

TECHNICAL MANUAL & USER GUIDE

FRENCH LANGUAGE TEST

This manual has been created by the psychologists from the Science and Innovation department of Central Test.

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1. Introduction

Effective Communication skills are an essential requirement for an employee in any organization. An individual who can express his/her views clearly and concisely in written and oral form is considered to be an undoubted asset to the organization. Certain jobs in the print media industry and other profiles such as Sales, Managerial Positions, Content Writing, etc. require superior knowledge of the French language wherein the individual needs to be clear and concise in the way he/she communicates.

Therefore, the **FRENCH LANGUAGE TEST** was created to support companies in recruiting decisions, and especially to examine the French language skills of non-native speakers.

1.1. What does the FRENCH LANGUAGE TEST measure?

This test is designed to assess the key aspects of the French language that are most significant and instrumental in a corporate setting which are Vocabulary, Grammar and Spelling. The focus here is on communication i.e. getting the message across in the appropriate form and receiving messages in their intended sense.

1.2. What does the test taker/test administrator get?

- A summary of candidate's overall performance including number of correct responses and overall language proficiency on a scale of zero to ten.
- Personalized interpretation of overall score.
- Graphical representation of scores on each of the three factors: Spelling, Vocabulary and Grammar.
- Detailed comments on each factor score.

Suitability of the test

The **FRENCH LANGUAGE TEST** provides a norm based objective assessment of the test-taker's French language skills. This test is recommended for recruitment of non-native speakers. Due to its level of difficulty, it is less suitable for beginners.

This test is especially reserved for our professional clients like HR departments of organizations, schools and colleges and trainers. This test is not available for general public.

Format of the test

- 60 Multiple Choice Questions
- Time: 30 minutes
- Administration: Online

This test is recommended for supervised administration but if the test has to be taken in a non-supervised remote administration mode, appropriate care should be taken by the test administrator to minimize the possibility of getting external help (dictionary, book or expert person) on the part of the test-taker.

Factor descriptions

The **FRENCH LANGUAGE TEST** is designed in such a way as to measure three important components i.e. Vocabulary, Grammar and Spelling. These three factors form the crux and prove to be advantageous in language development.

Vocabulary is a set of words belonging to a specific language. It refers to the words one must know in order to understand and communicate effectively in that language.

Grammar is the set of rules governing a particular language such as in word usage, sentence construction etc. Awareness of French grammar is important as it enhances both reading and writing skills, and facilitates effective communication.

Spelling is the correct way of writing words. The rules of spelling are set by use and tradition and to have a high level of spelling you need to know and apply these rules.

2. Psychometric Properties

2.1. Sample descriptives

At *Central Test*, assessments are continuously revised in order to ensure their reliability and validity over time. Validation analyses were conducted on a sample of 166 participants between February and July 2016. The average age is 38.02 years with a standard deviation of 48.98 years (minimum age: 18 years and maximum 79 years).

Table 1. Sample Descriptives based on Gender.

Gender	Percentage (%)
Male	32.00
Female	68.00

2.2. Descriptive statistics

Factor	Median	Mean	Std. Error	Standard Deviation
Overall	6.20	6.07	0.17	2.25
Spelling	5.50	5.63	0.18	2.46
Grammar	6.50	6.44	0.19	2.41
Vocabulary	6.50	6.13	0.19	2.41

Mean and standard deviation are two very important statistics as they help understand a candidate's position in the population of reference.

Standard error of mean provides an estimate of error variance likely to be found in the population. The lesser the standard error in comparison to mean score, the greater the accuracy of the test to assess that particular characteristic.

Mean score is normally a mathematical average of all the observed scores. It provides a tentative assessment as to what extent the data is representative of the theoretical assumptions. Mathematically it tells as to which point on the scale most of the scores are falling around. In this test the factors are scored on a 10-point scale ranging from 0 to 10. Ideally, the mean score should fall between 4.5 and 5.5. However, from the above tabulated scores the mean score of Grammar is falling slightly above the ideal score range.

Standard deviation is the mathematical average of all the individual deviation scores. It provides information as to what extent the scores are dispersed from the mean score.

Table 2. Item Sensitivities.

