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A Description of MMPI-2-RF Profile of Eleven Boko Haram Terrorists

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Abstract

Nigeria, the largest country on the continent of Africa, has been fighting wars with the proclaimed terrorist group Boko Haram. Currently, Boko Haram has between 1,500 and 2,000 fighters; most documentation about them is either a position paper or a situation review. There is scanty data on the personality and psychological assessment of Boko Haram terrorists using a standardized self-report inventory. Hence, this study aims to describe and explore the profile of the Boko Haram suspects on all the scales of the Minnesota Multiphasic Personality Inventory-2-Restructured Form. Eleven respondents were purposefully recruited because they were the only ones incarcerated at the 'Kiri-kiri' Prison facility at the time of this research. Their scores on the inventory were descriptively analyzed. More of these terrorists endorsed significant scores or symptoms of emotional/internalizing dysfunction (EID), somatic complaints (RC1), antisocial behavior (RC4), ideas of persecution (RC6), gastrointestinal complaints (GIC), neurological complaints (NUC), suicidal/death ideation (SUI), anxiety (AXY), shyness (SHY), and disaffiliativeness (DSF), while elevated scores or severe symptoms were reported on stress/worry (STW) and psychoticism (PSYC-r). This research provides personality and psychological assessments of Boko Haram terrorists for the first time using MMPI-2-RF, though it is limited by sample size. Therefore, a larger sample size may be needed for further studies and the ability to make inferences and generalizations.

Keywords: boko haram terrorists, higher order scale, mmpi-2-rf, personality and psychopathology scales

Abstrak

Nigeria, negara terbesar di benua Afrika, telah berperang melawan kelompok teroris Boko Haram. Saat ini, Boko Haram memiliki antara 1.500 dan 2.000 pejuang; sebagian besar dokumentasi mengenai hal tersebut berupa kertas posisi atau tinjauan situasi. Hanya ada sedikit data mengenai penilaian kepribadian dan psikologis teroris Boko Haram yang menggunakan inventarisasi laporan mandiri yang terstandarisasi. Oleh karena itu, penelitian ini bertujuan untuk mendeskripsikan dan mengeksplorasi profil tersangka Boko Haram pada semua skala Minnesota Multiphasic Personality Inventory-2-Restructured Form. Sebelas responden sengaja direkrut karena merekalah satu-satunya yang dipenjara di fasilitas Penjara 'Kiri-kiri' pada saat penelitian ini dilakukan. Skor mereka pada inventaris dianalisis secara deskriptif. Lebih banyak dari teroris ini yang mendukung skor atau gejala signifikan dari emotional/internalizing dysfunction (EID), somatic complaints (RC1), antisocial behavior (RC4), ideas of persecution (RC6), gastrointestinal complaints (GIC), neurological complaints (NUC), suicidal/death ideation (SUI), anxiety (AXY), shyness (SHY), and disaffiliativeness (DSF), *sedangkan peningkatan skor atau gejala parah dilaporkan pada* stress/worry (STW) *dan* psychoticism (PSYC-r). *Penelitian ini pertama kali memberikan penilaian kepribadian dan psikologis teroris Boko Haram menggunakan*

MMPI-2-RF, meskipun dibatasi oleh ukuran sampel. Oleh karena itu, ukuran sampel yang lebih besar mungkin diperlukan untuk penelitian lebih lanjut dan kemampuan untuk membuat kesimpulan dan generalisasi.

***Kata kunci**: teroris boko haram, skala tingkat tinggi, mmpi-2-rf, skala kepribadian dan psikopatologi*

Introduction

Terrorism has become popular all over the world. It is a concept that has many definitions, but none have been legally adopted, even by the United Nations (UN). Usually, these definitions are based on the perceptions of the definers. Irrespective, most definitions identify terrorism as focusing on people (primarily non-combatants or civilians) intending to kill or inflict serious injury, create fear, and have psychological effects because they are out to propagate an ideology or political goals. These describe what Boko Haram does in Nigeria.

Nigeria, the largest country in Africa, has been fighting a war with the proclaimed terrorist group Boko Haram. This group is domiciled in northeastern Nigeria but has extended its attacks to Chad, Cameroon, and Niger. Since its radicalization in 2009, more than 350,000 people have died through direct and indirect fighting, with children being the majority (Granville, 2020; Aguwa, 2017). The Congressional Research Service (2021) reported about 1500 to 2000 Boko Haram fighters. It raises concern, wondering why an individual would join a radicalized group or organization whose objectives are violence, aggression, fear, destruction, and murder.

