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The Globalization of Super Intelligence: The Unintentional Consequences and Solution

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Abstract

The dwindling financial performance and the constant pressure to reduce cost and human intervention from boring tasks and repetitive led to the complexity of software programming languages blurring the lines between digital, physical and biological spheres. As a result of solving the artificial intelligence problem resulted in technological singularity of making humans to remain irrelevant. The event of COVID-19 variants rapidly contributed to the globalization of superintelligence. To deal with the AI apocalypseis to ensure that the advent of digital super intelligence is symbiotic with humanity by increasing the brain bandwidth to make humans be at par with broadening AI's scope. This study employed survey research design. A self-administered questionnaire was distributed to 298 respondents. Descriptive and inferential statistics (linear regression) were employed in testing the stated hypothesis. The study discovered that there exists a positive relationship between all of the indicators of brain chips implantation and making humans remain relevant. This study failed to accept the null hypothesis which state that implantation of artificial intelligence inside the brain does not make humans remain relevant. This study therefore concluded that brain computer interface significantly influences making humans remain relevant Thus, this study, recommends that implantation of brain chips to make humans more efficient and reduce cost of training of human workforce.

Keywords: *Artificial Intelligence, Artificial Intelligence Apocalypses, Brain-Computer Interface, COVID-19 Variants, Super intelligence, Technological Singularity*

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Background to the Study

The globalization of artificial intelligence revolutionized when firms are faced with global pricing and cost strategies to remain competitive. The complexity of software programming languages is supercharging the technological base of the world order to the digital revolution of blurring the lines between digital, physical and biological spheres (Peter, 2020). Artificial intelligence (AI) is the brain of super-intelligent machines or robots. As a result of solving the AI problem, manufacturing companies recorded productivity growth of 10% in GDP per capita globally (Manyika, Chui, Miremadi, Bughin, George, Willmott, and Dewhurst, 2017). Boston Consulting Group forecasted an output enhancement of 30% in small and medium scale enterprises (SMEs) over the ten (10) years as a result of adaptable, easy to program and cheaper robots (Boston Consulting Group, 2015). The event of COVID -19 which plumbed the global economy into -3% rapidly contributed in the globalization of superintelligence. The globalization of superintelligence us now used to curb variants of COVID-19 (Anand and Kay, 2021; PWC, 2020; Vaishya, Javaid, Khan, and Haleem2020). Egwakhe, Amos and Nicodemus (2020) found that solving AI problems has a positive effect on labour productivity.

Scholarshas also noted that in solving the AI problem, has contributed to the global high rate of unemployment and suicide because artificial intelligent machines are g3etting cheaper and more autonomous than humans (Danaher, 2017; Hewitt, 2017; Koo, and Cox, 2007). According to Nedelkoska and Quintini (2018). routine workers both developed and developing countries receive unequal on the task-training, The World Bank report (2016) discovered technological unemployment of 67% of South African jobs, 65% of Nigerian jobs, technological unemployment has also contributed to the surge in Nigeria's unemployment rate from 23.1% in 2018 to 33.5% in 2020 CNBC Africa (2018) and Ngige, (2020), and 39% Gini inequality index (World Bank, 2018). Theexplosion of intelligence would likely cause the extinction of human civilization (Alexander 2011; Ray, 2005). Humans are forced to demand lower wages. (Mazur 2019; Hoeschl, Tania and Hoeschl, 2017).

Oxford Economic (2019), postulated that 20 million factory jobs will be disrupted in 2030. Mathew, Reymundo, Shanelle, Giancarlo and Julie (2015) investigated the decision-making authority, team efficiency and human worker satisfaction in mixed human-robot teams where people prefer to cede automated scheduling algorithms to make decisions when it comes to shared decision-making authority between teammates with human-only and human robots' teams. Ajibade, Adegbie, and Falana (2021), revealed robotic intervention effect on the labour cost of listed manufacturing companies in Nigeria. The recursive improvements of the utility function or its optimization function of AI fourth industrial revolution have caused skill outdatedness OECD (2019) and the replacement of emotional labour (Cormier, Young, Nakane, Newman and Durocher, 2013). According to John (2018), the technological singularity is a bridge that revolutionized the direction of evolution from that controlled by the law of biology to super-intelligent machines. Stephen Hawkings warned that the human-level AI could end the human race (Rory, 2014).

To deal with the AI apocalypse is to ensure that the advent of digital super intelligence is symbiotic with humanity (Sissi, 2019). Brain-Chips Implantation (BCI) will increase the brain bandwidth and make humans be at par with broadening AI's scope (Narges, ND). These nanobots expand the human intellect by totally immersing humans in virtual reality and directly connecting the brain to the internet (Maartje, 2009). Elon Mask developed 1024 threadlike flexible electrodes implanted into the cerebral cortex of the brain, increasing and upgrading memory, cognitive powers, ability to monitor brain signals (Ivana, 2017; NBC, 2021; Narges, ND). The major issue in this study is that there is a paucity of scholarly literature in Nigeria on the intentional consequences and solution towards technological singularity. Hence, it is imperative to examine the effect of brain-computer interface in making humans remain relevant.

