

## Translation of Eysenck Personality Questionnaire-Revised (EPQ-R) in Ibibio language

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### Abstract

This study focused on the translation and cross-validation of the Eysenck Personality Questionnaire-Revised (EPQ-R) into the Ibibio language to enhance its cultural relevance for psychological assessments in Nigeria. A rigorous forward-backward translation process was employed, involving nine experts including bilingual translators and psychologists, to ensure linguistic and conceptual equivalence. The validation phase used a cross-sectional survey design in Uyo, Akwa Ibom State, with 399 participants purposively sampled for being bilingual in English and Ibibio, residing in Uyo Metropolis, and mentally stable. Participants included students (34.6%), civil servants (32.1%), and the general population (33.3%), with ages ranging from 18 to 65 years ( $M = 37$ ). Instruments administered were the Ibibio-translated EPQ-R, the Life Orientation Test-Revised (LOT-R), and the Kessler Psychological Distress Scale. Psychometric evaluation revealed robust indices of reliability and validity. Cronbach's alpha values for the major scales were Extraversion ( $\alpha = 0.86$ ), Neuroticism ( $\alpha = 0.88$ ), and Psychoticism ( $\alpha = 0.65$ ), while the Lie scale yielded 0.64. Content validity was confirmed by clinical psychology experts using a 5-point Likert scale. Convergent validity was established through correlations with the Kessler Psychological Distress Scale, while divergent validity was supported by its relationship with the LOT-R. Factor analysis further confirmed the retention of the original EPQ-R factor structure. The study concludes that the Ibibio-translated EPQ-R is a reliable and culturally sensitive instrument suitable for personality assessment among Ibibio speakers, with applications in clinical diagnosis, research, and education.

**Keywords:** Ibibio Language, Personality, Psychometric evaluation, Translation

### 1. Introduction

Personality assessment has long been the bedrock of psychology research and clinical practice, providing insight into the individual differences in behaviour, cognition and emotion (John et al., 2008). The Eysenck Personality Questionnaire-Revised (EPQ-R), which is grounded in Eysenck's biological theory of personality, is one of the

most widely used and well-established instruments for comprehensively assessing key personality traits, including Extraversion, Neuroticism, and Psychoticism (Eysenck & Eysenck, 1991). Researchers and clinicians have widely adopted this multidimensional questionnaire to gain insights into an individual's personality profile (Pilkonis, 2019). However, the validity and applicability of such tools are often hinged on their cultural and linguistic relevance (van der Vijver & Tanzer, 2004). In a multicultural and multilingual society like Nigeria, there is an urgent need to adapt psychological assessment to local languages to ensure cultural sensitivity, comprehension and psychometric equivalence (Akinyemi & Ifeagwazi, 2021). This study seeks to address this gap by translating the EPQ-R into Ibibio: one of the major languages spoken in Akwa Ibom State, South-South Nigeria. The study also seeks to evaluate the validity of the instrument compared to its English version. By doing so, we aim to contribute to the growing field of culturally responsive psychological assessment and enhance the accessibility of personality testing in an indigenous context.

Personality is an individual's unique collection of interrelated behavioral, cognitive, and emotional patterns that shape their distinctive adjustment to life (Funder, 2019; McCrae & Costa, 2008). These patterns are generally stable but can change over long periods (Roberts & Mroczek, 2008). Personality encompasses the characteristic patterns of thoughts, feelings, and behaviors that make each person unique. In essence, it defines what makes you, you. It refers to the enduring traits and patterns that drive individuals to consistently think, feel, and behave in specific ways. Our personality is the unique combination of how we approach the world, interpret events, and consistently act across different situations. Each individual has a distinct pattern of enduring, long-term characteristics and a way of interacting with others and the world around them. Our personalities are considered to be long-lasting, stable, and not easily changed. Given the diversity of human experience and the multitude of factors that contribute to our uniqueness, numerous perspectives for empirically studying personality have been proposed. Each perspective offers insight into what makes each of us unique (Pervin & John, 1999), but is also limited by its underlying assumptions. Only by considering each perspective can we truly comprehend the meaning of personality.