The validated socio-cognition approach or framework of personality holds that the psychological aspects of radicalization are a process of mental operations and socio-cognitive capacities of distortions, schemas, and presentations. It posits that individuals get radicalized in changing phases. The changing phase comprises acquiring knowledge, identity reassessment, and reflection, which are affected by how the individual processes information (Bandura, 1986). Borum (2003) buttressed the approach by adding that individuals operate using a mental-behavioral sensation of their internal map of reality, not reality itself. So, the point at which a terrorist internalizes and accepts radicalization cannot be determined.

Discussions in literature have explained the reasons an individual will join a terrorist or radical group using push, pull, and personal factors. The push factors are structural problems such as inequity, geopolitical factors, injustice, or violence. The pull factors are stimuli that tally with the lifestyles and are appealing, such as incentives, group morality, group belonging, or adventure-seeking. In contrast, the personal factors are the individualistic traits and features that make them vulnerable and fragile, such as demographical characteristics, mental state (psychopathology), and personality (Matteo et al., 2018).

Expanding the personal factors using the triple vulnerability theory by Barlow et al. (2014) states that neuroticism plays a triadic role in an individual's proneness to terrorism. The first is a general biological vulnerability that comprises genetic and neurobiological factors (inheritable and neuro-cognitive), general psychological vulnerability (perceived inability to cope with life stressors that are correlated with uncontrollability and unpredictability), and specific psychological or personality vulnerability (likelihood of the occurrence of primarily negative emotions correlated with disorderliness in reaction to stress). Individuals' psychological or personality factors can put them in a vulnerable situation that could influence their development of an extremist mindset and involvement in terrorism (Trip et al., 2019).

Furthermore, the authors opined that an individual's involvement in radicalization and extreme violence combines complex behavior, attitude, belief, and action (cognitive and behavioral radicalization) (Granville, 2020). Cognitive radicalization involves acquiring values, attitudes, and political beliefs that deviate sharply from mainstream society's. Behavioral radicalization involves participating in a range of radical activities, whether legal or clandestine, which could culminate in terrorism (Hafez & Mullins, 2015, p. 961). Whether cognitive or behavioral, both components are incorporated into the personality of the terrorist.

There is a growing, controversial view that terrorists are not pathological in the traditional sense. From some samples, most of the terrorists enrolled were not pathological (Lankford, 2014), and external factors and group and collective psychology were likely their motivations (Stoddard, 2011; Horowitz, 2015). Bhui (2016), Merari et al. (2009), and Weatherston (2003) shared opposing findings. They revealed that terrorism was implicated as being associated with schizophrenia and delusional disorders. Also, it is associated with impulsive and emotionally unstable personality traits, including paranoid, antisocial, dependent, and avoidant personality disorders. Lone-actor terrorists are 13.49 times more likely to suffer psychological disorders than group terrorists, as seen in the cases of Omar Matten, who murdered 49 gays in a mass shooting in Florida, and Ander Breivik (psychiatric illness), who also carried out a mass murder in Norway (Corner & Gill, 2018). In the case of Breivik, his psychological assessment showed that he had paranoid schizophrenia and narcissistic personality disorder. However, the court's ruling stated that he was sane and guilty. The autopsy of Omar showed that he was emotionally unstable (he had bipolar disorder), which may have affected his emotions and perception of reality.

Terrorists have been found to share similar psychological features with the community they are from and with non-terrorists (Garcet, 2021; Trip et al., 2019), and in other cases, terrorists were found to suffer from mental illness (Campelo et al., 2018), but the difference has been seen with regards to their personalities and possible personality disorders. Alizadeh et al. (2017) found out after analyzing 355,000 tweets that extremists were low on agreeableness and neuroticism and were more open than non-extremists but shared close extraversion traits. This implies that extremists are less likely to agree with other people's opinions but can propagate their own successfully.