Conceptual Framework

The globalization of Superintelligence

The dwindling financial performance and the constant pressure to reduce cost and human intervention from boring tasks and repetitive led to the globalization of super intelligent machines like the 60,000 unit of imported robots in Australia, 35,000 units of imported robots in Europe and 17,000 unit of robot imported in America in 2008 to 262,000 units of robots in Australia, 66,000 units of robots in Europe and 46,000 units of robots in 2017 IFR (2018), in which China sold about 156,000 units of robots leading in the world's sales of industrial robots Ying (2019), to maximize productivity and to be more cost-effective, this has led capital owners to prefer the employment of robotic workforce than human workforce because robots are getting cheaper than human workforce (Francesco, Ekkehard and Enzo 2018; Mazur 2019; Pauline and Eric, 2003). Technological unemployment has also contributed to the surge in Nigeria's unemployment rate from 23.1% in 2018 to 33.5% in 2020 (CNBC Africa, 2018; Ngige, 2020). Oxford Economic (2019), reported 1.7 million manufacturing jobs have already been displaced by robotization around the world since 2000, besides, with multiplied three-fold of the robot to about 2.25 million robots getting cheaper than the human workforce.The recursive improvements of the utility function or the optimization function of AI fourth industrial revolution has revolutionized the direction of evolution from that controlled by the law of biology to super-intelligent machines. To mitigate technological singularity, Narges (ND) stated that the advent of digital super intelligent should be symbiotic with humanityby having an AI layeron the human brain to increases the speed of the brain bandwidth.

Brain-Computer Interface

Ahmed (2010), defined Brain-computer interface (BCI) or neutral implant as a technological interface that nexus directly to human brain. According to Stefano (2011), neural implants are hybrid entities where computer chips are implanted inside the biological brain to establish a close interaction of transferring, and storing information through the internet. McGee and Maguire (2007), categorized BCI into therapeutic enhancing and capacity enhancing. Therapy enhancement is the intervention to medical issues while the latter is to enhance a healthy person with new capacities ((McGee and Maguire, 2007). Elon Mask developed 1024 threadlike flexible electrodes implanted into the cerebral cortex of the brain through the use of Neualink surgical robot to perform a bloodless operation of inserting Neutral ink into the brain to help keep up with the threat of technological singularity and also address health conditions (Darrel, 2020).

Sarah (2021), stated that Elon Musk's Neutralink have not been given approval by food and drug administration (FDA) due to the health complexities after the operation but Synchronhave been given approval for human trails. According to Oxley, Mitchell, Opie, Yoo, Mocco, Campbell, Bird, and Lee, (2020), Synchronentails sending Stentrode device to the brain through the blood vessels. Elizabeth, Cassie, llmar, Dalton, Curtis, Abhishek and Suhrud (2020), opined that despite the benefit that neuroprosthetics through microelectrodes interface holds, the major challenge that have made clinical application of brain-chips implantation limited is because of acute and chronic inflammation. However, theacute inflammation and blood brain barrier can be significantly reduced through the use of therapeutic hypothermia (TH) applied after the implant of microelectrode array (Elizabeth et al, 2020)

Barbara (2018) discovered that brain-inspired paradigms have the extraordinary capability of providing intelligent features in hardware. Hirotaka (2014), revealed that a cyborg's cognitive load decreases more. Cyborgs have emotions and are sociable (Kathleen, 2003). Scholarships noted the unintentional consequences that come with BCI. Implanted neuromorphic hardware make bionic or cyber-huma ns to heavily rely on computer chips than the brain intellect (Woodrow, 2015). BCI acting as an actuator or a sensor into the brain changes human nature to the workings of supercomputers (Fabrice, 2008; Roberts, 2013). Woodrow and Alexander (2017) researched cyborgs and enhancement technology and noted that BCI will lead to a decoupling of the identity of the cyborg's memories from interacting with the real world (Woodrow et al 2017). Dina (2014), noted infected cyborgs can spread the virus to other computer devices. Ip, Michael and Michael (2008), discovered that BCI will aggravate the social gap in which those who can afford will get chipped. Recent scholarship discovered that the implantation of optimized neuromorphic hardware helps in solving motor-neuron, spine problems and ultra-low power cognitive systems (Satheesan, Deshmukh, and Dwivedi et al, 2021).

Methodology

This research study adopted survey research design which made use of quantitative data. Brain-chips interface questionnaire by Vansteensel, Kristo, Aarnoutse and Ramsey (2017), was adapted for this study. Descriptive and inferential statistics was used through linear regression. A structured questionnaire was distributed to the respondents through an email describing the purpose and a link to fill it out on the Google Form website. Purposive sampling was used to select a sample of 298 respondents completed the questionnaires. The a priori expectation to this study is that implantation of brain chips will make humans remain relevant. The stated objective was optimized below:

$Y = f(X)$
Y = Human Remain Relevant (HRR)
X = Brain-computer interface (BCI)
x_1 = Efficiency(Eff)
x_2 = Health of Humans (HH)
x_3 =Reduced Emotional Load(REL)

