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Security Intelligence Framework for Suicide Bombers Identification in a Crowd

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Abstract

Terrorism is the aggression unjustly carried out by individuals, groups, or states against human beings. It includes the form of unjustly terrifying, harming, threatening, and killing of people in the target area. In effect, this evil is perpetrated by some groups that believe in the use of such tactics as a means of advancing their cause. These acts are always caused by foreign terrorists whose identities and where about are not always known. Therefore there is need for an individual to identify these terrorists while in a crowd. This will be achieved by developing a security intelligent model for easy identification of a suicide bomber. The research involved document analysis and interview protocol with the security experts within Ondo and Ekiti State, Nigeria to determine the constructs for identifying the suicide bombers. Their responses were documented and audio recorded for transcription purposes. The sample for this phase of the study was obtained from among the senior security personnel until a saturation stage were reached. And the findings from them were analyzed thematically. The questionnaires were developed from the output of the thematic analysis and the result was analyzed using Rasch model which were used to determine the validity of the responses concerning the constructs. The results from the findings will form the model that can guide an individual to identify suicide bombers while in a crowd. It is hoped that the outcome of the study will increase the body of knowledge on security and contribute significantly to safety measures in avoiding suicide bombers' menace.

Keywords: Suicide Bomber, Security, Identification, Crowd, Rasch Model

Background to the Study

Suicide bombing has been one of the major threat to Nigerian for the past decade which involved series of attacks by Nigerian terror organization called Boko haram which made use of bombs explosion for their nefarious activities (Nalajala *et al*., 2016). The first bomb explosion occurred in Nigeria in 1986 when a letter bomb was sent to Dele Giwa in his house (Oluwasanmi, 2016). Nothing of such was heard until 2014 when series of blast occurred on the UN headquarter in Abuja that claimed many lives and destroyed lots of properties (BBC

News, September 3rd, 2014). These incidence has been occurring since then at different places such as market, place of worship, bus stop and campuses most especially where many people are involved (Pethő-Kiss, 2020). The new forms of bomb are more sophisticated and dangerous, which make use of mobile phones that permits terrorists to initiate a bomb immediately (Vanimireddy & Kumari, 2012).

Indeed, the worldwide manifestation of terrorism has been evident in Africa especially, Nigeria. The terrorist's methods of operations includes: the use of improvised explosive devices, targeted assassinations, ambushes, drive-by shootings, suicide bombings, and kidnappings (Kingdom *et al*., 2015). Since its advent, the sectarian insurgency has wrecked immense havoc in the country, especially by using explosives and firearms with the gruesome intention to murder (Okoli & Chukwuma, 2014). It is perpetrated by groups who believe in the use of violets as a means of advancing their cause. This is carried out by individuals, groups or states against human beings. It includes forms of unjustly terrifying, harming, threatening, and killing of people and banditry. It also includes any violent act or threat carried out as part of individual or collective criminal plan aimed at terrifying or harming people or endangering their lives, freedom or security.

These acts are planned and perpetrated by collections of loosely organized people that operate in shadow networks that are difficult to define and identify to perform their nefarious activities without being challenged (Ezeah, 2015). They move freely throughout the world, hide when necessary and exploit safe harbors proffered by rogue entities (Ezeah, 2015). It has been observed that the terrorists operate freely in Nigeria and when caught, they are unpunished because of the support given by their sponsors. Hence there is need for a Region proposal Convolution Neural Network that can detect suicide bombers most especially while in a crowd for security enhancement.

Suicide Bombing Activities in Nigeria

The suicide bombing activities includes: Bodo bombings on 9/12/16 that killed 57 people and injured 177 civilian, 15/8/2017– A woman bomber blew herself up and killed 27 others at a market in the village of Konduga near Maiduguri. Mubi bombing on 21/11/2017, 50 people were killed in a suicide attack in the northern part of Nigeria caused by militants. Suicide bomber trooped into funeral gathering to lunch an explosion that claimed 37lives on 18/2/2015. On 23/3/2020, 70 Nigerian soldiers were killed, many were wounded while some were kidnapped by the terrorists in an ambush near a village in Yobe State, Nigeria. 30 killed at crowded mosque when 2female suicide bombers blew themselves (Umar, 2015). Just to mention a few from the lists of their activities to confirm that Nigerian need to be more cautioned while in a gathering or in a crowded area.