Boko Haram (meaning westernization is Sacrilege) was initially known as Jamāʿat Ahl al-Sunnah li-l-Daʿawahwa al-Jihād (Association of the People of the Sunnah for Preaching and Jihad" or "People Committed to the Prophet's Teaching for Propagation and Jihad"). Boko Haram became their tag name because of their doctrine, which is perceived to be against westernization (Onapajo & Uzodike, 2012). The organization was founded in 2002 but became violent in 2009 after the killing of its founder, Muhammad Yusuf (Aguwa, 2017). As of 2014, world organizations such as the UN, the European Union, and countries such as the United States of America, the United Kingdom, Australia, and Canada had enlisted Boko Haram as a terrorist organization. Recently, they have become one of the deadliest terrorist organizations (Curiel et al., 2020). In March 2015, Boko Haram pledged allegiance to ISWAP (Islamic State West Africa Province), a branch of ISIL (the Islamic State of Iraq and the Levant), a more dangerous terrorist group.

They attack civilians in villages and busy markets. Also, they launch deadly suicide attacks and abduct civilians, primarily women and children. In April 2014, over 279 girls were abducted from their school hostel in Chibok. Some were released after three and a half years, with over 100 still missing (The Guardian News, 2018). Over 2.2 million Nigerians have been internally displaced; 328,005 are refugees, and over 847,931 are internally displaced in Cameroon, Chad, and Niger (UNHCR, 2022). The documented impact of the Boko Haram terrorist attacks revealed that the economic, social, and political aspects of Borno State in northeastern Nigeria, which is home to almost 6 million people, have collapsed, leaving refugees and internally displaced people in Chad, Cameron, and Niger with a severe humanitarian crisis (Granville, 2020). Today, IDP (Internally Displaced People) camps are being run to keep the civilians alive.

Personality disorders are quite prominent among terrorists or radicals. Out of 27 individuals who adhered to radical courses, 23 of them suffered personality disorders, with anti-social/dissocial being the most prominent, followed by narcissistic personality disorder. Further results showed that most suffered a double personality disorder diagnosis (Garcet, 2021). Campelo et al. (2018) realized that personality disorders associated with terrorism were anti-social, obsessive, and histrionic.

Quantitative assessment of the personality and psychopathology of Boko Haram terrorists using a self-report test has not had its fair share of research, as having access to terrorists is a rare opportunity in

Nigeria. Available documents are qualitative studies of position papers and review reports, which were carried out using second-hand case studies and media interviews (Corner & Gill, 2018). When collecting data, accessing only eleven (11) incarcerated Boko Haram terrorists was an advancement in research. Ho and Choo (2018) share this thought on how most studies are retrospective, as many terrorists tend to go into hiding or lose their lives. Corner and Gill (2020) recommended evaluating terrorists using standard, validated psychological tests to assess psychological disorders.

A personality assessment tool is vital in defining the personality and psychopathology of any individual, including a terrorist. This is the reason Scarcella, Page, and Furtado (2016) ran a psychometric quality assessment of four operational instruments, 17 research measures, and nine inventories assessing terrorism and personality. Unlike most other studies that evaluate assessment tools, compare assessments, or run a reliability or validity check on assessment tools, this current study is aimed at exploring and describing the profile of the eleven Boko Haram suspects on all the scales of the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) and to see the personality psychopathology they endorsed the most. Questions to be responded to include: How will the profiles of the Boko Haram terrorists look on all scales of the MMPI-2-RF, and what will be the prominent personalities and psychopathologies amongst them?

Methods

Research Design

The research was conducted using a quantitative method, specifically a descriptive design. Descriptive statistics, specifically frequency distribution, was used for a simplified presentation of the data. It was more fitting as the study was targeted at gathering personality and psychopathological information about Boko Haram terrorists and statistically describing them. Also, the data were used without any assumptions. The core of this study is an element of exploration. This was the aspect of modest information known about Boko Haram concerning their personality and psychopathology, especially with the use of MMPI-2-RF and exploring the outcomes.

Participants

Eleven (11) incarcerated male Boko Haram terrorists were purposively sampled. This was so because, at the time of collecting the data, there were just 11 of them at the Kiri-kiri maximum prison in Lagos, Nigeria. At the time of data collection, they were awaiting trial.

The participants were purposively sampled as they were the sample of interest. They were approached in their prison cells after getting ethical approvals from the ethical board and the prison authority. Ethical approval was granted because the researcher did not take pictures or make recordings of the prisons or the prison environment. The Controller assigned two prison staff members to work with the researchers. They took the researcher (only one person was allowed at a time) to the Boko Haram terrorist inmate cells and waited till the assessment was over. The researcher briefed the participants on what the study was all about, gave them an informed consent form to fill out, and handed over the assessment to them with pencils. Some were allowed to take a few minutes break in between assessments. Their break was still within the cell room.

