

Wechsler adult intelligence scale forth edition



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INTRODUCTION

This evaluation summary is written in review of Wechsler Adult Intelligence Scale-Forth Edition (WAIS-IV), an individually administered test of intelligence widely used internationally assessing the cognitive ability of adolescents and adults ages 16 years 0 months through 90 years 11 months. WAIS-IV was released in year 2008 as a revision on its immediate predecessor WAIS-III, which was developed 11 years before WAIS-IV and preceded by 4 older editions back dated since 1939. To date, numerous foreign-country adaptations are available in the market, including . The interest in exploring the application issue with examination of various aspects of the tools will be discussed from a perspective of a Singapore-based psychologist. Direction of the discussions is established to review on the purpose, psychometric properties as well as local/cultural appropriateness of the tool supported by concerns on local clients.

TEST BACKGROUND

The WAIS-IV seeks to measure general intelligence through the administration of numerous subtests, each of which is an indicator and estimate of intelligence. It provides a composite of intellectual functioning using 15 separate subtests that are combined into four cognitive skill categories as follow:

Verbal Comprehension

Similarities

Vocabulary

Information

Comprehension (Supplemental)

Perceptual Reasoning

Block Design

Matrix Reasoning

Visual Puzzles

Picture Completion (Supplemental)

Figure Weights (Supplemental)

Working Memory Scale

Digit Span

Arithmetic

Letter-Number Sequencing (Supplemental)

Processing Speed

Symbol Search

Coding

Cancellation (Supplemental).

The 15 subtests are administered in a prescribed order, which require average of 69 minutes to complete. Administration guidelines and scoring

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rules are provided in the manuals. The three new subtests are Visual Puzzles, Figure Weights and Cancellation. Review on subtests. However, Figure Weights, Letter-Number Sequencing Cancellation are not available for 70-90-year-olds. Neither the administration and scoring manual nor the technical and interpretation manual indicate why this age group is excluded from these three subtests.

PURPOSE

Theory

WAIS-IV and other scales developed by Weschler measure ' general intelligence' proposed by Cattel's two-factor theory, which composites fluid and crystallized intelligence. Fluid ability is thought to be biologically driven and represents general ability to reason on novel tasks and unfamiliar contexts, whereas crystallized ability represents reasoning and problem solving related to task-specific knowledge. WAIS-IV measures fluid intelligence on the performance scale and crystallized intelligence on the verbal scale. The overall IQ score (Full-Scale IQ or FSIQ) is based on a combination of these two scales. There were many theories proposed after the development and implementation of WAIS tests, including xxx. Cattell-Horn-Carroll (CHC) theory in year 2000. Weiss and colleagues (Weiss, 2010) challenge the belief that the intellectual growth and development of individuals represents the unfolding of a predominantly fixed trait only marginally influenced by the nature and quality of environmental opportunities and experiences. Review with CHC has found:

Are all these skills fixed or malleable due to instruction or social factors? The impact on interpretation, educational policy as intervention and how does the society determine achievement and success.

Time consuming:

Test performance is also affected by attention span, motivational level

Academic intelligence:

It is highly correlated to cognitive abilities in typical school or work settings.

Multiple Intelligence Theory proposed by xxx in which social, kinesthetic, interpersonal and emotional intelligence are not assessed by WAIS-IV.

Nevertheless it has been reviewed as having high construct validity.

PSYCHOMETRIC

REPORTED Reliability, validity and concerns from gathered reviews. any critique on manuals and articles discussing the relevant topic. Talk about the update of its validity to measure the alternative theories such as multiple intelligence aka construct validity. This test was revised from the previous edition WAIS-III.

Construct validity:

Factor analyses supported four factor model based on Verbal

Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed subtests.

Criterion-validity:

WAIS-III, WISC-IV and Brown Attention Deficit Disorder Test (Brown ADD).

Convergent validity between the first two tests and negatively correlated with Brown ADD, which shows discriminant validity evidence.

DISCUSSION ON SUBTESTS**Verbal Comprehension Subtest**

VOCABULARY The verbal IQ test scale analyses your vocabulary, arithmetic, information, comprehension and digit span capabilities and abstract conceptualization. The IQ test results heavily depend upon your practice, skills, education, culture, socio-economic conditions and the current state of your mind. The Wechsler IQ test generally assumes that your native language is English. However, if English is not your native language or you differ from others in culture, your IQ may vary considerably. Education, experience and life-style also contribute for better scoring in this sub-test. Standard and differentiation of local English and, usage of terms may vary.