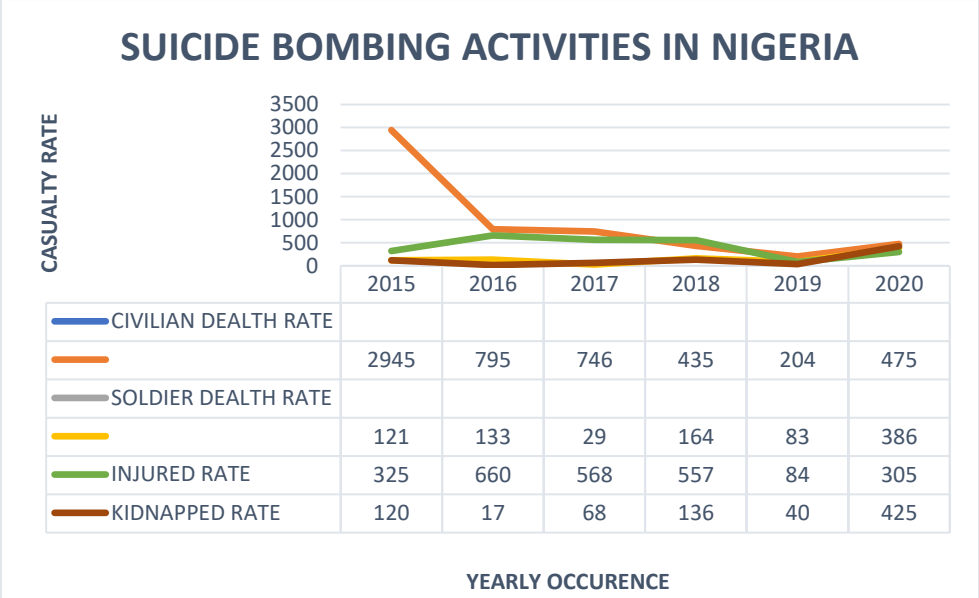

Figure 1: IED Casualties rate in Nigeria. 2015-2020 (Ahmet Guler & Mustafa Demir, 2021)

Aim of the Paper

The main focused of this paper is to develop a model for identifying a suicide bomber in a crowd. Specifically:

i. The study seeks to explore the variables for identifying suicide bombers and
ii. To develop an intelligence framework for suicide bombers identification in a crowd.

Literature Review

Pethő-Kiss (2020) identified specific security challenges that Christian communities face as a result of book haram insurgent and suggested that a security measures that can help in detecting the bomb materials should be carried out, he did not mention how the terrorist can be identified. (Glackin *et al*., (2020) used swabs and an optical sensor element to collect and detect trace explosive residues from improvised explosive device, this research emphasized on what should be done after the deed has been done Samberg *et al* (2020) designed and built a smart device that can efficiently protect the crowded area and environment from the bomb fragments to safe people from more injured before the arrival of bomb squad in to the site of occurrence. The researchers' addresses the fragment after the deed to avoid more injured but did not talk about how to avoid the occurrence. Glackin *et al* (2020) worked on Explosives detection by swabbing for improvised explosive devices. The work demonstrated a sensitive method by collecting and detecting trace explosive residues from improvised explosive devices using swabs and an optical sensor element. Cotta (2019) worked on Metaheuristic approaches to the Placement of Suicide Bomber Detectors. Their aim was to maximize the chances of detecting a suicide-bombing attack to reduce the casualties. Wei, (2019) worked on Improved Convolutional Pose Machines for Human Pose Estimation Using Image Sensor Data. The aim was to develop a novel that combing convolutional pose machines (CPMs) with GoogLeNet for human pose estimation using image sensor data to improve model. Gautami & Balaji, (2019) presented a method to locate, characterize, and identify the IED in landmines using a Ground-Penetrating RADAR with electromagnetic imaging. Gürkan & Karapınar (2019) used Fluxgate sensor array to detect improvised explosive devices placed underground and classify the underground objects as explosive or

non-explosive. From the literature reviewed no researcher has worked on the variables for identified suicide bombers using rasch model, which call for this study.

Methodology

The population for the study is made up of security officers within Ondo and Ekiti state. The purposive sampling technique was used for the qualitative with a theoretical saturation of 7 participants which includes 2army, 3chief security officers, 1 PPRO and 1 ASP. The thematic analysis was used for the qualitative phase of the study. Since the current study is seeking to establish the variables for identifying suicide bombers in a crowd. The Partial Credit Model (PCM) in Rasch Measurement Model version 3.74.0 was used to obtain the consensus of the experts.