The Eysenck Personality Questionnaire-Revised (EPQ-R) is a widely used psychological instrument designed to measure three core dimensions of personality: Extraversion, Neuroticism and Psychoticism (Eysenck & Eysenck, 1991). The scale is psychometrically robust and applicable across clinical, occupational, and research settings (Francis et al., 1992). Extraversion reflects sociability and impulsivity, while Neuroticism relates to emotional instability and anxiety. Psychoticism, though controversial, captures traits such as aggression and detachment (Eysenck, 1992). The Lie Scale, included to detect social desirability bias, has attracted criticism for potentially distorting validity (McCrae & Costa, 1983). Despite such limitations, the EPQ-R remains a valuable measure. Its cross-cultural applicability, however, depends on accurate linguistic and conceptual translation (van der Vijver & Tanzer, 2004)

Sandin et al. (1999) examined the Spanish adaptation of the EPQ-R and found that it maintained strong psychometric properties comparable to the original English version. Their study demonstrated high internal consistency across the Extraversion, Neuroticism, and Psychoticism scales, confirming the reliability of the instrument in a Spanish-speaking population. Similarly, Zhang and Huang (2001) conducted a validation study of the Chinese version of the EPQ-R, reporting strong factorial stability and internal consistency. Their findings reinforced the cross-cultural applicability of the EPQ-R while also highlighting the importance of cultural nuances in interpreting personality traits.

Francis et al. (2006) analyzed the performance of the EPQ-R in various European contexts, demonstrating its reliability and validity across different linguistic backgrounds. Their findings suggested that while the factor structure of the EPQ-R remained largely intact, certain items required modifications to align with cultural interpretations of personality constructs. In the Middle Eastern context, Khodarahimi (2012) validated the

Persian adaptation of the EPQ-R and found that the instrument exhibited strong psychometric properties, with reliability coefficients comparable to those reported in Western samples.

The Eysenck Personality Questionnaire-Revised is a widely employed psychological instrument that measures key personality traits, including extraversion, neuroticism, psychoticism, and the lie scale (Pilkonis, 2019). This comprehensive assessment tool has been utilized globally to evaluate personality structures across diverse populations. However, its applicability in regions with varied linguistic backgrounds, such as Akwa Ibom State in South-South Nigeria, has been limited due to language barriers. Specifically, the majority of psychological assessments, including the EPQ-R, are developed and primarily administered in English, which poses a significant challenge for non-English-speaking populations, including the Ibibio tribe, which has an estimated population of around 6 million individuals. Given the rich cultural and linguistic diversity of the Ibibio people, administering the EPQ-R in its original English format may result in misinterpretation, leading to inaccurate personality assessments and flawed research outcomes that fail to capture the nuances of Ibibio personality characteristics.

The Eysenck Personality Questionnaire-Revised (EPQ-R) has proven to be a valuable and widely used tool in psychological research for measuring key personality traits such as extraversion, neuroticism, psychoticism, and the lie scale. Its reliability and validity have been well-established in various populations, making it a fundamental instrument for the assessment of personality dimensions. The EPQ-R is a useful tool for assessing personality, it can be used to understand individual differences in personality, to diagnose psychological disorders, and to make decisions about educational and occupational placement. However, recent studies, such as those by Meiring et al. (2021), highlight the critical need to consider cultural differences in the factor structure of personality assessments like the EPQ-R. Cultural norms, values, and linguistic variations can influence how individuals respond to personality items, potentially leading to different factor structures across diverse cultural groups. These variations call into question the universal applicability of the EPQ-R and emphasize the importance of adapting or re-validating the questionnaire within specific cultural and linguistic contexts to ensure its accuracy and relevance. Conducting such cultural evaluations is essential not only for improving the instrument's psychometric properties but also for enhancing its utility in cross-cultural research and clinical practice.

Furthermore, while the Ibibio language is crucial to the cultural identity of the people, the absence of a validated personality assessment tool in this language creates a gap in mental health evaluations, educational assessments, and research endeavours targeting Ibibio-speaking populations. This gap highlights the need for a culturally relevant and linguistically appropriate version of the EPQ-R that can ensure reliable and valid personality assessments for Ibibio speakers. To address this issue, this study aims to translate the EPQ-R into the Ibibio language, ensuring that its psychometric properties, such as reliability and validity, are maintained in the process. This endeavour will not only contribute to more accurate personality assessments among the Ibibio people but also enhance the generalizability of personality research in diverse cultural contexts. It was therefore hypothesized that Ibibio version of Eysenck Personality Questionnaire-revised (EPQ-R) will be as valid as the original. It was also hypothesized that the Ibibio version of the EPQ-R will display similar psychometric properties as the original.

## **2. Literature review**

### **2.1. Personality**

Personality refers to the unique and relatively stable patterns of thinking, feeling, and behaving that distinguish individuals from one another. It encompasses the consistent traits and characteristics that influence how people interact with their environment and respond to various life situations. According to Eysenck's theory of

personality, these traits are largely biologically based and are shaped by hereditary and physiological processes (Eysenck, 1967). Eysenck proposed that personality can be understood through three broad dimensions: extraversion, neuroticism, and psychoticism, which form the foundation of the Eysenck Personality Questionnaire-Revised (EPQ-R). Eysenck defined extraversion as a trait reflecting sociability, liveliness, and activity, where extraverts seek stimulation due to their lower levels of cortical arousal. In contrast, introverts have higher baseline arousal, leading them to avoid excessive stimulation. The second dimension, neuroticism, reflects emotional instability, anxiety, and moodiness. Individuals high in neuroticism are more likely to react strongly to stress and experience negative emotions.