% correct answers		% correct answers	
Q1	79%	Q29	83%
Q2	72%	Q30	54%
Q3	78%	Q31	84%
Q4	67%	Q32	67%
Q5	83%	Q33	64%
Q6	70%	Q34	59%
Q7	56%	Q35	44%
Q8	70%	Q36	43%
Q9	65%	Q37	32%
Q10	53%	Q38	78%
Q11	62%	Q39	73%
Q12	66%	Q40	64%
Q13	72%	Q41	71%
Q14	75%	Q42	55%
Q15	62%	Q43	90%
Q16	61%	Q44	72%
Q17	54%	Q45	64%
Q18	50%	Q46	84%
Q19	60%	Q47	45%
Q20	33%	Q48	54%
Q21	76%	Q49	66%
Q22	64%	Q50	34%
Q23	33%	Q51	51%
Q24	56%	Q52	47%
Q25	72%	Q53	81%
Q26	73%	Q54	57%
Q27	61%	Q55	74%
Q28	77%	Q56	46%

% correct answers	
Q57	37%
Q58	49%
Q59	67%
Q60	55%

2.3. Reliability

Reliability measures the extent to which an assessment is free from error and the degree to which items on a scale measure the same construct. For example, all of the items that measure Grammar are coherent and reflect the definition of the factor. A primary concern, when developing and using assessments, is the extent to which random measurement errors influence test performance. If a test is unreliable it is impossible for it to be valid, as accuracy of results (validity) depends on the consistency (reliability) with which the same results are produced. Reliability enables test users to be confident that the results accurately reflect the test taker's attitude, aptitude, or behaviour. In the context of a language assessment, reliability helps assure test users that the scores obtained reflects the language ability of a job candidate or employee. When an assessment has high reliability it also helps to guard against biases that may be caused from errors in human judgement during the recruitment and selection process.

2.3.1. Internal reliability

Internal, or inter-item, reliability measures the extent to which items on a scale are internally consistent and all measure the same construct. Internal reliability is measured by Cronbach's Alpha (α), which computes the average of all possible inter-item correlations by generating item factor loadings, without relying on a single indicator of reliability which may contain large amounts of error. Cronbach's Alpha ranges from 0 to 1 and has a recommended coefficient of .7, with 1 being total reliability (Nunnally, 1978); values greater than .9 are considered excellent, .7 to .9 is considered good, values of .6 to .7 are acceptable, .5 to .6 is poor, and values of less than .5 is unacceptable.

Table 3. Reliability Coefficient for All Factors.

Factor	Reliability
Overall	0.95
Spelling	0.86
Grammar	0.95
Vocabulary	0.87

Cronbach's Alpha was computed for the overall test as well as for each factor. All factors showed good internal consistency, all alphas being above .74 (see Table). The factor alphas of the assessment ranged from .88 to .94, therefore the internal consistency of the factors is excellent. The **FRENCH LANGUAGE TEST** had an overall alpha of .97 indicating that it is very reliable.

2.3.2. Split-half reliability

Split-half reliability is another measurement of reliability. In split-half reliability, the test is randomly divided and compared; by doing so this helps determine if, and how well, all parts of the test contribute to the measurement of the construct.

An advantage of this approach is that it only requires a single test administration. Split-half reliability is a correlation between the total scores of the two halves, and so each individual will have two scores, one for each half. Split-half reliability is calculated using the Spearman Brown formula.

The **FRENCH LANGUAGE TEST** scale as a whole appears to have an excellent internal consistency, with a Spearman-Brown coefficient of 9.03.

2.4. Validity

Validity is the extent to which a test measures what it is supposed to measure and is a judgment made on the basis of observation and statistical indicators. It is important for a test to be reliable at first in order for it to be valid. Validity may be explored and determined through various means:

Face validity

Face validity refers to the operationalization of the concept. It is to see whether "on its face" the test items seem like a good translation of the construct. This is probably the weakest way to try to demonstrate validity as it is highly subjective in nature.

To improve the quality of face validity assessment, and make it more systematic and objective in nature we send the test-items to our panel of experts for their review and on the basis of their feedback items showing consistent agreement are finally retained in the test.

Content validity

Content validity refers to the extent the contents of the test (factor descriptions and items) present true operationalization of the construct. This is again done by the panel of the experts.

Construct validity

Construct validity measures the degree to which a test measures what it claims to measure. Construct validity is essential to the overall validity (perceived and actual) of a scale. When a construct is not clearly defined, direct inferences are unable to be made between construct and other behaviours (Cronbach & Meehl, 1955). Often there is no accepted unit of measurement for constructs and even fairly well-known ones, such as intelligence, are open to debate. The construct validity of a scale may therefore be threatened if a construct is: a) either too broad or too narrow; b) mislabelled as a specific dimension of or component within the construct; c) confounded by other related constructs that mask the effects of the main construct; or d) developed with insufficient research.