Setting

Participants were residents of the Kiri-kiri maximum prison in Lagos, Nigeria. When the data was to be collected, they were not allowed to leave their cells, so the cells were the specific environment for responding to the inventory.

Measurement

The study utilized a structured and standardized MMPI-2-RF to collect data for assessing personality and psychopathology. All the scoring criteria in the MMPI-2-RF manual were adopted for

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each scale and used in the categorization of low scores, significant scores, and elevated scores, which imply normal, significant, and severe symptoms, respectively.

Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF)

The technique of assessing personality and psychopathology is to measure different patterns of traits across varying situations and to clear up the diagnosis. The MMPI series has been empirically proven to be effective in the forensic assessment and evaluation of personality and psychopathology (Ben-Porath & Tellegen, 2011; Scarcella et al., 2016; Aroyewun, T. F., & Aroyewun-Adekomaiya, K., 2022), but at the same time, there is scarce research on the use of MMPI-2-RF in evaluating the personality and psychopathology of terrorists, especially Boko Haram terrorists.

MMPI-2-RF is the fourth generation of the MMPI series. It is empirically and conceptually linked with modern models and theories of personality and psychopathology because it focuses on the mental abilities and attributes, personality, symptomology, psychopathology, and neurological functioning of the test taker. It was developed and published in 2008, and its first edition came out in 2011 by Ben-Porath and Tellegen. The inventory comprised 338 item questions, nine (9) scales, and 51 sub-scales. The scales are under two major headings: protocol validity (nine validity scales) and substantive scales (3 higher-order scales, 9 RC scales, 23 specific problem scales (somatic, internalizing, externalizing, and interpersonal scales), two (2) interest scales, and five (5) personality-psychopathology (PSY-5) scales). The protocol validity scales are to inquire into the interpretability and over- and under-reporting, which have implications for substantive scale outcomes.

Competence of Authors to Use MMPI-2-RF

The MMPI-2-RF was legally purchased from Pearson in the United Kingdom, and we also requested permission to use it for practice and research, which was granted. All authors have doctorate degrees, while the first three have doctorates in Clinical Psychology. The corresponding author submitted her graduate certificate and was issued the category of level C, which implies qualification to purchase, administer, and interpret all categories of Pearson assessments.

Inclusion and Exclusion Criteria

The criteria for participants consist of the participant being able to read and understand English. Apart from that, participants must also be 18 years of age and above

Ethical Approval

All procedures performed in the studies involving human participants were following the ethical standards of the institutional and state research committees and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. The study was approved by the Ethical Committee of Oyo State Hospitals' Management Board under the Ministry of Health with reference number AD 13/479/746 and the Nigerian Prisons Service (now Nigerian Correctional Service), office of the Controller of Prisons, State Prison Headquarters, Lagos State, with document No. LSPH:923B/CON/VOL.IV/150. Informed consent was obtained from all the participants involved in the study.

Results and Discussion

Results

The standard for scoring the MMPI-2-RF is to follow the protocol validity screening using criteria (Cannot Say > 18, VRIN-r or TRIN-r > 80T, F-r > 120T, Fp-r > 100, or L-r > 80T) (Ben-Porath & Tellegen, 2008), to screen out invalid and uninterpretable profiles. For this current study, it was used in the classification and categorization, and the profiles were not screened out. This was due to the study's objective, which was to explore the profiles of the eleven Boko Haram terrorists.

Table 1. Description on the Validity, Interpretability, Over and Under Reporting Scales

Validity Scales		VRIN-r	TRIN-r	F-r	Fp-r	Fs	FBS-r	RBS	L-r	K-r
Valid/Interpretable	N	3	7							
	%	27.3	63.6							
Valid/Interpret with caution	N	2	3							
	%	18.2%	27.3%							
Invalid and / Unimterpretable	N	6	1							
	%	54.5	9.1							
No Evidence of Over-reporting	N			2	0	2	10	6		
	%			18.2	0	18.2	90.9	54.5		
Over-reporting	N			9	11	9	1	5		
	%			81.8	100.0	81.8	9.1	45.5		
No Evidence of Under-Reporting	N								2	11
	%								18.2	100.0
Under-reporting	N								8	0
	%								72.7	0

VRIN-r = Variable Response Inconsistency; TRIN-r = True Response Inconsistency; F-r = Infrequent Responses; Fp-r = Infrequent Psychopathology Responses; Fs = Infrequent Somatic Responses; FBS-r = Symptom Validity, RBS = Response Bias Scale; L-r = Uncommon Virtues; K-r = Adjustment Validity.

