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FACTORS AFFECTING THE PERSONALITY OF UPPER PRIMARY SCHOOL CHILDREN

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Abstract

The present study examined factors associated with the personality of upper primary school children, with specific reference to the Big Five personality framework. The study was situated in the field of education and psychology and employed a descriptive survey approach with a causal-comparative perspective. For the item-analysis and preliminary reliability stage of the researcher-developed personality scale, data were collected from 370 Grade 8 students studying in Gujarati-medium upper primary schools. The sample comprised 201 boys and 169 girls. The instrument was developed with reference to the Big Five personality dimensions—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—and contained 50 final items. Item discrimination was examined using the upper and lower 27% groups and independent-samples t values, while item-total relationships were examined through Pearson's correlation coefficient. The findings showed that most items demonstrated meaningful discrimination and positive item-total relationships. However, the reported p values for Items 3, 8, 9, 20, 22, and 35 were greater than .05 and therefore should not be described as statistically significant without verification. The results provide useful evidence for refining and documenting the psychometric quality of the researcher-developed instrument.

Keywords: personality, Big Five personality traits, upper primary students, item analysis, t test, item-total correlation, education

1. Introduction

Personality represents a relatively organized pattern of thoughts, feelings, attitudes, and behaviours through which an individual responds to people and situations. The development of personality during childhood and early adolescence is influenced by interacting personal, family, school, and social experiences. Upper primary education is therefore an important period for understanding individual differences in children's personality characteristics.

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The Big Five model provides an empirically established framework for describing personality through five broad dimensions: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. The framework has been widely used in personality research because it offers a comprehensive taxonomy for organizing individual differences (John et al., 2008; John & Soto, 2021).

2. Statement of the Problem

The problem investigated in the present study was stated as: **"A Study of Factors Affecting the Personality of Upper Primary School Children."**

3. Objectives of the Study

To develop a researcher-made personality scale for upper primary school children based on the Big Five personality framework.

To examine the discriminatory power of the items of the researcher-developed scale.

To examine the relationship of each item with the total score through item-total correlation.

To identify items requiring further verification or refinement before final use in the broader research study.

4. Method

4.1 Research Design

The study followed a descriptive research design using the survey method. A causal-comparative perspective was also incorporated in the broader research methodology to examine differences associated with selected background variables.

4.2 Population and Sample

The population comprised Grade 8 students studying in Gujarati-medium upper primary schools in Surat district, including schools under the Surat Municipal Corporation. For the present item-analysis stage, four schools were selected and data were obtained from 370 students.

Group	N	Percentage
Boys	201	54.32%
Girls	169	45.68%
Total	370	100.00%

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4.3 Research Tools

A researcher-developed personality scale was constructed on the basis of the Big Five personality framework and relevant theoretical and measurement literature. The final scale considered for item analysis contained 50 items. The response format used a three-point scale. For positively worded items, Agree, Neutral, and Disagree were scored 1, 2, and 3 respectively; for negatively worded items, reverse scoring was applied.

4.4 Item Analysis Procedure

For item discrimination, the upper 27% and lower 27% groups were formed. One hundred respondents were used in each extreme group for the item-analysis procedure. Independent-samples t values were calculated to examine differences between the two groups. Pearson's item-total correlation was also calculated to examine the relationship between each item and the total test score.

5. Results

Table 1 presents the reported mean, t value, item-total correlation (r), and p value for each of the 50 items.

Item	Mean	t	r	p
I1	2.795	5.346	.296	.000
I2	2.235	31.639	.736	.000
I3	2.903	1.601	.158	.111
I4	2.495	8.162	.422	.000
I5	2.684	4.447	.271	.000
I6	2.186	3.501	.205	.000
I7	2.630	4.579	.271	.000
I8	2.246	0.849	.029	.397
I9	2.259	0.886	.079	.377
I10	2.032	4.463	.283	.000
I11	2.676	7.058	.355	.000
I12	2.670	6.058	.319	.000
I13	2.470	9.750	.415	.000
I14	2.322	4.069	.258	.000

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I15	2.562	6.212	.334	.000
I16	2.765	5.266	.346	.000
I17	2.016	48.244	.769	.000
I18	2.681	7.547	.398	.000
I19	2.116	43.370	.766	.000
I20	2.565	0.722	.084	.471
I21	2.719	6.229	.334	.000
I22	2.076	0.365	.034	.716
I23	2.341	7.668	.415	.000
I24	2.759	3.744	.188	.000
I25	2.465	2.668	.188	.008
I26	2.651	6.643	.354	.000
I27	2.159	11.741	.505	.000
I28	2.024	99.000	.791	.000
I29	1.938	2.335	.130	.021
I30	2.689	6.651	.332	.000
I31	1.614	3.562	.238	.000
I32	2.738	6.506	.340	.000
I33	2.030	10.290	.478	.000
I34	2.011	51.688	.765	.000
I35	2.646	0.542	.069	.589
I36	2.581	5.381	.297	.000
I37	2.497	7.540	.399	.000
I38	2.430	5.098	.277	.000
I39	2.549	7.239	.358	.000
I40	2.532	3.499	.195	.000
I41	2.373	4.576	.264	.000
I42	2.051	27.633	.701	.000
I43	2.062	9.095	.408	.000