Eysenck associated this trait with a more reactive autonomic nervous system (Eysenck, 1990). The third dimension, psychoticism, involves traits such as aggressiveness, impersonality, and a lack of empathy. Although less clearly defined, psychoticism is believed to be linked to biological factors such as testosterone levels and dopamine activity (Eysenck & Eysenck, 1976). The EPQ-R includes a Lie scale, designed to detect socially desirable responses and enhance the validity of the assessment. This makes the instrument valuable in both clinical and research settings. Eysenck's biological basis of personality has been supported by twin studies and cross-cultural research, which suggest that traits like extraversion and neuroticism are heritable to a significant degree (McCrae & Costa, 1997). Understanding the concept of personality from Eysenck's perspective provides a strong theoretical foundation for translating and adapting the EPQ-R into indigenous languages such as Ibibio. Doing so will allow for culturally sensitive psychological assessments, enabling more accurate personality profiling among Ibibio-speaking populations.\

## 2.2. Personal Growth Initiative

Ibibio is a Niger-Congo language within the Atlantic–Congo branch, specifically categorized under the Lower Cross subgroup of the Cross River languages. It is spoken predominantly by the Ibibio ethnic group in southeastern Nigeria, mainly in Akwa Ibom State and parts of Cross River and Abia States. The language is considered one of Nigeria's major regional languages, with estimates ranging from 3.7 million to over 6 million native speakers (Essien, 1990; Urua, 2001).

Functionally, Ibibio serves as a language of interethnic communication, education, religion, and broadcast in Akwa Ibom. It belongs to a larger dialect continuum known as the Efik-Ibibio cluster, which includes closely related languages such as Efik, Anaang, and Oron (Essien, 1990). Although historically distinct, these languages share mutual intelligibility and cultural overlap. Ibibio, alongside Efik, has been used for early Christian missionary work and literary development in southeastern Nigeria.

Structurally, Ibibio is a tonal language with a phonological system characterized by two level tones -High and Low as well as contour tones such as Rising and Falling. It also displays a terrace tone system with downdrift and downstep (Urua, 2001). This tone system plays a central role in distinguishing lexical and grammatical meanings. Ibibio is also agglutinative, which means it forms words by combining various affixes to express grammatical relationships, resulting in long and morphologically rich word forms (Udoka, 2022).

Syntactically, Ibibio follows a Subject–Verb–Object (SVO) sentence structure and makes extensive use of tense, aspect, and mood markers. These markers are typically affixed to the verb and show agreement with the subject. The language also uses a range of connectives such as *mme* (and), *ado* (but), and *nko* (also), which serve both syntactic and semantic functions in discourse (Ettekon & Isaac, 2022). The clause structure in Ibibio is detailed and hierarchically organized, aligning with principles of generative grammar (Udoka, 2022). Today, Ibibio is actively used in both spoken and written forms. It is taught in schools within Akwa Ibom State, used in local media such as the Akwa Ibom Broadcasting Corporation, and serves as a medium of communication in

churches and marketplaces. Despite the increasing influence of English and Pidgin English in urban areas, Ibibio remains a vital part of the linguistic and cultural identity of its speakers (Essien, 1990; Urua, 2001).

### **3. Research method**

#### **3.1. Participants/Procedure**

The study was conducted in Uyo metropolis, the capital of Akwa Ibom State in South-South Nigeria. A total of 60 participants with their age ranging from 18 – 65 years and varying educational levels from primary to university were recruited. All the participants speak both Ibibio and English. Recruitment took place across stratified sites including the University of Uyo, Akwa Ibom State College of Nursing Sciences, Anua, Uyo, Akwa Ibom State Secretariat and various community groups such as artisans, market women, transport fare operators.

Ethical approval for the study was obtained from the Akwa Ibom State Ministry of Health Ethical Review Board, Uyo. Participants were duly informed about the purpose and procedures of the study, assured of their confidentiality and anonymity of their responses, and provided written informed consent. Participation was entirely voluntary, and only individuals who met the inclusion criteria – being at least 18 years, mentally stable, and residents of Uyo, ability to speak Ibibio and English, read and understand the questionnaire were included. First, the Eysenck Personality Questionnaire-Revised (EPQ-R) was translated using a rigorous back-translation approach. Three linguists fluent in English and Ibibio independently translated the instrument into Ibibio. Another three linguists are blind to the original version, back-translated it into English. A panel of three Psychologists reviewed the back-translated version for conceptual and cultural equivalence using a 5-point Likert scale with a cut-off score of 3 indicating acceptable alignment with the original content.