Table 2. Description on Demographics and MMPI-2-RF Scales

	Low Score		Significant Score		Elevated Scores	
	N	%	N	%	N	%
Higher Order Scales						
EID	0	0	11	100	0	0
THD	2	18.2	4	36.4	5	45.5
BXD	8	72.7	2	18.2	1	9.1
Restructured Clinical Scales						
RCd	8	72.7	3	27.3	0	0
RC1	1	9.1	8	72.7	2	18.2
RC2	9	81.8	2	18.2	0	0
RC3	7	63.6	4	36.4	0	0
RC4	4	36.4	7	63.6	0	0
RC6	3	27.3	8	72.7	0	0
RC7	8	72.7	3	27.3	0	0
RC8	3	27.3	4	36.4	4	36.4
RC9	10	90.9	1	9.1	0	0

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	Low Score		Significant Score		Elevated Scores	
	N	%	N	%	N	%
Somatic/Cognitive Scales						
MLS	7	63.6	2	18.2	2	18.2
GIC	2	18.2	8	72.7	1	9.1
HPC	5	45.5	5	45.5	1	9.1
NUC	3	27.3	8	72.2	0	0
COG	6	54.5	5	45.5	0	0
Internalizing Scales						
SUI	2	18.2	7	63.6	2	18.2
HLP	10	90.5	1	9.1	0	0
SFD	7	63.6	4	36.4	0	0
NFC	7	63.6	4	36.4	0	0
STW	0	0	2	18.2	9	81.8
AXY	2	18.2	8	72.7	1	9.1
ANP	8	72.7	2	18.2	1	9.1
BRF	2	18.2	5	45.5	4	36.1
MSF	11	100.0	0	0	0	0
Externalizing Scales						
JCP	8	72.7	3	27.3	0	0
SUB	8	72.7	2	18.2	1	9.1
AGG	10	90.9	1	9.1	0	0
ACT	8	72.7	2	18.2	1	9.1
Interpersonal Scales						
FML	8	72.7	3	27.3	0	0
IPP	11	100.0	0	0	0	0
SAV	10	90.9	1	9.1	0	0
SHY	1	9.1	8	72.7	2	18.2
DSF	2	18.2	7	63.6	2	18.2
Interest Scales						
AES	7	63.6	4	36.4	0	0
MEC	8	72.7	3	27.3	0	0

	Low Score		Significant Score		Elevated Scores	
	N	%	N	%	N	%
Personality Psychopathology Five (PSY-5)						
AGGR-r	0	0	10	90.9	1	9.1
PSYC-r	0	0	1	9.1	10	90.9
DISC-r	0	0	9	81.8	2	18.2
NEGE-r	0	0	9	81.8	2	18.2
INTR-r	1	9.1	9	81.8	1	9.1

Low Scores = normal; Significant Scores = Significant Symptoms; Elevated Scores = Serious Symptoms; SUI = Suicidal/Death Ideation; HLP = Helplessness/Hopelessness; SFD = Self Doubt; NFC = Inefficacy; STW = Stress/Worry; AXY = Anxiety; ANP = Anger Proneness; BRF = Behavior-Restricting Fears; MSF = Multiple Specific Fears; JCP = Juvenile Conduct Problem ; SUB = Substance Abuse; AGG = Aggression; ACT = Activation; FML = Family Problems; IPP = Interpersonal Passivity; SAV = Social Avoidance; SHY = Shyness; DSF = Disaffiliativeness; AES = Aesthetic-Literacy Interests; MEC = Mechanical-Physical Interests, AGGR-r = Aggressiveness-Revised; PSYC-r = Psychoticism-Revised; DISC-r = Disconstraint-Revised; NEGE-r = Negative Emotionality/Neuroticism-Revised; INTR-r = Introversion/Low Positive Emotionality-Revised.

In **Table 1.** Variable Response Inconsistency (VRIN-r) and true response inconsistency (TRIN-r) are used to detect the interpretability of all the scales. Of the eleven responses, VRIN-r (*n* = 6, 54.5%) and TRIN-r (*n* = 1, 9.1%) had un-interpretable profiles. There was evidence of over-reporting on infrequent responses (F-r; *n* = 9, 81.8%), infrequent psychopathology responses (Fp-r; *n* = 11, 100.0%), and infrequent somatic responses (Fs; *n* = 9, 81.8%). Respondents under-reported only on uncommon virtues (L-r; *n* = 8, 72.2%).