Analysis and Findings

Table 1: Thematic Approach for suicide bombers identifications by the experts.

RESPONSES	RESPONDENTS	CODES	THEMES
A bomb is an explosive weapon that uses the exothermic reaction of an explosive materials to provide an extremely sudden and violet release of energy.	PP1, PP2, PP4	Meaning	Description
suicide bombing is an act which an individual personally delivers an explosive and detonates them to inflict the greatest possible damage, killing himself in the process	PP1, PP2, PP4	Damages	Killing
Suicide bomber is a person, especially a terrorist, who carries out a bomb attack with intension or expectation of killing himself as well as others.	PPI, PP6, PP3, PP4, pp5	Intension	Who
A suicide bomber is someone that has been trained to kill, to destroy, who is verse by political, religious or money motivation to kill and who has zero his mind to die in the process			
Yes, fully on ground, suicide bombers cannot be ruled out in our society	Pp1, pp2, pp7	Existence	Visibility
Actions: by carrying heavy luggage, bag or wearing a backpack, keeps hands in pocket and repeatedly pats upper body.	Pp1, pp2, pp3, pp4, pp5, pp6, pp7	Actions	Altitude

Appearance: walk with deliberations, sweating or anxious, prior to detonation, may hold hands on head and shout a phrase, pale face from recently shaved beard on male. Loose cloth or out of sync with the weather, suspect social position or location. Emotion: inappropriate emotional state, eyes focused and vigilant, does not respond to authoritative command or direct salutation from a distance. May appear to be in trance. Actions, critical observant, intelligent aids, vigilant, silence and authoritarian speech. Common among Muslim, difficult to identify, it requires intelligent training, their body language, mode of dressing use of hijab, use of alimajeris boys, and use of technology. Dressing code, by putting on bigger dress than themselves, very sad because they know death is approaching, doesn't move closer to people, and touches his body intermittently. Nervous in appearance, be focus and steering, looking for a way to blend, doesn't listen to authority, can be praying by whispering to himself, buying things without collecting change, walking towards a target object.	

Table 2: Summary of interview findings for suicide bombers identification.

Construct	Respondents						
	Pp1	Pp2	Pp3	Pp4	Pp5	Pp6	Pp7
Meaning	#	#		#			
Description	#	#		#			
Damages	#	#		#		#	
Intension	#		#	#	#	#	
Existence	#	#					#
Appearance	#	#	#	#	#	#	#
Actions	#	#	#	#	#	#	#