Stratified and purposive sampling were used to ensure diversity across gender, occupation, and education. The questionnaires were distributed by the researcher and two trained psychology graduate students. Out of 410 questionnaires distributed, 399 were completed and returned, resulting in a response rate of 97.3%.

#### **3.2. Instrument**

##### **Eysenck Personality Questionnaire-Revised (EPQ-R)**

The Eysenck Personality Questionnaire-Revised (EPQ-R) is a 100-item dichotomous (Yes/No) self-report inventory assessing four domains: Extraversion (E), Neuroticism(N), Psychoticism(P) and Lie(L). Sample reliability coefficient reported by Eysenck and Barrett (1985) and others are as follows:

Extraversion:  $\alpha = .88$  (males),  $.85$  (females)

Neuroticism:  $\alpha = .88$  (males),  $.90$  (females)

Psychoticism:  $\alpha = .78$  (males),  $.76$  (females)

Lie Scale:  $\alpha = .82$  (males),  $.79$  (females)

The instrument has demonstrated robust factor structure and criterion-related validity in various cultural contexts.

#### 4. Result

**Table 1:** Demographic Characteristics of Participants Who Responded to the Ibibio Version of the EPQ

S/N	Variables	Frequency (n)	Percent (%)
1	Sex		
	Male	24	40.0
	Female	36	60.0
2	Age		
	≤ 40 years	44	73.3
	> 40 years	16	26.7
	Marital Status		
	Single	27	45.0
	Married	29	48.3
	Separated	1	1.7
	Widowed	3	5.0
3	Education		
	FSLC	1	1.7
	SSCE	19	31.7
	NCE/OND	2	3.3
	HND	9	15.0
	BSc	24	40.0
	MSc	5	8.3
4	Population		
	Student	21	35.0
	General Population	19	31.7
	Civil Servants	20	33.3
<b>Total</b>		<b>60</b>	<b>100</b>

Results presented in Table 1 reveal that out of the 60 participants who responded to the Ibibio version of the EPQ, the majority (60%) were female, while 40% were male. In terms of age distribution, 73.3% of the participants were aged 40 years or younger, while 26.7% were above 40 years. Nearly half of the respondents (48.3%) were married, while 45.0% were single. A small proportion of participants were either widowed (5.0%) or separated (1.7%). The educational background of the participants varied, with most holding at least a secondary school certificate. The highest proportion (40%) had a Bachelor's degree (BSc), followed by those with a Senior Secondary Certificate Examination (SSCE) qualification (31.7%). Only a small fraction (1.7%) had completed only the First School Leaving Certificate (FSLC). In terms of occupational classification, 35.0% of the participants were students, 31.7% were from the general population, and 33.3% were civil servants.

**Table 2:** Validity and Reliability Statistics for All Items in the Population

Measure	Value
Cronbach's Alpha	0.928
Part 1 – Cronbach's Alpha	0.884
Number of Items (Part 1)	50
Part 2 – Cronbach's Alpha	0.872
Number of Items (Part 2)	50
Total Number of Items	100
Correlation Between Forms	0.723
Guttman Split-Half Coefficient	0.839
Inter-item total correlation	0.169 - 0.622

Results presented in Table 2 show the reliability statistics for the Eysenck Personality Questionnaire (EPQ) based on all items in the backward translated English version. The Cronbach's Alpha of 0.93 indicates a high level of internal consistency for the entire set of items in the questionnaire, suggesting that the items in the English version are highly correlated and measure the same underlying construct. For the first 50 items, the Cronbach's Alpha of 0.884 demonstrates strong internal consistency, while the second set of 50 items also shows good reliability with a Cronbach's Alpha of 0.87. The correlation between the two forms of the questionnaire, 0.72, indicates that both parts are consistent with each other and measure the same underlying construct. The Guttman split-half coefficient of 0.84 further confirms the reliability of the EPQ, showing that



the two halves of the questionnaire yield consistent results. The corrected item-total correlation coefficients for the Eysenck Personality Questionnaire (EPQ) ranged between 0.17 and 0.62, indicating that the individual items had a range of validity in their association with the total scale score.

**Table 3:** Reliability Statistics for Ibibio Version of 100-Item EPQ (All Population)

Reliability Statistics	Value
Cronbach's Alpha	0.931
Number of Items	100
Split-Half Reliability	0.870
Correlation Between Forms	0.820
<b>Corrected Item-Total Correlation (Range)</b>	<b>0.201 to 0.633</b>

The Cronbach's Alpha value of 0.93 indicates good internal consistency for the Ibibio version of the 100-item Eysenck Personality Questionnaire (EPQ) for all population. This suggests that the test items are highly related and measure a consistent construct. The Corrected Item-Total Correlation (Range: 0.20 to 0.63) shows the degree to which individual items correlate with the overall test score. All values are positive, indicating that the items contribute well to the overall scale. The Split-Half Reliability (0.87) suggests strong internal consistency when the test is split into two halves. This means that if the test were divided into two equal parts, the scores from both halves would be highly correlated, reinforcing the reliability of the instrument. The Correlation Between Forms (0.82) represents an assumed estimate of the relationship between different forms of the test. This high correlation suggests that different versions or splits of the test provide consistent results, further validating its reliability.