In **Table 2.** We can see higher-order scales, all of the participants reported significant scores of emotional/internalizing dysfunctions (EID; *n* =11, 100%). Elevated scores were reported on thought dysfunction (THD *n* =5, 45.5%). In the restructured clinical scales, more participants report low scores on demoralization (RCd; *n* = 8, 72.7%), low positive emotions (RC2; *n* = 9, 81.8%), cynicism (RC3; *n* = 7, 63.6%), dysfunctional negative emotions (RC7, *n* = 8, 72.7%) and hypomanic activation (RC9; *n* = 10, 90.9%). Significant scores were reported on somatic complaints (RC1; *n* = 8, 72.2%), antisocial behavior (RC4; n = 7, 63.6%), and ideas of persecution (RC6; n = 8, 72.7%). An equal report was made for significant scores (n = 4, 36.4%) and elevated scores (n = 4, 36.4%) on aberrant experiences (RC8).

On the somatic cognitive scales, more participants reported low scores on malaise (MLS; *n* = 7, 63.6%) and cognitive complaints (COG; *n* = 6, 54.5%). There were more significant scores on gastrointestinal complaints (GIC; *n* = 8, 72.7%) and neurological complaints (NUC; *n* = 8, 72.7%8). There was an equal report on low scores (*n* = 5, 45.5%) and significant scores (*n* = 5, 45.5%) on head pain complaints (HPC). On the internalizing scales, participants reported more low scores on helplessness/hopelessness (HLP; *n* = 10, 90.9%), self-doubt (SFD; *n* = 7, 63.6%), inefficacy (NFC; *n* = 7, 63.6%), anger proneness (ANP; *n* = 8, 72.7%), and multiple specific fears (MSF; *n* = 11, 100.0%). Significant scores were reported on suicide (SUI*;* *n* = 7, 63.6%) and anxiety (AXY; *n* = 8, 72.7%). Elevated scores were reported on stress/worry (STW; *n* = 9, 81.8%).

On the externalizing scales, there were reports of low scores on all the sub-scales of juvenile conduct problem (JCP; *n* = 8, 72.7%), substance abuse (SUB; *n* = 8, 72.7%), aggression (AGG; *n*= 20, 90.9%)

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and activation (ACT; *n* = 8, 72.7%). On interpersonal scales, there were reports of low scores on family problems (FML; *n* = 8, 72.7%), interpersonal passivity (IPP; *n* = 11, 100.0%), and social avoidance (SAV; *n* = 10, 90.9%). There were significant scores on shyness (SHY; *n* =8, 72.7%) and disaffiliativeness (DSF; *n* = 7, 63.6%). On interest scales, more participants reported low scores on both aesthetic-literacy interests (AES; *n* = 7, 63.6%) and mechanical-physical interests (MEC; *n* = 8, 72.7%). On personality psychopathology five (psy-5) scales, participants reported significant scores on aggressiveness-revised (AGGR-r; *n* = 10, 90.9%), disconstraint-revised (DISC-r; *n* = 9, 81.8%), negative emotionality/neuroticism-revised (NEGE-r; *n* = 9, 81.8%), introversion/low positive emotionality-revised (INTR-r; *n* = 9, 81.8%). More participants reported elevated scores on psychoticism-revised (PSYC-r; *n* = 10, 90.9%).

Discussion

Boko Haram Terrorists on Validity Scales

A possible reason for the high score on VRIN-r of some of these profiles could be a non-cooperative move by the respondents, in which the questions were answered without reading or their inability to understand the language of the items (Ben-Porath & Tellegen, 2008/2011; Aroyewun & Aroyewun-Adekomaiya, 2022) correctly, though, interpretation of other validity and substantial scales was not disrupted. There was evidence of over-reporting (the respondents presented their dysfunction in an overly extreme light) of mental disorders and somatic and cognitive symptoms on F-r and Fp-r. These could be due to a genuine history of psychological dysfunction or outright overreporting of symptoms. In cases like this, a further test might be needed to clarify the circumstances (Ben-Porath &Tellegen, 2008/2011). The high number of respondents reporting on Fs (*n* = 9, 81.8%) indicated over-reporting on medical complaints, specifically somatic symptoms. A possible cause could be external incentives, as respondents were given toiletries as incentives for participation.