Model 1
$HRR_i = \alpha_0 + \alpha_1 Eff_i$

Model 2
$HRR_i = \alpha_0 + \alpha_1 HH_i$

Model 3
$HRR_i = \alpha_0 + \alpha_1 REL_i$

Analysis of Demographic Features of Participants

Table 1: Demographic Characteristics of Respondents

Variable		Frequency (n)	Percentage (%)
Gender	Male	128	43.0
Female		170	
	Total	**298**	57.0
			100.0
Age	Below 30 years	63	21.1
	Between 30-50 years	102	34.2
	Above 50 years	133	44.6
	Total	**298**	**100.0**
Educational Background	HND	85	28.5
	BSC	79	26.5
	MSC	61	20.5
	Professional	73	24.5
	Total	**298**	**100.0**

Source: Field Survey 2020

Table 1 shows that majority of the participants were female representing 57% while the remaining 43% were male. Furthermore, majority of the participants were between the ages of above 50 years (44.6%), followed by respondents within 30-50 years age bracket (34.2%), with only 63 respondents (21.1%) falling below 30 years. In addition, majority of the respondents in this study were HND holders (28.5%), followed by BSc holders (26.5%), while participants with MSc were least represented in this study (20.5%). Table 1 is presented pictorially thus:

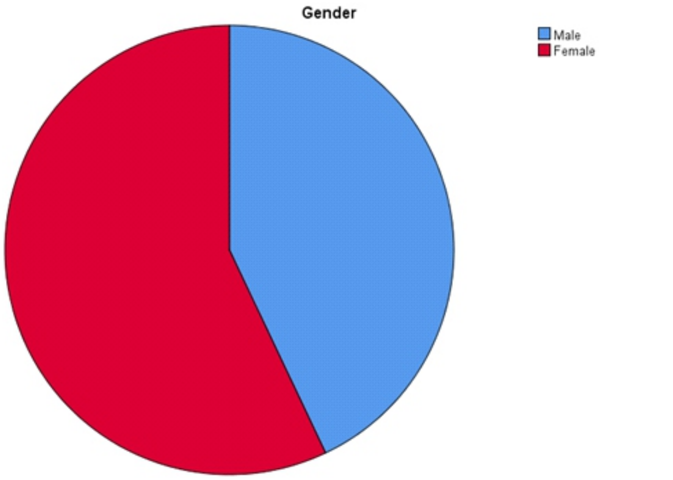

Fig. 1: Gender

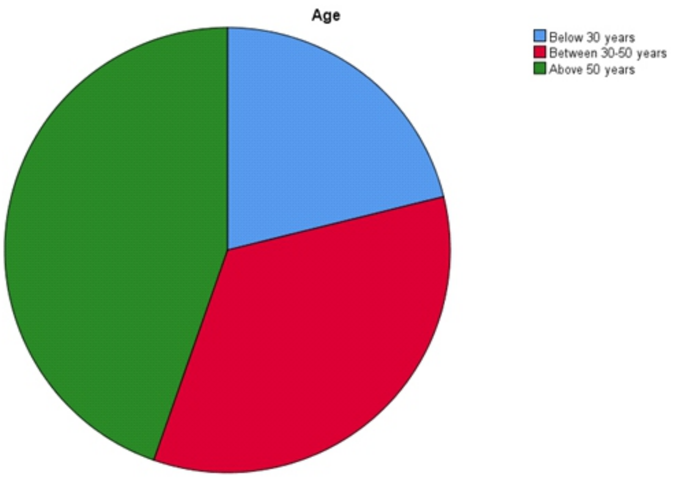

Fig. 2: Age

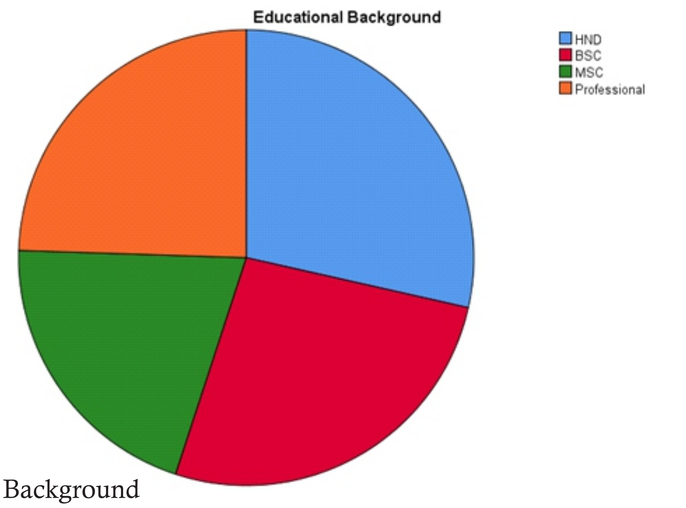

Fig. 3: Educational Background

Presentation of Descriptive Analysis

Table 2: Human Efficiency

Items	SA Freq. (%)	A Freq. (%)	D Freq. (%)	SD Freq. (%)	$\bar{x}$	SD
Brain chips will enable broader employment of workers	60 (20.1)	225 (75.5)	13 (4.4)	-	3.16	0.47
Brain chip will make the minds of workers become valuable resources	149 (50.0)	105 (35.2)	25 (8.4)	19 (6.4)	3.29	0.87
Brain chips will lead to higher wages for workers	743 (24.8)	199 (66.8)	19 (6.4)	6 (2.0)	3.14	0.62
Brain chips will enable low-cost training	138 (46.3)	58 (19.5)	82 (27.5)	20 (6.7)	3.05	1.00
Brain chips will open doors to a new type of work relationship	183 (61.4)	89 (29.9)	20 (6.7)	6 (2.0)	3.51	0.71
Impanated brain chips will make routine workers more innovative	212 (71.1)	70 (73.5)	10 (3.4)	6 (2.0)	3.64	0.64
Adding a high bandwidth interface to the cortex of the brain will solve the problem of slow nature of human workers	144 (48.3)	82 (27.5)	50 (16.8)	22 (7.4)	3.17	0.96
Brain chips will make workers to easily learn or memorize	161 (54.0)	83 (27.9)	41 (13.8)	13 (4.4)	3.31	0.87
Implanted computer chips will help workers to concentrate more	223 (74.8)	42 (14.1)	16 (5.4)	17 (5.7)	3.58	0.83
Brain chip will be used workers to work independently	242 (81.2)	36 (12.1)	13 (4.4)	7 (2.3)	3.72	0.66

KEY: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, ***Decision Rule if mean is 1 to 1.49 =Strongly Disagree; 1.5 to 2.49 = Disagree; 2.5 to 3.49 =Agree; 3.5 to 4.49= Strongly Agree

Interpretation