COMPREHENSION The WAIS-IV test measures your social awareness and common-sense with this sub-test. It focuses upon your social sense and your conception of cultural values. When such sub-test is prepared for the USA citizens, others may get low IQ scoring. Secondly, no candidate shall like to answer in a fashion that his society rejects. For example, you are asked about your reaction on finding a bag full of dollars. You may need that bag in your heart but you shall like to answer as the society demands. Example,

INFORMATION The questions originate from a particular culture to know your general knowledge attainment. General knowledge such as ' who is the first

president of the United States', " what is the meaning of" xxx". How was it developed? Possible to replace? Relevance of the subtest, making it optional?

SIMILARITIES IN DISSIMILAR OBJECTS This is also a culturally influenced test.

NORMING PROCEDURE

The standardization sample involved least 2200 subjects across variables of age, sex, race/ethnicity, education level and geographic region that are representative of US population.

RECENCY

Close match to October 2005 U. S. Census

NORM Demographic in SG

An individual's intelligence is traditionally measured relative to a sample of people the same age that is representative of a national population. This helps psychologists answer the question of how a particular person compares to other people across the nation in which that individual lives and competes (Weiss et. al, 2010). WAIS-IV adopted by the psychological services in Singapore is the US-norm version, signifies that the test is normed and standardised according to the population in the United States. While the U. S. has population of 310, 880, 383 is almost 80 times bigger than that of Singapore with 4, 495, 731, it may have considerably significant variances quantitatively and most importantly qualitatively. Singapore is a multi-racial and multi-cultural country in South East Asia, known for its international position in terms of business and residence. There were 3. 77 million Singapore residents, comprising 3. 23 million Singapore citizens and 0. 54

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million permanent residents, and 1. 31 million non-resident foreigners as at year 2010. That speaking, it is estimated that almost 2 out of 3 million people reside in this island are foreigners, including converted citizens. Although the U. S. is comparably abundant with multi-racial or multi-national population, the composition of predominant and minority groups as well as regional difference with its pertaining demographic sub-cultures may reflect a different norm with much more depths and breadths to be explored across the continent in a small island country.

TEST Development and Reviews

The testing paradigm itself is a stimulus response set that could be considered a social-communication style specific to Western European cultures (Kayser, 1989) how do Singaporeans respond? They are limited to comparison between English speaking nations that are westernized, industrialized and share common historical roots. Is Singapore one of them? To what extent is the ex-British colonial and relatively young colonial country different from those countries? To what extent is it different from other Asian countries?

ABOUT SINGAPORE

DEMOGRAPHIC

No matter where a person lives, no person lives in the country ' as a whole'. People live in neighbourhoods or communities that can vary along simple dimensions such as size, and along with more complex dimensions such that communities may reflect unique characteristics that can impact the development and maintenance of cognitive abilities in many ways. There may be a contextual interpretation for those who want to measure how the <https://assignbuster.com/wechsler-adult-intelligence-scale-forth-edition/>

person being tested compares to other people in the same community or culture other than intelligence being measured (Weiss, 2010).

Further study of the society will lead to awareness of the need to analyse the differences underlie races and nationalities, namely language and culture, as the two major factors that are highly correlated to other factors such as educational level, age and Social-Economic Status (SES). All these are believe to potentially impact the variance of norm as well as test scores in comparison to the US norm.

LANGUAGE

Language is one of the parameters along which cultures vary. In Singapore, 4 official languages are recognised: English, Malay, Chinese (Mandarin), and Tamil. These official languages, along with a multitude of other languages, reflect Singapore's multiracial, multicultural and multilingual nature. As of 2009, there are more than 20 languages identified as being spoken in Singapore (David, Maya Esther (2008). It is justifiable to administer the measure in view of the the importance of the examinee to perform test tasks in the language that will be will be used in the workplace (Foxcroft, 2006) . When intelligence or achievement tests are concerned, English as the predominant official language and medium of instruction in schools and cooperate settings, WAIS-IV is to be administered In English.. Although the official language used in the local educational system is English, students are to learn their mother tongues as well as a third language upon request.