Results Analysis and Discussion

Table 3: Analysis of the respondents

PERSON CLASS	Obs-Exp Average	DIF MEASURE	DIF S.E.	PERSON CLASS	Obs-Exp Average	DIF MEASURE	DIF S.E.	DIF CONTRAST	JOINT S.E.	Welch t	Welch d.f.	Welch Prob.	Mantel-Haenszel Chi-squ	Mantel-Haenszel Prob.	Size CUMLOR	ITEM Number	ITEM Name
1	-2.35	-3.38	.08	2	1.33	-3.64	.06	.26	.10	2.65	22	.0148	2.6778	.1018		1	ACT1
1	-2.35	-3.38	.08	3	.03	-3.56	.06	.18	.10	1.84	23	.0786	2.1110	.1462		1	ACT1
1	-.31	1.25	.36	2	.16	.64	.24	.61	.44	1.41	22	.1738	.0588	.8084	.29	2	ACT2
1	-.31	1.25	.36	3	.02	.82	.25	.43	.44	.97	22	.3406	2.6667	.1025		2	ACT2
1	-.01	.75	.33	2	.05	.70	.24	.06	.41	.14	23	.8924	.9245	.3363	-1.20	3	ACT3
1	-.01	.75	.33	3	-.04	.80	.25	-.05	.42	-.12	23	.9016	.0800	.7773	-.41	3	ACT3
1	.13	.15	.31	2	-.17	.46	.24	-.31	.39	-.80	23	.4300	.3636	.5465	-1.10	4	ACT4
1	.13	.15	.31	3	.09	.19	.23	-.04	.38	-.11	23	.9142	.1111	.7389	-.41	4	ACT4
1	.44	-.51	.31	2	.05	-.11	.24	-.41	.40	-1.03	23	.3139	.4717	.4922	-.98	5	ACT5
1	.44	-.51	.31	3	-.29	.25	.23	-.76	.39	-1.95	23	.0633	.0465	.8292	-.25	5	ACT5
1	-.21	.44	.32	2	-.12	.35	.24	.09	.40	.24	23	.8147	.0588	.8084	.41	6	APR1
1	-.21	.44	.32	3	.23	-.02	.23	.46	.39	1.18	23	.2510	.2000	.6547	-.69	6	APR1
1	-.19	-.23	.31	2	.09	-.54	.26	.31	.40	.78	24	.4410	3.4286	.0641		7	APR2
1	-.19	-.23	.31	3	.01	-.42	.24	.20	.39	.51	23	.6129	.2581	.6115	-.59	7	APR2
1	.18	-.42	.31	2	-.26	.07	.24	-.48	.39	-1.23	23	.2297	2.4228	.1196		8	APR3
1	.18	-.42	.31	3	.15	-.39	.23	-.03	.39	-.08	23	.9376	2.0000	.1573		8	APR3
1	.51	-.42	.31	2	-.11	.24	.24	-.65	.39	-1.67	23	.1084	.0130	.9093	.15	9	APR4
1	.51	-.42	.31	3	-.17	.30	.23	-.72	.39	-1.85	23	.0778	1.0000	.3173		9	APR4
1	-.04	.06	.31	2	.00	.01	.24	.05	.39	.12	23	.9064	.8571	.3545	1.10	10	APR5
1	-.04	.06	.31	3	.02	-.02	.23	.07	.38	.19	23	.8528	.3247	.5688	.81	10	APR5
1	.44	-.32	.31	2	.06	.07	.24	-.39	.39	-.99	23	.3306	.2162	.6419	.69	11	DRS1
1	.44	-.32	.31	3	-.30	.46	.23	-.78	.39	-2.02	23	.0556	1.4706	.2253		11	DRS1
1	.60	-.13	.31	2	-.23	.76	.24	-.89	.39	-2.27	23	.0332	.0588	.8084	-.41	12	DRS2
1	.60	-.13	.31	3	-.11	.63	.24	-.76	.39	-1.96	24	.0621	.0000	1.000	.00	12	DRS2
1	.10	.06	.31	2	.03	.12	.24	-.07	.39	-.18	23	.8620	1.0000	.3173		13	DRS3
1	.10	.06	.31	3	-.08	.25	.23	-.19	.38	-.49	23	.6261	1.0000	.3173		13	DRS3
1	.04	.25	.31	2	-.11	.41	.24	-.16	.39	-.41	23	.6860	.0588	.8084	-.41	14	DRS4
1	.04	.25	.31	3	.09	.19	.23	.05	.39	.14	23	.8896	.2857	.5930	-.69	14	DRS4
1	.20	-.42	.31	2	-.03	-.17	.24	-.25	.39	-.64	23	.5302	.4717	.4922	-.98	15	EMT1
1	.20	-.42	.31	3	-.08	-.12	.23	-.30	.39	-.77	23	.4502	.8182	.3657	-1.39	15	EMT1
1	.10	-.13	.31	2	.01	-.03	.24	-.10	.39	-.25	23	.8012	.8571	.3545	-1.39	16	EMT2
1	.10	-.13	.31	3	-.07	.04	.23	-.17	.38	-.44	23	.6639	3.0000	.0833		16	EMT2
1	-.12	.34	.31	2	-.23	.46	.24	-.12	.40	-.30	23	.7647	.4717	.4922	.98	17	EMT3
1	-.12	.34	.31	3	.28	-.07	.23	.41	.39	1.06	23	.2990	.6154	.4328	1.10	17	EMT3
1	.10	.06	.31	2	-.44	.64	.24	-.58	.39	-1.49	23	.1503	2.0000	.1573		18	REL1
1	.10	.06	.31	3	.37	-.23	.23	.28	.38	.73	23	.4714	1.1429	.2850	-1.61	18	REL1
1	.25	.25	.31	2	.06	.46	.24	-.22	.39	-.55	23	.5845	3.7812	.0518		19	REL2
1	.25	.25	.31	3	-.19	.74	.24	-.50	.39	-1.26	24	.2193	2.0000	.1573		19	REL2
1	.15	.15	.31	2	-.15	.46	.24	-.31	.39	-.80	23	.4300	2.2830	.1308		20	REL3
1	.15	.15	.31	3	.06	.25	.23	-.09	.39	-.25	23	.8081	2.0000	.1573		20	REL3