Table 2 reveals that 20.1% of the respondents strongly agreed that brain chips will enable broader employment of workers, 75.5% agreed, 4.4% disagree. With the mean value of 3.16 and the standard deviation of 0.47, it can be said that most of the respondents agreed that brain chips will enable broader employment of workers. 50.0% of the respondents strongly agreed that brain chips will make the minds of workers become valuable resources, 35.2% agreed, 8.4% disagreed while 6.4% strongly disagreed. With the mean value of 3.29 and standard deviation of 0.87, it can be said that the majority of the respondents strongly agreed that brain chips will make the minds of workers become valuable resources. 24.8% of the respondents strongly agreed that brain chips will lead to higher wages forworkers, 66.8% agreed, 6.4% disagreed while 2.0% strongly disagreed. With the mean value of 3.14 and standard deviation of 0.62, it can be said that most of the respondents agreed that brain chips will lead to higher wages for workers. 46.3% of the respondents strongly agreed that the brain-chip will enable low-cost training, 19.5% agreed, 27.5% disagreed, while 6.7% strongly disagreed. With the mean value of 3.05 and standard deviation of 1.00 can be said that more of the respondents strongly agreed that brain-chip will enable low-cost training. 61.4% strongly believe that brain chips will open doors to a new type of work relationship, 29.9% agreed, 6.7% disagreed while 2.0hat % strongly disagreed. With the mean value of 3.51 and standard deviation of 0.71 can be said that more of the respondents strongly agreed that brain chips will open doors to a new type of work relationship.

From Table 2, 71.1% strongly agreed thatImpanated brain chips will make routine workers more innovative, 73.5% agreed, 3.4% disagreed, while 2.0% strongly disagreed that impanated brain chips will make routine workers more innovative. With the mean value of 3.64 and standard deviation of 0.64 can be said that most of the respondents agreed that impanated brain chips will make routine workers more innovative. 48.3% strongly agreed that adding a high bandwidth interface to the cortex of the brain will solve the problem of slow nature of human workers, 27.5% agreed, 16.8% disagreed, while 7.4% strongly disagreed that adding a high bandwidth interface to the cortex of the brain will solve the problem of slow nature of human workers. with the mean value of 3.17 and standard deviation of 0.96 can be said that most of the respondents strongly agreed that adding a high bandwidth interface to the cortex of the brain will solve the problem of slow nature of human workers. 54.0% strongly agreed that brain chips will make workers to easily learn or memorize, 27.9% agreed, 13.8% disagreed while 4.4% strongly disagreed that brain chips will make workers to easily learn or memorize. With the mean value of 3.31 and standard deviation of 0.83 it can be said that majority of the respondents strongly agreed that brain chips will make workers to easily learn or memorize. 74.8% of the respondents strongly agreed that Implanted computer chips will help workers to concentrate more, 14.1% agreed, 5.4% disagreed while 5.7% strongly disagreed that implanted computer chips will help workers to concentrate more. With the mean of 3.58 and standard deviation of 0.83 it can be said that most of the respondents strongly agreed that implanted computer chips will help workers to concentrate more.