The first hypothesis that the Ibibio version of the Eysenck Personality Questionnaire-revised (EPQ-R) will be as valid as the original is confirmed. The high internal consistency, strong reliability supports the validity of the Ibibio version, demonstrating it is comparable to the original EPQ-R.

**Table 4:** Reliability Statistics of the Ibibio Version of the EPQ (Student Population)

Reliability Statistics	Value
Cronbach's Alpha	0.927
Number of Items	100
Split-Half Reliability (Part 1)	0.878
Split-Half Reliability (Part 2)	0.875
Correlation Between Forms	0.733
Guttman Split-Half Coefficient	0.842
<b>Corrected Item-Total Correlation (Range)</b>	<b>0.349 to 0.759</b>

Results presented in Table 4 reveal that the Ibibio version of the Eysenck Personality Questionnaire-Revised (EPQ-R) demonstrates good internal consistency, as indicated by a Cronbach's alpha of 0.93. This suggests that the items within the scale are highly correlated and measure a cohesive construct. The split-half reliability analysis further supports this finding, with Part 1 and Part 2 of the scale yielding reliability coefficients of 0.88 and 0.88, respectively. The correlation between the two forms is 0.73, indicating a strong relationship between the two halves of the scale. Additionally, the Guttman split-half coefficient of 0.84 further confirms the scale's reliability. The corrected item-total correlation ranges from 0.35 to 0.76, demonstrating that most items contribute meaningfully to the overall scale. These findings suggest that the Ibibio version of the EPQ-R is a reliable measure for assessing personality traits among the student population in Ibibio Language.

**Hypothesis 2:** Ibibio version of Eysenck Personality Questionnaire-revised (EPQ-R) will display similar psychometric properties as the original.

**Table 5:** Reliability Statistics of the EPQ-R Scale in Ibibio Version (General Population)

Statistic	Value
Cronbach's Alpha (Total Scale)	.898
Number of Items	100
Corrected Item-Total Correlation Range	.098 to .800
Split-Half Reliability	
Part 1 (Items 1-50)	.819
Part 2 (Items 51-100)	.826
Correlation Between Forms	.762
Guttman Split-Half Coefficient	.857

The reliability statistics of the Ibibio version of the Eysenck Personality Questionnaire-Revised (EPQ-R) indicate that it is a highly reliable instrument for assessing personality traits in the general population. The Cronbach's Alpha for the total scale is 0.90, which is considered good internal consistency. This means that the items effectively measure personality traits in a consistent manner within the broader population. The corrected item-total correlation ranges from 0.30 to 0.80, good iter-item relationships. Split-half reliability results further support the scale's robustness. The first half of the test (Items 1-50) has a reliability coefficient of 0.82, while the second half (Items 51-100) has a similar value of 0.82, demonstrating strong consistency in both sections. The correlation between the two halves is 0.76, indicating a moderately strong relationship, while the Guttman Split-Half Coefficient of 0.86 further confirms the scale's reliability. These findings suggest that the translated Ibibio version of the EPQ is a dependable tool for measuring personality traits in the general population and maintains similar psychometric properties like the original. Therefore, the second hypothesis which stated that Ibibio version of Eysenck Personality Questionnaire-revised (EPQ-R) will display similar psychometric properties as the original was confirmed.

**Table 7:** Reliability statistics for civil servants subpopulation

Statistic	Value
<b>Cronbach's Alpha</b>	0.897
<b>Number of Items</b>	99
<b>Corrected Item-Total Correlation Range</b>	0.234 - 0.591
Part 1 (Items 1-50)	0.876
Part 2 (Items 51-99)	0.807
Correlation Between Forms	0.526
<b>Guttman Split-Half Coefficient</b>	0.682

Results presented in Table 7 reveal that the Cronbach's Alpha (0.897) for the EPQ translated in Ibibio language with civil servants indicates high internal consistency. The corrected item-total correlation range (0.234 - 0.591) shows that the items were positively related to one another, suggesting its validity. For split-half reliability, Part 1 (items 1-50) has a strong reliability coefficient of 0.876, while Part 2 (items 51-99) is slightly lower at 0.807. The correlation between the two halves (0.526) suggests a moderate relationship, meaning the two sections of the test are consistent. The Guttman Split-Half coefficient (0.682) indicates that the test, when split, still maintains a reasonable level of reliability.