Table 4: Analysis of the respondents continue

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	PERSON
24	112	20	-2.66	.18	7.83	3.7	1.81	2.5	A .93	.94	45.0	33.4	3.00 3.00 3.00 2.00 1.00
17	110	20	-2.72	.17	5.46	2.8	2.02	3.0	B .95	.94	20.0	34.3	2.00 2.00 3.00 1.00 1.00
14	111	20	-2.69	.17	5.16	2.7	1.97	2.9	C .95	.94	20.0	33.7	1.00 1.00 4.00 2.00 1.00
34	95	20	-3.08	.15	3.46	2.5	1.59	2.0	D .92	.93	35.0	35.1	3.00 3.00 4.00 1.00 1.00
45	92	20	-3.16	.17	3.25	2.1	1.58	1.9	E .93	.93	25.0	36.3	2.00 2.00 4.00 1.00 1.00
12	103	20	-2.90	.15	2.98	2.2	1.07	.4	F .96	.93	20.0	34.4	1.00 1.00 4.00 1.00 2.00
29	97	20	-3.03	.15	2.63	2.1	1.33	1.2	G .95	.93	30.0	35.2	1.00 1.00 2.00 1.00 1.00
40	128	20	-2.17	.20	2.32	1.6	.78	-.7	H .93	.94	55.0	33.0	2.00 2.00 3.00 1.00 1.00
27	94	20	-3.10	.16	2.23	1.5	1.04	.2	I .95	.93	50.0	35.0	2.00 2.00 2.00 2.00 1.00
36	92	20	-3.16	.17	2.15	1.4	1.21	.8	J .95	.93	30.0	36.3	2.00 2.00 3.00 1.00 1.00
21	85	20	-3.39	.20	2.01	1.4	1.33	1.1	K .92	.94	35.0	37.1	3.00 3.00 3.00 2.00 2.00
49	120	20	-2.42	.17	1.63	1.2	.69	-1.2	L .96	.94	40.0	33.4	3.00 3.00 3.00 2.00 1.00
25	97	20	-3.03	.15	1.61	1.1	1.23	.9	M .94	.93	30.0	35.2	1.00 1.00 2.00 1.00 2.00
50	129	20	-2.12	.21	1.15	.4	1.57	1.7	N .94	.94	20.0	33.7	2.00 2.00 4.00 1.00 1.00
46	87	20	-3.32	.19	1.51	.8	1.09	.4	O .95	.94	35.0	37.1	3.00 3.00 4.00 1.00 1.00
47	124	20	-2.30	.18	.82	-.2	1.44	1.5	P .94	.94	20.0	34.1	2.00 2.00 4.00 1.00 1.00
11	91	20	-3.18	.17	1.38	.7	1.32	1.1	Q .94	.93	30.0	36.4	1.00 1.00 3.00 1.00 1.00
48	121	20	-2.39	.17	1.12	.4	1.26	1.0	R .94	.94	30.0	34.0	2.00 2.00 3.00 1.00 1.00
35	96	20	-3.06	.15	1.25	.6	.78	-.8	S .95	.93	35.0	35.3	2.00 2.00 4.00 1.00 1.00
22	81	20	-3.57	.21	1.22	.5	1.24	.8	T .92	.94	45.0	37.4	1.00 1.00 4.00 1.00 2.00
39	81	20	-3.57	.21	1.22	.5	1.24	.8	U .92	.94	45.0	37.4	3.00 3.00 4.00 1.00 1.00
31	96	20	-3.06	.15	1.21	.5	.65	-1.4	V .96	.93	35.0	35.3	3.00 3.00 3.00 1.00 2.00
42	103	20	-2.90	.15	.52	-.6	1.16	.7	W .94	.93	40.0	34.4	3.00 3.00 3.00 1.00 1.00
44	102	20	-2.93	.15	.50	-.7	1.16	.7	X .94	.93	40.0	34.7	2.00 2.00 4.00 1.00 2.00
6	77	20	-3.73	.17	.54	.1	1.15	.5	Y .91	.93	40.0	38.2	2.00 2.00 4.00 2.00 2.00
