыт и знания.	
59	В сложных задачах я предлагаю несколько вариантов решений.	
60	Я не сторонник нововведений, мне нравится, как я живу.	

Ключи

Шкалы	Пункты
Полезависимость	1, 18, 40, 47, 55
Полезависимость	6, 13, 34, 51, 58
Узкий диапазон эквивалентности	10, 19, 29, 41, 48
Широкий диапазон эквивалентности	7, 14, 24, 35, 57
Гибкость	2, 11, 20, 30, 49
Ригидность	8, 25, 36, 44, 50
Импульсивность	3, 12, 21, 31, 42
Рефлексивность	9, 15, 26, 37, 54
Конкретная концептуализация	4, 22, 32, 53, 56
Абстрактная концептуализация	16, 27, 38, 45, 59
Толерантность к нереалистическому опыту	5, 23, 33, 43, 52
Нетолерантность к нереалистическому опыту	17, 28, 39, 46, 60

Пункты, выделенные жирным шрифтом, составляют краткий вариант опросника