**Table 8:** Reliability Statistics for Ibibio Version of EPQ-R Sub-scales

Scale	Cronbach's (Total Scale)	Alpha Number Items	of Corrected Correlation Range	Item-Total Correlation Between Forms	Guttman Coefficient	Split-Half
<b>Psychoticism (P)</b>	0.793	32	0.148 - 0.532	0.639	0.775	
<b>Extraversion (E)</b>	0.792	23	0.142 - 0.547	0.425	0.597	
<b>Neuroticism (N)</b>	0.782	24	0.261 - 0.451	0.681	0.792	
<b>Lie Scale (L)</b>	0.679	21	0.193 - 0.493	0.500	0.645	

As seen in Table 8, the reliability analysis of the Ibibio Version of the EPQ-R for the shows that all sub-scales demonstrate moderate to high internal consistency. The Psychoticism (P) scale has a Cronbach's Alpha of 0.79, indicating satisfactory reliability. The corrected item-total correlations range from 0.15 to 0.53, suggesting that while most items contribute well to the overall scale, some have relatively lower correlations. The Extraversion (E) scale has a reliability coefficient of 0.79, with an item-total correlation range of 0.14 to 0.55. For the Neuroticism (N) scale, Cronbach's Alpha is 0.78, showing acceptable reliability. The item-total correlations range from 0.26 to 0.45, which suggests moderate consistency in item contributions. The correlation between forms is relatively strong (0.68), indicating that the scale is stable. The Lie (L) scale has the lowest reliability coefficient (0.68). The correlation between forms (0.50) also suggests good correlation between the good parts. The item-total correlation range (0.19 - 0.49) further supports the validity of the sub-scale in Ibibio language.

The results revealed that the Ibibio version of the Eysenck Personality Questionnaire-Revised (EPQ-R) demonstrated strong reliability across the total scale and its sub-scales, with Cronbach's Alpha values ranging from moderate to high, acceptable item-total correlations, and supportive split-half reliability measures. These psychometric properties closely mirror those of the original version, confirming that the translated instrument retains its consistency and measurement integrity within both the general population and the civil servant subgroup. Therefore, Hypothesis 2, which stated that the Ibibio version of the EPQ-R will display similar psychometric properties as the original, is accepted.

## 5. Discussion

The first hypothesis, which posited that the Ibibio version of the Eysenck Personality Questionnaire-Revised (EPQ-R) would demonstrate comparable validity to the original English version, was supported by the findings. This outcome aligns with a substantial body of research indicating that translated versions of the EPQ-R retain their reliability and validity across diverse cultural and linguistic contexts. For instance, studies on the Spanish and Chinese adaptations of the EPQ-R have consistently shown that these translated versions maintain strong psychometric properties, closely mirroring those of the original instrument (Sandin et al., 1999; Zhang & Huang, 2001). Similarly, research on adaptations in European and Middle Eastern contexts has further underscored the robustness and cross-cultural applicability of the EPQ-R (Francis et al., 2006; Khodarahimi, 2012). These findings collectively reinforce the notion that the EPQ-R is a versatile tool capable of transcending cultural boundaries when appropriately adapted.

The findings from this study suggest that the Ibibio version of the EPQ-R can serve as a reliable and valid tool for psychological assessments within the Ibibio-speaking population. However, the process of adaptation underscores the critical importance of considering cultural and linguistic nuances when translating and implementing psychological instruments in new settings. As emphasized by Van de Vijver and Tanzer (2004), the success of cross-cultural adaptations hinges on achieving both linguistic equivalence (ensuring that the translated items convey the same meaning as the original) and cultural equivalence (ensuring that the items are

relevant and meaningful within the target culture). The removal of inconsistent items in the Ibibio version highlights the necessity of continuous refinement and validation to ensure that the tool remains culturally appropriate and psycho-metrically sound for local populations.

The second hypothesis, which proposed that the Ibibio version of the Eysenck Personality Questionnaire-Revised (EPQ-R) would exhibit psychometric properties similar to those of the original English version, was supported by the findings. This outcome is consistent with a wealth of research demonstrating that the EPQ-R maintains its structural integrity and reliability across diverse linguistic and cultural contexts. For example, studies on the Iranian and Brazilian adaptations of the EPQ-R have reported comparable levels of internal consistency and item-total correlations, indicating that the core dimensions of the questionnaire - extraversion, neuroticism, psychoticism, and lie scales - remain stable and reliable even when translated and adapted for different populations (Aluja *et al.*, 2006; Khodarahimi, 2012). Similarly, research on the German and Turkish versions of the EPQ-R has shown that the instrument retains strong split-half reliability coefficients, further underscoring its robustness in assessing personality traits across cultures (Francis *et al.*, 2006; Atak, 2013).