43	98	20	-3.01	.15	1.11	.4	1.00	.1	y .96	.93	35.0	34.6	3.00 3.00 4.00 1.00 2.00
41	100	20	-2.97	.15	1.04	.3	.68	-1.3	x .95	.93	50.0	34.4	2.00 2.00 3.00 1.00 2.00
30	111	20	-2.69	.17	.61	-.2	1.04	.2	w .94	.94	30.0	33.7	2.00 2.00 3.00 1.00 1.00
33	100	20	-2.97	.15	.91	.0	.96	-.1	v .96	.93	35.0	34.4	3.00 3.00 2.00 1.00 2.00
13	79	20	-3.65	.21	.84	.4	.92	-.1	u .92	.94	30.0	38.6	2.00 2.00 3.00 2.00 2.00
10	90	20	-3.21	.18	.87	.1	.90	-.3	t .96	.93	30.0	36.0	3.00 3.00 3.00 1.00 2.00
28	85	20	-3.39	.20	.88	.0	.88	-.3	s .93	.94	45.0	37.1	3.00 3.00 3.00 1.00 1.00
2	84	20	-3.43	.20	.87	.0	.79	-.7	r .95	.94	40.0	36.6	3.00 3.00 2.00 1.00 1.00
4	83	20	-3.48	.21	.85	-.1	.65	-1.2	q .96	.94	40.0	36.5	1.00 1.00 4.00 1.00 1.00
1	83	20	-3.48	.21	.72	-.3	.85	-.4	p .92	.94	40.0	36.5	3.00 3.00 1.00 1.00 1.00
37	103	20	-2.90	.15	.48	-.7	.84	-.6	o .96	.93	25.0	34.4	2.00 2.00 4.00 2.00 1.00
18	96	20	-3.06	.15	.37	-1.1	.82	-.6	n .96	.93	25.0	35.3	3.00 3.00 3.00 1.00 2.00
9	87	20	-3.32	.19	.53	-.5	.78	-.7	m .94	.94	55.0	37.1	3.00 3.00 3.00 1.00 1.00
23	89	20	-3.25	.18	.51	-.4	.78	-.7	l .94	.93	45.0	36.5	1.00 1.00 3.00 1.00 1.00
3	83	20	-3.48	.21	.74	-.3	.76	-.7	k .95	.94	40.0	36.5	2.00 2.00 2.00 2.00 1.00
20	81	20	-3.57	.21	.75	-.1	.62	-1.2	j .94	.94	60.0	37.4	1.00 1.00 4.00 2.00 1.00
19	82	20	-3.52	.21	.66	-.4	.67	-1.1	i .95	.94	40.0	36.5	1.00 1.00 2.00 1.00 1.00
5	84	20	-3.43	.20	.65	-.5	.53	-1.8	h .95	.94	60.0	36.6	1.00 1.00 4.00 1.00 1.00
15	83	20	-3.48	.21	.54	-.8	.64	-1.3	g .95	.94	40.0	36.5	2.00 2.00 4.00 2.00 1.00
38	95	20	-3.08	.15	.64	-.4	.60	-1.7	f .95	.93	50.0	35.1	2.00 2.00 3.00 2.00 1.00
26	120	20	-2.42	.17	.44	-1.1	.61	-1.6	e .95	.94	45.0	33.4	2.00 2.00 3.00 1.00 1.00
32	117	20	-2.51	.17	.60	-.5	.54	-2.0	d .95	.94	45.0	33.5	3.00 3.00 3.00 1.00 2.00
8	87	20	-3.32	.19	.48	-.6	.54	-1.8	c .94	.94	55.0	37.1	3.00 3.00 2.00 1.00 1.00
7	79	20	-3.65	.21	.38	-.1	.50	-1.4	b .95	.94	60.0	38.6	3.00 3.00 2.00 1.00 2.00
16	98	20	-3.01	.15	.47	-1.0	.44	-2.6	a .96	.93	40.0	34.6	3.00 3.00 3.00 1.00 1.00
MEAN	96.4	20.0	-3.08	.18	1.44	.4	1.00	.0			38.2	35.6	
S.D.	13.9	.0	.40	.02	1.44	1.1	.38	1.3			10.8	1.5	