Furthermore, 81.2% strongly agreed that brain chip will be used workers to work independently, 12.1% agreed, 4.4% disagreed while 2.3% strongly disagreed that Brain chip will be used workers to work independently. With the mean value of 3.72 and standard deviation of 0.66, it can be said that majority of the respondents strongly agreed that brain chip will be used workers to work independently

Table 3: Health

Items	SA Freq. (%)	A Freq. (%)	D Freq. (%)	SD Freq. (%)	$\bar{x}$	SD
Implanted brain chips will heal those paralyzed	82 (27.5)	115 (38.6)	29 (9.7)	72 (24.2)	2.70	1.12
Implanted chips inside the brain can reduce depression	148 (49.7)	108 (36.2)	40 (13.4)	2 (0.7)	3.35	0.73
Implanted chips in the brain can reduce stress of learning	79 (26.5)	123 (41.3)	90 (30.2)	6 (2.0)	2.93	0.80
Brain computer chips improves the brain memory	213 (71.5)	60 (20.1)	16 (5.4)	9 (3.0)	3.60	0.73
Implantation of brain chips reduces the rate of suicide	97 (32.6)	88 (29.5)	95 (31.9)	18 (6.0)	2.89	0.94
Implanted brain chips replace the damage area of the brain	101 (33.9)	123 (41.3)	55 (18.5)	19 (6.4)	3.03	0.88
Implantation of brain chips reduces the rate of boredom	108 (36.2)	182 (61.1)	5 (1.7)	3 (1.0)	3.33	0.56
Implanted brain chips cure dementia	133 (44.6)	40 (13.4)	105 (35.2)	20 (6.7)	2.96	1.03
implanted brain chips help to cure Alzheimer	220 (73.8)	42 (14.1)	20 (7.4)	14 (4.7)	3.57	0.82
Implanted brain chips help to cure spinal cord injuries	241 (80.9)	29 (9.7)	23 (7.7)	5 (1.7)	3.70	0.68

KEY: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, ***Decision Rule if mean is 1 to 1.49 =Strongly Disagree; 1.5 to 2.49 = Disagree; 2.5 to 3.49 =Agree; 3.5 to 4.49= Strongly Agree

Source: Field Survey 2020

Interpretation

From Table 3, 27.5% of the respondents strongly agreed that Implanted brain chips will heal those paralyzed 38.6% agreed, 9.7% disagreed, while 24.2% strongly disagreed. With the mean value of 2.7 and the standard deviation of 1.12, it can be said that most of the respondents agreed that implanted brain chips will heal those paralyzed. 49.7% of the respondents strongly agreed that implanted chips inside the brain can reduce depression, 36.2% agreed, 13.4% disagreed while 0.7% strongly disagreed. With the mean value of 3.35 and standard deviation of 0.73, it can be said that the majority of the respondents strongly agreed that Implanted chips inside the brain can reduce depression. 26.5% of the respondents strongly agreed that implanted chips in the brain can reduce stress of learning, 41.3% agreed, 30.2% disagreed while 2.0% strongly disagreed. With the mean value of 2.93 and standard deviation of 0.80, it can be said that most of the respondents agreed that implanted chips in the brain can reduce stress of learning. 71.5% of the respondents strongly agreed that the brain-chip improves the brain memory, 20.1% agreed, 5.4% disagreed, while 3.0% strongly disagreed. With the mean value of 3.6 and standard deviation of 0.73 can be said that more of the respondents strongly agreed that brain-chip improves the brain memory. 32.6% strongly believe that Implantation of brain chips reduces the rate of suicide, 29.5% agreed, 31.9% disagreed while 6.0 % strongly disagreed. With the mean value of 2.89 and standard deviation of 0.94 can be said that more of the respondents strongly agreed that implantation of brain chips reduces the rate of suicide

33.9% strongly agreed that Impanated brain chips replace the damage area of the brain 41.3% agreed, 18.5% disagreed, while 6.4% strongly disagreed. With the mean value of 3.03 and standard deviation of 0.88 can be said that most of the respondents agreed that impanated brain chips replace the damage area of the brain. 36.2% strongly agreed that implantation of brain chips reduces the rate of boredom, 61.1% agreed, 1.7% disagreed, while 1.0% strongly disagreed. With the mean value of 3.33 and standard deviation of 0.56 can be said that most of the respondents agreed that implantation of brain chips reduces the rate of boredom. 44.6% strongly agreed that Implanted brain chips cure dementia, 13.4% agreed, 35.2% disagreed while 6.7% strongly disagreed. With the mean value of 2.96 and standard deviation of 1.03 it can be said that majority of the respondents strongly agreed that Implanted brain chips cure dementia. 73.8% of the respondents strongly agreed that implanted brain chips help to cure Alzheimer, 14.1% agreed, 7.4% disagreed while 4.7% strongly disagreed. With the mean of 3.57 and standard deviation of 0.82 it can be said that most of the respondents strongly agreed that implanted brain chips help to cure Alzheimer.

Furthermore, 80.9% strongly agreed that Implanted brain chips helps to cure spinal cord injuries, 9.7% agreed, 7.7% disagreed while 1.7% strongly disagreed. With the mean value of 3.70 and standard deviation of 0.68, it can be said that majority of the respondents strongly agreed that brain chips.