The internal consistency of the Ibibio version, as measured by Cronbach's alpha, aligns closely with findings from these cross-cultural studies, suggesting that the translated scale reliably captures the intended personality constructs. This consistency is particularly noteworthy given the challenges often associated with cross-cultural adaptations of psychological instruments. For instance, studies on the Japanese and Arabic versions of the EPQ-R have highlighted the importance of ensuring that translated items maintain their conceptual equivalence and relevance to the target population (Iwawaki *et al.*, 2000; Alansari, 2004). In the case of the Ibibio version, the overall reliability metrics indicate that the adaptation process successfully preserved the psychometric integrity of the original instrument. However, as with many cross-cultural adaptations, certain items in the Ibibio version exhibited weaker correlations with the overall scale. This phenomenon is not uncommon and has been documented in other studies where cultural variations influence the interpretation of personality-related constructs. For example, Barrett *et al.* (1998) found that items related to social behaviours or emotional expressions often require significant modification to align with local cultural norms. Similarly, research on the Chinese and Spanish versions of the EPQ-R has shown that some items may not perform as well in translated versions due to differences in cultural conceptualizations of personality traits (Zhang & Huang, 2001; Sandin *et al.*, 1999). These findings suggest that while the fundamental structure of the EPQ-R remains stable, certain items may need to be refined or replaced to better align with the cultural context of the target population.

The presence of weaker correlations in some items of the Ibibio version highlights the importance of cultural sensitivity in psychological research. As emphasized by Van de Vijver and Leung (1997), achieving both linguistic and cultural equivalence is critical to ensuring the validity and reliability of translated instruments. This requires not only accurate translation but also a deep understanding of the cultural nuances that shape how individuals interpret and respond to psychological constructs. The iterative process of refining problematic items, as seen in the Ibibio adaptation, is a common practice in cross-cultural research and has been shown to enhance the overall reliability and validity of psychological tools (Hambleton *et al.*, 2005; Cheung *et al.*, 2011). Furthermore, the findings from the Ibibio adaptation contribute to a broader understanding of the EPQ-R's cross-cultural applicability. Studies on adaptations in African contexts, such as the Yoruba and Zulu versions of the EPQ-R, have similarly demonstrated the instrument's reliability while also identifying the need for cultural adjustments (Peltzer and Renner, 2003; Adeyemi *et al.*, 2007). These studies, along with the Ibibio findings, underscore the importance of considering local cultural frameworks when adapting psychological instruments for use in non-Western settings.

## **6. Implication of findings**

The findings of this study carry significant implications for psychological assessment, clinical diagnostics, and research practices within linguistically and culturally diverse populations in Nigeria. By successfully translating and cross-validating the Eysenck Personality Questionnaire-Revised (EPQ-R) into the Ibibio language, the study demonstrates the feasibility and importance of developing psychometrically sound psychological tools for indigenous language speakers. The rigorous translation process combined with strong reliability indices (Extraversion  $\alpha = 0.86$ , Neuroticism  $\alpha = 0.88$ , Psychoticism  $\alpha = 0.65$ , and Lie Scale  $\alpha = 0.64$ ) indicates that the Ibibio version of the EPQ-R maintains internal consistency and construct validity comparable to the original version (Eysenck & Eysenck, 1976).

One major implication is the advancement of culturally responsive psychological testing. The use of the Ibibio-translated EPQ-R ensures that personality assessment is not restricted by language barriers, which can lead to misdiagnosis or inadequate interpretation of personality traits. This is particularly important in clinical settings, where accurate understanding of traits like neuroticism or psychoticism can guide treatment planning, counseling, and intervention strategies (Van de Vijver & Tanzer, 2004). The instrument's applicability across a broad demographic ranging from students to civil servants further supports its utility in educational, organizational, and healthcare settings.

The findings also highlight the potential for expanding psychological research in underrepresented linguistic groups. The validation of the EPQ-R in Ibibio enables researchers to collect culturally and linguistically valid data, thus fostering inclusive research practices and enabling comparisons across Nigeria's diverse ethnolinguistic groups. Moreover, the instrument's ability to retain its original factor structure suggests that core personality constructs identified by Eysenck are stable across cultures, affirming the universality of certain personality dimensions (McCrae & Costa, 1997).

Another implication lies in the educational sector, where the tool can aid in personality-based guidance, career counseling, and student support services. Institutions that provide psychological services in Akwa Ibom State and surrounding areas can adopt the Ibibio EPQ-R to better understand and support their students, especially in contexts where English proficiency may limit self-expression. Additionally, this study sets a precedent for translating other psychological instruments into indigenous languages, promoting linguistic equity in psychological assessment and mental health care.