GYANBODH
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I44	2.381	6.302	.328	.000
I45	1.900	31.111	.730	.000
I46	1.900	7.486	.346	.000
I47	1.789	4.103	.202	.000
I48	2.162	4.209	.219	.000
I49	2.078	7.270	.362	.000
I50	1.649	2.114	.130	.036

Note. p = significance probability; r = item-total correlation. Values are reproduced from the reported item-analysis results.

6. Interpretation of Results

The item-analysis results indicate substantial variation in the discriminatory power and item-total relationships of the 50 items. Many items have t values that indicate meaningful differences between the upper and lower groups and have positive item-total correlations. Particularly strong item-total relationships were observed for Items 2, 17, 19, 28, 34, 42, and 45.

Items 3, 8, 9, 20, 22, and 35 require particular attention. Their reported p values (.111, .397, .377, .471, .716, and .589, respectively) exceed .05. Therefore, these items cannot be interpreted as statistically significant on the basis of the reported values. Item 8 also has a very low item-total correlation (r = .029), while Items 9, 20, 22, and 35 likewise show weak item-total relationships. These items should be reviewed for wording, construct alignment, reverse scoring, response distribution, or data-entry accuracy before finalizing the instrument.

Items 25, 29, and 50 have statistically significant p values but comparatively modest item-total correlations. Such items may warrant substantive review even when their statistical test is significant.

7. Discussion

The findings broadly support the usefulness of item discrimination and item-total correlation as complementary procedures in the development of a researcher-made personality scale. A strong item should differentiate between respondents with higher and lower overall scores and should also demonstrate an appropriate relationship with the construct represented by the total score.

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Because the present analysis is an item-analysis stage based on 370 students, its findings should be distinguished from the larger final substantive dataset of 1,268 respondents used in the broader thesis. The 370-student dataset should therefore be reported specifically as the sample used for preliminary item analysis and scale refinement.

8. Major Findings

The item-analysis sample consisted of 370 Grade 8 students, including 201 boys and 169 girls.

The researcher-developed instrument contained 50 items based on the Big Five personality framework.

Most items showed positive item-total correlations and meaningful discrimination.

Items 2, 17, 19, 28, 34, 42, and 45 showed particularly strong item-total correlations.

Items 3, 8, 9, 20, 22, and 35 had reported p values greater than .05 and require verification or revision.

Items 8, 9, 20, 22, and 35 also showed weak item-total correlations.

The findings provide a basis for further psychometric refinement before use in the final study.

9. Educational Implications

Teachers can use structured personality assessment to understand individual differences among upper primary students.

Schools may use evidence-based personality information to support student guidance, classroom participation, and socio-emotional development.

Teacher educators can incorporate personality development activities into pre-service and in-service teacher education.

Researchers should use systematic item analysis and reliability and validity evidence before adopting researcher-made scales.

Items showing weak psychometric performance should be reviewed rather than retained solely on the basis of convenience.

10. Limitations

The present article focuses on the item-analysis stage of the researcher-developed scale and therefore does not constitute the complete analysis of the broader 1,268-student thesis dataset. In addition, the reported item-analysis table contains several values that require

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verification against the original statistical output before final journal submission. Conclusions should therefore be interpreted within the scope of the available item-analysis evidence.

11. Conclusion

The study provides preliminary psychometric evidence for a researcher-developed Big Five personality scale intended for upper primary school children. The analysis demonstrates that most items possess useful discriminatory and item-total characteristics. At the same time, the results identify a small group of items requiring careful review. A rigorous finalization process should combine statistical findings with theoretical relevance, expert judgment, reliability evidence, and validity evidence. Such a process can strengthen the quality of the instrument and its subsequent use in research on factors affecting the personality of upper primary school children.

References

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), Handbook of personality: Theory and research (3rd ed., pp. 114–158). Guilford Press.

John, O. P., & Soto, C. J. (2021). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), Handbook of personality: Theory and research (4th ed.). Guilford Press.

Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Psychological Assessment Resources.

Desai, H. G., & Desai, K. G. (1997). Research methodology and educational measurement.

Williamson, J. M. (1998). Educational and psychological measurement principles.

Hakim, R. L., & Asthana, H. S. (1977). Psychological measurement and assessment.

Shukla, S. (2014). Research methodology and educational research.