Evidence of under-reporting (the respondents doused their dysfunction by "faking good") was significant only on uncommon virtues (L-r). With 72.2% of the terrorists endorsing these scales, it implied their need to present themselves in a commendable light. They might have elevated scores on L-r when they have no insight into what psychological dysfunction is or that something is at stake. In the case of the current Boko Haram terrorists in government custody, it might be a possibility that they want to present themselves as good regardless of their violent crimes, or maybe with the anticipation of reduced charges.

Boko Haram Terrorists on Higher-Order Scales

All respondents reported significant scores, that is, significant symptoms of emotional or internalizing dysfunctions (EID). A significant EID symptom is characterized by a low positive. Alizadeh et al. (2017) found out that there were reports of low scores on neuroticism, while for this current study, significant symptoms were reported on emotionality and neuroticism, which could be due to several factors. A slightly above-average number of terrorists reported elevated scores on THD; that is, they reported severe symptoms. These implied that they were suffering from serious thought dysfunction, which might be characterized by hallucinations, disunion from reality, distrust or paranoia, and out-of-the-ordinary thoughts and perceptions, which might be indicative of psychosis.

Boko Haram Terrorists on Restructured Clinical Scales

Significant symptoms were reported on somatic complaints (RC1), which implied the existence of a lot of somatic complaints, like symptoms of the gastrointestinal and neurological areas and head pain. It may be expected to see severe symptoms and an indication of possible over-reporting of infrequent somatic responses (Fs). Also, there were significant symptoms reported on RC4 and RC6. It may not come as a surprise for the terrorist to have significant symptoms of antisocial behavior (RC4), as Willem (2004) wrote, "Some persons with antisocial personality disorder (ASPD) are terrorists, and some terrorists suffer from ASPD." Either way, the qualities are there, for instance, acts of inability to conform to societal rules, issues with authority, history of involvement with legal/criminal justice, and

disregard and violation of the rights of others (DSM-5, 2013). They experience the belief that harm is coming to them through anyone and are delusional about it at this stage. If it were elevated scores, then they would be experiencing severe paranoid delusions with a prominent level of suspicion. They reported severe symptoms of aberrant experiences (RC8), meaning they endorsed experiencing unusual thinking, disorganized thoughts, hallucinations (visual or auditory), delusion, and poor interpersonal functioning, an indication of psychosis.

Boko Haram Terrorists on Somatic/Cognitive Scales

The interpretability of some of the profiles of the sub-scales under the somatic/cognitive scale might be restrictive because of the T-score on Fs. It was indicative that Fs≥100 showed possible evidence of over-reporting, and many (54.5%) respondents endorsed evidence of over-reporting on the Fs scale. The expectation might be to see elevated scores on MLS, GIC, HPC, NUC, and COG, but the scores ranged more from low scores (normal) to significant symptoms, which might imply that their symptoms might just be genuine (Ben-Porath &Tellegen, 2008/2011). Malaise (MLS) had more (63.6%) reports of low scores; two of them reported significant symptoms, and another two reported severe symptoms. They have endorsed feeling low on energy, tiredness, weakness, experiencing poor health, and exhaustion. With more Boko Haram terrorists endorsing significant symptoms of gastrointestinal complaints (GIC), it implied that they reported several gastrointestinal complaints like nausea and reoccurring upset stomachs. With an average number of them endorsing significant symptoms in head pain complaints (HPC), they endorsed the feeling of headaches that come and go, head and neck pain, and headaches when upset.

Boko haram terrorists on Internalizing Scales

Seven out of the eleven Boko Haram reported significant symptoms in their latest suicidal (SUI) experience in thought and attempt, and eight of them reported feeling anxious on the AXY scale. Nine reported severe symptoms on the stress/worry scale (STW). They expressed being worried over misfortune and stressed. Their minds were also occupied with disappointments, difficulties with time pressure, and possibly finances.

Boko haram terrorists on Externalizing Scales

There was a limited report of significant or elevated symptoms on JCP, SUB, AGG, and ACT. The majority of them fall within the low score (normal category). Three of them endorsed juvenile conduct (JCP), characterized by stealing, problematic behavior at school, and being easily influenced by peers. It might be expected that they would all endorse substance abuse (SUB), but only two endorsed significant symptoms, and one endorsed severe substance abuse, which entails the use of alcohol as a relaxation and expressive tool, frequent and/or problematic use of alcohol and/or drugs, and sensation seeking.