Table 4: Reduced Emotional Load (REL)

Items	SA Freq. (%)	A Freq. (%)	D Freq. (%)	SD Freq. (%)	$\bar{x}$	SD
Implanted chips reduce irritability	182 (61.1)	64 (21.5)	44 (14.8)	8 (2.7)	3.41	0.84
Implanted brain chips reduce anxiety	194 (65.1)	52 (17.4)	47 (15.8)	5 (1.7)	3.45	0.82
Impulses of emotional pain can be transferred far away from each other	86 (28.0)	107 (35.9)	90 (30.2)	15 (5.0)	2.89	0.88
Implanted brain chips reduce sadness	80 (26.8)	80 (26.8)	114 (38.3)	24 (8.1)	2.72	0.95
Implanted brain chips reduce disconnection from reality	82 (27.5)	63 (21.1)	108 (36.2)	45 (15.1)	2.61	1.05
Implantation of brain chips reduce excessive fear	140 (47.0)	97 (32.6)	35 (11.7)	26 (8.7)	3.18	0.95
Implantation of brain chip reduces conduct disorders	145 (48.7)	62 (20.8)	74 (24.8)	17 (5.7)	3.12	0.98
Cyborgs have feelings for non cyber humans	80 (26.8)	58 (19.5)	86 (28.9)	74 (24.8)	2.48	1.13

KEY: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree, ***Decision Rule if mean is 1 to 1.49 =Strongly Disagree; 1.5 to 2.49 = Disagree; 2.5 to 3.49 =Agree; 3.5 to 4.49= Strongly Agree

Source: Field Survey 2020

Interpretation

From Table 4, 61.1% of the respondents strongly agreed that Implanted brain chips reduce irritability21.5% agreed, 14.8% disagreed, while 2.7% strongly disagreed. With the mean value of 3.14and the standard deviation of 0.84, it can be said that most of the respondents strongly agreed that implanted brain chipsreduce irritability. 65.1% of the respondents strongly agreed that implanted chips inside the brain reduce anxiety, 17.4% agreed, 13.8% disagreed while 1.7% strongly disagreed. With the mean value of 3.45 and standard deviation of 0.82, it can be said that the majority of the respondents strongly agreed that Implanted chips inside the brain reduce anxiety. 28% of the respondents strongly agreed thatimpulses of emotional pain can be transferred far away from each other 35.9% agreed, 30.2% disagreed while 5% strongly disagreed. With the mean value of 2.89 and standard deviation of 0.88, it can be said that most of the respondents agreed that Impulses of emotional pain can be transferred far away from each other. 26.8% of the respondents strongly agreed that implanted brain chips reduce sadness, 26.8% agreed, 38.3% disagreed, while 8.1% strongly disagreed. With the mean value of 2.72 and standard deviation of 0.95 can be said that more of the respondents disagreed that implanted brain chips reduce sadness. 27.5% strongly believe that Implanted brain chips reduce disconnection from reality, 21.1% agreed, 36.2% disagreed while 15.1% strongly disagreed. With the mean value of 2.61 and standard deviation of 1.05 can be said that more of the respondents disagreed thatImplanted brain chips reduce disconnection from reality.

From Table 4, 47% strongly agreed that Impanated brain chips reduce excessive fear, 32.6% agreed, 11.7% disagreed, while 8.7% strongly disagreed. With the mean value of 3.18 and standard deviation of 0.95 can be said that most of the respondents strongly agreed that Implantation of brain chips reduce excessive fear. 48.7% strongly agreed that Implantation of brain chip reduces conduct disorders 20.8% agreed, 24.8% disagreed, while 5.7% strongly disagreed. With the mean value of 3.12 and standard deviation of 0.98 can be said that most of the respondents strongly agreed that Implantation of brain chip reduces conduct disorders. Furthermore, 26.8% strongly agreed that Cyborgs have feelings for non cyber humans, 19.5% agreed, 28.9% disagreed, while 24.8% strongly disagreed that cyborgs have feelings for non cyber humans. With the mean value of 2.48 and standard deviation of 1.13, it can be said that majority of the respondents disagreed that Cyborgs have feelings for non cyber humans

Table 5: Reliability test

Cronbach's Alpha	Cronbach's Alpha on standardized item	Number of items.
0.747	0.802	40

Source: SPSS 24 output

Table 5 shows the Cronbach's alpha value of 0.747 meaning that there is a good internal consistency among the scales as it is more than the 0.70 threshold.

H_{01}: There is no significant influence of human efficiency and making human remain relevant

Table 6a: ANOVA & Model Summary of Test of influence of Human Efficiency (Eff)onHuman Remain Relevant (HRR).

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	2.806	1	2.806	3.926	0.048
	Residual	211.575	296	0.715		
	Total	214.382	297			
R= 0.114						
R Square = 0.013						
Adjusted R Square = 0.010						

Source: SPSS 26 output

Table 6b: Influence of Eff on HRR

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.082	0.636		3.274	0.001
Human Efficiency	0.374	0.189	0.114	1.981	0.048
a. Dependent Variable: **HRR**					

Source: SPSS 26 output

Interpretation

There was a significant difference between the two variables ($\alpha 1 = 0.374$, $t = 1.981$, $p<0.05$). there was a positive correlation of 0.374. which shows that a unit increase in human efficiency with BCI will lead to a 0.374 increase in making humans remain efficient. The adjusted R^2 value (R^2= 0.013) shows that human efficiencycould account for only 1.3 per cent variation in making humans remain relevant.