Foreigners

The huge population of non-English speaking foreigners in Singapore offers new challenges. 36% of the population in Singapore. This significant group, if included in the sampling procedure, consists of nationalities from China, India, Malaysia, The Phillipines, Myanmar, Europeans and so on. For foreigners, speaking mother tongue could be the more efficient language albeit their ability if they are able to speak English as the second language (Department of Statistics, Ministry of Trade & Industry, Republic of Singapore. 2010). This may also include locally educated residents whom they received pre-college education in their home countries. Basic concepts used in the test items may not be unfamiliar to them but at the same time not natural or heuristic when mental/intellectual processing is involved. For example, Digit Span Subtest, Arithmetic test is the only factor found variant. If one counts in mother tongue and have to remember English alphabets (check out the test), the dual xxx may require much mental effort to process (retain, retrieve and output). For locals and foreigners who do not speak English, administration of the test may not gather valid data. For examinees that learn certain concepts in mother tongue, they may have to relate and translate that to English. Depending on their proficiency level, which pertains to the richness of vocabulary, performance may also vary according to the accuracy of this 'transfer' of knowledge. In the US, evidence from studies of adults suggests that amount of US educational experience may explain significant variance in WAIS-III scores of immigrants (Harris, Tulskey, & Schultheis, 2003)

Processing time, which test say Digit Span. Short term memory, registry and coding using mother tongue. Role of language in taking test and expression of 'observed intelligence'. Vocab, comprehension Test, Singaporean English, colloquial English and standard of English as compare to 'mainstream' English Speaking countries like US, UK. How does it affect? Understanding of instructions, items and expressing responds. For example.

WISC-IV English proficiency level

reason of migration have the potential to impact the acquisition of normative data and the inference derived from the use of psychological instruments.

Other confounds such as age of immigration, acculturation (Marin & Marin, 1991), and proficiency in a second language may be difficult to measure accurately but may synergically interact with demographic variables known to influence test performance (c. f., Heaton, Grant & Matthews, 1986).

Continuum of limited English proficient on one extreme to balanced bilingual on the other extreme. Adults who make up a specific ethnic group or culture may vary considerably in their English-language proficiency. In developing norms for a measure such as the WISC or WAIS, it is common practice to exclude individuals from the standardization sample who are not proficient in the English language, although those who speak English as a second language may be included. Communicative and cognitive proficiency.

Children or adult acquiring skills in English may not possess sufficient proficiency to effectively perform on a more demanding, context-reduced IQ tests. A study of non-native English-speaking adults who participated in the WAIS-III standardization illustrates the concerns and challenges. The degree of proficiency can vary widely among individuals with minority group status.

The broad terms are often viewed as representing homogeneities and consistencies among individuals that will somehow ensure the integrity of data collection and score interpretation.

Colloquial English/English as second language

Use of colloquial or archaic language in test items can lead to misunderstanding and miscommunication by examinees, which may ultimately influence score negatively (Nell, 1999). Examinees assessed in a language other than that spoken at home performed significantly lower level than those who were assessed in their mother tongue. Language usage and reading ability can significantly impact on test scores when measures are administered in languages or with cultures other than those for which the test has been standardised.

Conclusion

Correlation between Ethnic groups, Educational level, English proficiency

Various cultural and language groups could best be explained in terms of differences in the levels of education and the quality of the education received rather than in terms of English proficiency. (South Africa, is it otherwise in Singapore?) different racial ethnic backgrounds have differing levels of opportunity for cognitive growth and development. All adults were once children, review the demographic difference 30 years ago and today. How to access the elderies. With younger generations obtaining higher scores and while the reasons for these changes are unknown, they are typically attributed to societal improvements in health, nutrition and education (Flynn, 1984, 1987; Flynn & Weiss, 2007). At some point in the

future psychological researchers will most certainly cease using racial/ethnic status groupings, because of the increasing fluidity of racial and ethnic boundaries as well as the wide variability of culture and language within racial and ethnic groups. (Weiss, 2010).

Suggestion

Explore whether separate norms should have been developed for different language and cultural group combination. How possible is it? Can Singapore culture be represented as a group? How significant the differences are? Full or partial translation?

David, Maya Esther (2008). " Language Policies Impact on Language Maintenance and Teaching Focus on Malaysia Singapore and The Philippines" (PDF). University of Malaya Angel David Malaysia.

^ " Population Trends 2009" (PDF). Department of Statistics, Ministry of Trade & Industry, Republic of Singapore. 2010. Retrieved 2010-10-13.