Table 5: Statistical Analysis of the misfit order.

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INPUT: 50 PERSON 20 ITEM REPORTED: 50 PERSON 20 ITEM 54 CATS WINSTEPS 3.74.0

PERSON: REAL SEP.: 1.48 REL.: .69 ... ITEM: REAL SEP.: 5.75 REL.: .97

ITEM STATISTICS: MISFIT ORDER

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	ITEM
1	1767	50	-3.56	.04	2.06	3.5	1.98	2.6	A .73	.85	8.0	8.4	ACT1
14	156	50	.29	.15	1.29	1.6	1.28	1.5	B .50	.37	32.0	37.0	DRS4
12	146	50	.50	.15	1.29	1.5	1.28	1.5	C-.10	.37	26.0	37.7	DRS2
9	164	50	.12	.15	1.23	1.3	1.26	1.5	D .34	.37	36.0	36.9	APR4
8	180	50	-.23	.15	1.17	1.0	1.19	1.1	E .44	.35	26.0	35.4	APR3
18	162	50	.16	.15	1.15	.9	1.17	1.0	F .20	.37	46.0	36.9	REL1
11	163	50	.14	.15	1.14	.8	1.13	.8	G .44	.37	32.0	36.9	DRS1
10	169	50	.01	.15	1.06	.4	1.04	.3	H .63	.36	36.0	36.4	APR5
2	132	50	.82	.15	.95	-.2	.94	-.2	I .34	.36	34.0	40.6	ACT2
17	159	50	.22	.15	.95	-.2	.93	-.3	J .27	.37	42.0	36.9	EMT3
15	179	50	-.20	.15	.95	-.3	.93	-.4	j .48	.36	44.0	35.4	EMT1
19	145	50	.52	.15	.94	-.3	.92	-.4	i .65	.37	34.0	37.6	REL2
7	189	50	-.42	.15	.92	-.5	.90	-.5	h .60	.34	28.0	34.8	APR2
5	172	50	-.05	.15	.90	-.6	.91	-.5	g .30	.36	42.0	36.0	ACT5
3	135	50	.75	.15	.82	-.9	.83	-.9	f .50	.36	48.0	40.3	ACT3
20	155	50	.31	.15	.78	-1.3	.76	-1.4	e .38	.37	62.0	36.9	REL3
16	171	50	-.03	.15	.72	-1.8	.71	-1.9	d .69	.36	38.0	36.2	EMT2
13	162	50	.16	.15	.68	-2.0	.69	-2.0	c .42	.37	48.0	36.9	DRS3
4	156	50	.29	.15	.59	-2.7	.59	-2.6	b .29	.37	48.0	37.0	ACT4
6	159	50	.22	.15	.58	-2.8	.57	-2.9	a .43	.37	54.0	36.9	APR1
MEAN	241.1	50.0	.00	.14	1.01	-.1	1.00	-.2			38.2	35.6	
S.D.	350.4	.0	.87	.02	.32	1.5	.31	1.5			11.5	6.4	

Discussion

From the tables above, it was observed that actions such as: putting hands in pocket, parting upper body repeatedly and touching of the body intermittently are parts of the major signs of identifying a suicide bombers. Appearance like walking with deliberate actions, walking suspiciously and looking very anxious also contributed to suicide suspect in a crowd. Dressing mode like wear too bougous dresses, use of hijabs by their female folks to cover or hide the

dangerous objects. Muslims are almost the suspect when it comes to religion view of it because of their ways of dressing. They are emotionally unstable, looking so sad and speechless. All the above mentioned variables are the major signs that can help an individual to identify suicide bombers while in crowd. These are summarized in figure 2.

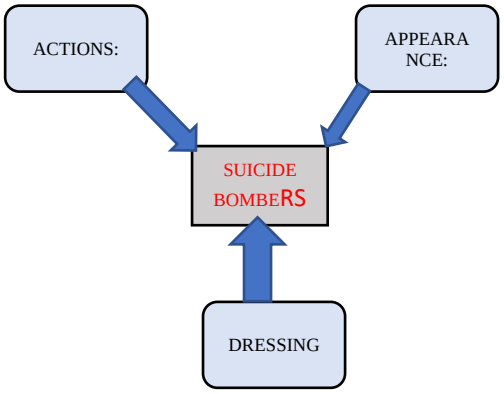

Figure 2: Variables for Suicide bombers identification.

Conclusion

Since the security of civilian is not grantee by the government of the day in Nigeria especially, it is of necessity for an individual to be security conscious. Therefore following the identifiable variables as identified by the security experts in the state as gathered by this researcher, it will greatly be of help to an individual most especially while in a crowd to identify the suicide bombers before carry out their nefarious activities. The study had been able to extend the body of work in security studies and proffers a pragmatic solution to evading the menace of the suicide bombers in a crowded environment. The study is significant to the government, academics, businesses, entrepreneurs and the general public especially on variables that deserve attention.

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