H_{02}: Health of Humans (HH) has no significant Influence on Human Remain Relevant (HRR)

Table 7a: ANOVA & Model Summary of Test of influence of HH on HRR

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	2.233	1	2.233	37.096	0.000
	Residual	17.816	296	0.060		
	Total	20.049	297			
R= 0.334						
R Square = 0.111						
Adjusted R Square = 0.108						

Source: SPSS 26 output

Table 7b: HH on HRR

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	2.154	.198		10.871	0.000
Health of Humans	0.376	0.062	0.334	6.091	0.000
a. Dependent Variable: **BCI**					

Source: SPSS 26 output

Interpretation

There was a significant difference between the two variables ($\alpha 1= 0.376$, $t= 6.091$, $p<0.05$). There was a positive correlation of 0.376. which shows that a unit increase inhealth with BCI will lead to a 0.374 increase in making humans remain relevant. The adjusted R^2 value (R^2= 0.111) shows that Health could account for only 11.1 per cent variation in making humans remain relevant.

H_{03}: There is no relationship between Reduced Emotional Load (REL) and Brain Computer Interface (BCI)

Table 8: Bivariate Pearson correlation test relationship between REL and HRR

		REL	HRR
GIFMIS	Pearson Correlation	1	0.526*
	Sig. (2-tailed)		0.000
		298	298
	N	0.526**	1
PERF	Pearson Correlation	0.000	
	Sig. (2-tailed)	298	298
	N	1	0.526

Source: SPSS 26 output

Interpretation

This result revealed the relationship that exists between Reduced Emotional Load (REL) and brain chips interface (BCI). From the table the correlation coefficient is 0.526 which signals that there is a strong positive relationship between REL and BCI ($r= 0.526$, $p<0.05$). This implies that reduced emotional load will make humans remain relevant. Hence, the null hypothesis which states that there is no relationship between reduced emotional load and making humans remain relevant was rejected.

Discussion and Conclusion

We aimed to examine the effect of BCI in making humans remain relevant. There is a significant effect of BCI in making humans remain relevant. The result of this study corresponded to the findings of Barbara (2018), Satheesan, Deshmukh, and et al, (2021). This project is not in parallel with the scholarship of Michael et al (2008), Woodrow (2015) Woodrow et al (2017), and Roberts (2013). To the best of our knowledge, no known study has been conducted on the effect of BCI in making humans remain relevant. Satheesan, et al (2021). discovered that the implantation of optimized neuromorphic hardware helps in solving motor-neuron, spine problems and ultra-low power cognitive systems This project is distinguished from other scholarship. BCI makes humans more rational, caring, improve their faith and intelligence level.

References

Ahmed, E. (2010). Brain chip implants: Controlling movements with thought alone: The impossible becomes reality, *Journal of Telecommunications, 5*(2), 34-39.

Ajibade, A. T., Adegbie, F., & Falana, A. (2021). Robotic intervention and labour cost of listed manufacturing companies in Nigeria, *6th ICAN International Academic Conference on Accounting & Finance* (IACAF 2021).

Alexander, A. A. (2011). From artificial intelligence to human super-intelligence, *Artificial Intelligence 2*(6), 3560.

Anand, R., & Kay, F. (2021*). 3 ways COVID-19 is transforming advanced analytics and AI*, Retrieved from https://www.weforum.org/agenda/2020/07/3-ways-COVID-19-is-transforming-advanced-analytics-and-ai/aper 36 on December 2, 2021

Barbara, D. (2018). Brain-inspired technologies: Towards chips that think? IEEE International *Solid-State Circuits Conference - (ISSCC)*, 12-18, DOI: 10.1109/ISSCC.2018.8310165.

Boston Consulting Group (2015). *The robotic revolution: The next great leap in manufacturing*, Retrieved from https://www.bcg.com/publication/2015/lean-manufacturing-innovation-robotics-next-great-leap-leap-manufacturing on January 25, 2021

CNBC Africa (2018). *Nigeria's unemployment rate rises to 23.1 percent in Q3*, Retrieved from https://www.cnbcafrica.com/news/west-africa/2018/12/20/nigeria-unemployment-rate-rises-to-23.1-percent-in-q3/ on February, 8, 2020.

Cormier, D., Young, J., Nakane, M., Newman, G., & Durocher, S. (2013). Would you do as a robot command? An obedience study for human-robot interaction, *International Conference on Human-Agent Interaction,* 1-3-1

Darrel, E. (2020). *Take a closer look at Elon Musk's Neuralink surgical robot*, Retrieved from https://techcrunch.com/2020/08/28/take-a-look-at-elon-musks-neuralink-surgical- robot/amp/ on December 21, 2021

Dina, S. (2014). *Microchips will be implanted into healthy people sooner than you think*. Retrieved fromhttps://www.businessinsider.com/microchip-implants-in-healthy-people-2014-7?r=US&IR=T

Egwakhe, A. J., Amos, N. B., & Nicodemus, T. (2020). Can technology transfer stimulate labour productivity: Experience from Nigeria Automobile sector, *International Journal of Business and Management, 15*(4), 1-10

Elizabeth, A. D., Cassie, B., llmar, T., Dalton, W. D., Curtis, S. K., Abhishek, P., & Suhrud, M. R. (2020). Therapeutic hypothemia reduces cortical inflammation associated with Utah array implants, *Journal of Neural Engineering, 17*(2).