Two approaches were used to establish construct validity in the **FRENCH LANGUAGE TEST**: subscale inter-correlations and confirmatory factor analysis.

2.4.1 Inter-factor correlations

Correlations were run between the **FRENCH LANGUAGE TEST** factors to explore the relationship between them.

Table 4. Inter-factor Correlations.

	Reading	Vocabulary	Grammar	Overall
Reading	1.00	0.84	0.77	0.93
Vocabulary	0.84	1.00	0.82	0.95
Grammar	0.77	0.82	1.00	0.92
Overall	0.93	0.95	0.92	1.00

* All correlations are significant at 0.05 level

As illustrated in the table above, there are strong correlations between the **FRENCH LANGUAGE TEST** factors ranging from .70 to .94. Spelling, Vocabulary, Grammar and the Overall test outcome all highly correlate with each other. This implies that if a respondent scores highly on one of these factors then it is likely that they will also score highly on the other two, and vice versa.

2.4.2. Confirmatory Factor Analysis (CFA)

To investigate the theoretical constructs or factors that may be represented by a set of items as well as the quality of individual items, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) are usually performed. EFA and CFA are both forms of factor analysis. Factor analysis analyses the factors (hypothetical constructs) of an assessment which are developed to interpret clusters of strong inter-correlations between items in a correlation matrix. Factor analysis aims to simplify a range of items into a few common variables; these can be identified by extracting and grouping items which have high correlations on a factor to reveal common variables.

The goal of EFA is to identify and maximise the importance of each dimension (percentage of variance), while CFA is a hypothesis driven approach that determines the degree to which observed indicators reflect the underlying construct by specifying the number of dimensions expected and then classifying the value of expected relationships (Schreiber, Nora, Stage, Barlow, & King, 2006). In doing so, CFA provides a numerical estimate of the degree to which the proposed factor structure is an accurate fit of the phenomenon in the real world. CFA therefore investigated the degree to which measures of a construct are consistent with established understanding and theoretical arguments for that construct.

EFA and CFA confirmed that one overall factor was sufficient. All item loadings ranged from 0.50 to 0.94 on that one factor on CFA.

2.5. Socio-cultural considerations

With an objective of examining the socio-cultural influences on the scores of the German Language Test, a comparative statistical analysis was conducted. Comparing test scores among different socio-cultural groups was done for gender and age:

Gender differences

Independent sample t-test on mean was carried out to see whether there is any significant difference between men and women on the dimensions of **FRENCH LANGUAGE TEST**.

Table 5. T-tests for Factors by Gender.

Factor	Male	Female	p-value t-test
Overall	6.10	6.05	0.9
Spelling	5.74	5.58	0.7
Grammar	6.20	6.56	0.4
Vocabulary	6.35	6.02	0.4

The means of both men and women were compared to see who performed better on the three factors and the overall test. After comparing the means using the t-test analysis it was noted that no significant difference was found between men and women on the three factors. This denotes that both men and women performed equally on the German Language Test.

3. Norms

Norms help in the comparison of an individual's score with the scores of others who have completed the same assessment. Norm groups enable us to compare an individual's score to those of a similar population.

Table 6. French Language Level by Factor.

		Beginner (n=125)	Intermediate (n=22)	Fluent (n=34)	Bilingual/Native (n=6)
Spelling	<i>Mean</i>	5.06	6.48	8.58	8.08
	<i>SD</i>	2.22	1.91	0.95	1.46
	<i>Median</i>	5.00	6.50	8.50	8.25
Grammar	<i>Mean</i>	5.79	7.66	9.23	9.50
	<i>SD</i>	2.37	1.63	0.56	0.45
	<i>Median</i>	6.00	7.75	9.00	9.50
Vocabulary	<i>Mean</i>	5.50	7.36	8.58	9.25
	<i>SD</i>	2.36	1.45	0.81	0.42
	<i>Median</i>	5.50	7.50	9.00	9.50
Overall	<i>Mean</i>	5.45	7.16	8.80	8.85
	<i>SD</i>	2.15	1.33	0.68	0.75
	<i>Median</i>	5.30	7.00	8.80	9.00

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