Boko haram terrorists on Interpersonal Scales

There were reports of conflict-free past and current family problems (FML), being assertive, and being able to stand up for oneself and lead others on interpersonal passivity (IPP). Significant symptoms were reported for shyness (SHY) and disaffiliativeness (DSF). They reported being uncomfortable around people, easily embarrassed, and shy, while their disaffiliativeness endorsement showed they dislike being around people. Hence, they preferred to be alone.

Boko Haram Terrorists on Interest Scales

There were more reports of low scores, meaning no interest in activities like music, writing, or theater arts in aesthetic-literacy interest (AES). Also, for mechanical-physical interest (MEC), low scores indicate no interest in building or fixing things or outdoor sports.

Boko Haram Terrorists on Personality Psychopathology Five (PSY-5)

There were reports of significant symptoms on aggressiveness-revised (AGGR-r), Disconstraint-Revised (DISC-r), Negative Emotionality/Neuroticism-Revised (NEGE-r) and Introversion/Low Positive Emotionality-Revised (INTR-r). According to Harkness, McNulty, Ben-Porath, & Graham (2002); Ben-Porath and Tellegen (2008/2011), significant symptoms on PSY-5 scales indicate the following: Reports on AGGR-r indicated violent-prone behavior and inordinate assertiveness, offensive aggression, and intimidation; others view them as domineering and believe they have leadership skills, and almost all of them (90.9%) endorsed this scale. Also, according to them, reports on DISC-r implied acting-out and risk-taking behaviors, impulsivity, excitement, and sensation seeking.

Endorsement of NEGE-r indicated worry, shame, guilt, behavioral inhibition, insecurity, negative emotional experiences, and self-criticism. Significant symptoms on INTR-r indicate the inability to experience joy, depression, lack of interest, negative thought processes, and avoidance of social situations and interactions. Almost all of them reported severe symptoms on Psychoticism-Revised (PSYC-r), this implied that different experiences relate to unusual thought processes or thought dysfunction, and they might feel alienated from others. They engage in unrealistic thinking and might have problems with reality testing.

Garcet (2021) investigated and found that the most prominent personality disorders reported were antisocial/dissocial and narcissistic both cluster B personality disorders. Campelo et al. (2018) also found that personality disorders associated with terrorism were antisocial and histrionic traits; both were cluster B personality disorders, followed by obsessive, which was cluster A personality disorder. For this current study, the most endorsed personality disorder was psychoticism, a cluster A personality disorder, followed by aggressiveness and disconstraint, both under cluster B personality disorders; and finally, harmful emotionality/neuroticism and introversion/low positive emotionality), both under cluster C personality disorders. Though antisocial behaviors were significantly endorsed on the RC4 scale by the Boko Haram terrorists, their report was still consistent with Garcet and Campelo et al.'s findings.

Strength and limitation

There is limited research on the use of MMPI-2-RF among terrorists globally. Being able to gather an MMPI-2-RF profile of some Boko Haram members is a step forward in research considering the rare population, which is hard to get by, and also the large number of items in the inventory. Although the population is small and the results cannot be generalized, it creates precedent for other researchers to leverage and gives an idea of how some profiles look and what scales are endorsed.

The MMPI-2-RF has a total of 338 items, this number of items is enough for participants to be saturated or give inconsistent responses. The population for this study is very minimal, though they are a special group. It is recommended that for further studies, the sample size be increased enough to generalize and make inferences. Participants might have issues with the way some items were coined and their idiomatic expressions.

Conclusion

The study explores and describes the MMPI-2-RF profile of Boko Haram terrorists. The eleven terrorists show significant scores on personality and psychopathology -5- scales. The researchers observed that the terrorists endorsed DSM-5 cluster A, B, and C personality disorders. MMPI-2-RF psychoticism personality psychopathology is linked with cluster A personality disorders. Aggressiveness and disconstraint personality psychopathology are linked with cluster B personality disorders. Negative emotionality/neuroticism and introversion/low positive emotionality personality psychopathology can be linked to cluster C personality disorders. The research provides a precedent for the personality assessment of terrorists in Nigeria; however, for further studies and the ability to make inferences and generalizations, a larger sample size may be needed, as well as utilizing inferential statistics for analysis.

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