At the policy level, the study underscores the need for investment in the development and validation of psychological tools tailored to Nigeria's multilingual context. The inclusion of indigenous languages in psychological measurement aligns with national and global goals for inclusive health and education services, as outlined by the WHO's emphasis on culturally competent care. Therefore, stakeholders including government agencies, academic institutions, and mental health professionals should prioritize the development of tools that enhance accessibility and diagnostic accuracy across all population segments.

In conclusion, the validation of the EPQ-R in Ibibio has profound implications for clinical practice, educational interventions, research inclusivity, and language-sensitive public policy. It contributes to a more equitable psychological landscape by ensuring that Ibibio-speaking individuals can be assessed in their first language, thereby improving the accuracy, relevance, and effectiveness of psychological services in Nigeria.

## **7. Contribution to knowledge**

This study makes a significant contribution to the field of psychological assessment and cross-cultural research by providing the first translation and cross-validation of the Eysenck Personality Questionnaire-Revised (EPQ-R) into the Ibibio language. Prior to this research, no standardized personality assessment tool had been

specifically adapted for use among the Ibibio-speaking population in Nigeria, which limited the accuracy of psychological evaluations within this cultural context. By producing a linguistically and conceptually equivalent version of the EPQ-R, this study fills a critical gap and advances the inclusivity of psychological measurement tools.

Beyond its practical achievement, the study enriches the broader field of cross-cultural psychometrics. The rigorous process of forward and backward translation, expert reviews, and empirical validation illustrates a robust methodological framework for adapting Western-based psychometric instruments to non-Western populations. This approach ensures both linguistic fidelity and cultural relevance, thereby offering a model that can be replicated in other indigenous language contexts within Nigeria and across Africa.

The validation of the Ibibio version of the EPQ-R using a diverse sample drawn from students, civil servants, and the general population further enhances its relevance and generalizability. Unlike studies that focus narrowly on specific groups, the inclusion of participants with varied demographic and educational backgrounds demonstrates that the instrument is reliable and applicable across a wide spectrum of the Ibibio-speaking community. This diversity strengthens the argument that the tool can be confidently employed in clinical, research, and educational settings.

Equally important, the psychometric evaluation confirmed the reliability and validity of the translated instrument. The Cronbach's alpha coefficients demonstrated acceptable to excellent internal consistency, while factor analysis confirmed that the instrument retained the original EPQ-R structure. In addition, the establishment of content, convergent, and divergent validity provides robust empirical support for the applicability of Eysenck's personality model within an African linguistic and cultural setting. This reinforces the universality of the model while also emphasizing the importance of cultural sensitivity in its application.

Practically, the study contributes a culturally sensitive personality assessment tool that enhances the accuracy of clinical diagnosis, research, and educational interventions among Ibibio speakers. It reduces the over-reliance on English-language instruments, which often fail to capture subtle cultural and linguistic nuances, thereby improving the precision of psychological assessments. The findings therefore have implications not only for mental health professionals but also for educators and researchers seeking to understand personality within the Ibibio cultural framework.

## **8. Conclusion**

The EPQ-R Ibibio version could become a reference tool for clinical assessment and studies on personality assessment, providing an extensive description of patients' behavioural and emotional characteristics. The process of translating and cross-validating the EPQ-R into the Ibibio language involves more than just linguistic accuracy. The study revealed that the psychometric properties of the questionnaire was preserved and the items conveyed the same meaning as the original. It also ensured that the items were culturally relevant and meaningful within the target culture. The Ibibio version and the cross-translated English version of the questionnaire has produced a satisfactory result equivalence to the original version, maintaining the psychometric property, reliability and validity in the study, it is therefore recommended for use as a reliable tool for psychological assessment in clinical and non-clinical population to assess individuals' personality. The following were recommended for this study;

- ❖ The translated Ibibio version and cross validated version of Eysenck Personality Questionnaire is recommended for adoption by psychologists and researchers to ensure the inclusion and representation of local population in psychological assessment. The Ibibio version is recommended for people that cannot read the English version while the cross validated version is recommended for all because it is more culturally and contextually relevance to the Nigerian population.
- ❖ EPQ-R should be translated by researchers to various local languages and cultural contexts, to ensure that people from different backgrounds can have access to effective, accurate and cultural relevant tool for personality assessment across diverse populations.
- ❖ The translated versions of EPQ-R should be evaluated and updated to account for linguistic or cultural changes in the population, this evaluation will make the translated instrument valid and reliable over time.
- ❖ Researchers in Psychology should work together with linguists and experts from various cultures when translating and validating psychological instrument to ensure the linguistic and psychological standards of the instrument is met.
- ❖ Personality assessment should be carried out using the Ibibio EPQ-R translated instrument in different Ibibio sample to evaluate the practical application of the psychological instrument enhancing its relevance, applicability and contribution to knowledge across diverse areas like schools, hospitals and organizations.

#### Declaration of Conflicting Interest

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