Fabrice, J. (2008). Beyond therapy and enhancement: the alteration of human nature, *NanoEthics, 2,* 15-23.

Falana, A., Adegbie, F. F., &Ajibade, A. T. (2021). Robotic intervention and net profit before interest and tax*, International Journal of Advanced Studies in Economics and Public Sector Management | IJASEPSM 9*(1), 25- 138.

Hirotaka, O. (2014). Emotional cyborg: Complementing emotional labour with human-agent interaction technology... Conference Paper $15.00. http://dx.doi.org/ 10.1145/2658861.265888

Ip, R., Michael, K., & Michael, M. G. (2008). The social implications of humancentric chip implants: a scenario – 'thy chipdom come, thy will be done. Collaborative electronic commerce technology and research (1-11). Spain: IEEE computer society.

Ivana, K. (2017). *Elon Musk's next move: Merging brains with computers*?, Retrieved from https://money.cnn.com/2017/03/28/technology/musk-neuralink-brains-computers-ai/index.html

John, K. (2018). The unfinished robots' revolution: Ten tips for humans, *Digitalizing Democracy*. ISBN: 9781351054867

Kathleen, W. (2003). *A feeling for the cyborg: Kathleen Woodward 1st Edition*, Routledge. ISBN 9780203873274

Koo, J., & Cox, W. M. (2007). An economic interpretation of suicide cycles in Japan, *Contemporary Economic Policy 26* (1), 34.

Maartje, S. (2009). The mind and the machine. On the conceptual and moral implications of brain-machine interaction, *Nanoethics* 3, 217

Mathew, C. G., Reymundo, A. G., Shanelle, G. C., Giancarlo, F. S., & Julie. A. S. (2015). Decision-making authority, team efficiency and human worker satisfaction in mixed human-robot teams, *Autonomous Robots 39*(3), 293-312

McGee, E. M., & Maguire, G. Q. (2007). Becoming borg to become immortal: regulating brain implant technologies*, Cambridge Quarterly of healthcare Ethics, 16*(03), 291-302.

Narges, M. N. (ND). *We're very close to the cutting edge in AI – and it scares the hell out of me,* Retrieved from https://348708859.medium.com/were-very-close-to-the-cutting-edge-in-ai-and-it-scares-the-hell-out-of-me-444916583a4a

NBC (2021). *Elon Musk's Neutralink puts computer chips in pigs' brains in bid to cure diseases*, Retrieved from htttps://www.nbcnews.com/tech/tech-news/elon-musk-s-neuralink-puts-computer-chips-pigs-brains-bid-n1238782

Nedelkoska, L. & Quintini, G. (2018). *Automation, skills use and training,* OECD Social, Employment and Migration Working Papers 202.

Ngige, C. (2020). Nigeria's unemployment rate hits 33.5 per cent by 2020 –Minister, *Premium Times*. Retrieved from https://www.premiumtimesng.com/news/top-news/328137-nigeris-unemployment-rate-hits-33.5-per-cent-by-2020-minister.html on February, 10, 2020.

OECD (2019). *The future of work: OECD employment outlook 2019 highligh*t.

Oxley, T., Mitchell, P., Opie, N., Yoo., P., Mocco, J., Campbell, B., Bird, C., & Lee, S., (2020). Motor neuroprothesis implanted using cerebral venography improved activities of daily living in severe paralysis. *J, NeuroIntervent Surg 12(Suppl 1),* A1- A172.

Peter, D. (2020). The globalization of artificial intelligence: Consequences for the politics of environmentalism, *Globalization 2-15*: Doi: 10.1080/14747731.2020.1785670

PWC (2020). *PWC's MSME survey 2020: Building to last*, Retrieved from https:// www.pwc-msme-survey-2020-final.pdf on September 8, 2020.

Ray, K. (2005). *The singularity is Near: When humans transcend Biology*, The Viking Press

Roberts, B. (2013). *Intervention in the brain: politics, policy and ethics*, The MIT Press Cambridge, Massachusetts, London England ISBN: 978-0-262-01891-3.

Rory, C. (2014). *Stephen hawking warns artificial intelligence could end mankind*, Retrieved from https://www.bbc.com/news/technology-30290540

Sarah, J. (2021). *This 20-person biotech firm just beat Elon Musk's Neuralink in getting the Ok to test brain chip implants in humans with paralysis*, Retrieved from https://www.businessinsider.com/synchron-brain-computer-chip-implant-elon-musk-neutralink-human-trial-2021-7 on December 21, 2021

Satheesan, A. D., Deshmukh, C., & Dwivedi, A. et al. (2021). A review on brain implants, *Advanced Res. Appl. Arti Intel Neural Network 5*(1), 15-21.

Sissi, C. (2019). *Elon Musk's 'brain chip' could be suicide of the mind says scientist*, Retrieved from https://observer.com/2019/08/elon-musk-neuralink-ai-brain-chip-danger-psychologist/

Stefano, V. (2011). Brain-chip interfaces: The present and the future. *Procedia Computer Science, 7,* 61-64.

Vaishya, R., Javaid, M., Khan, I. H., & Haleem, A. (2020). Artificial intelligence (AI) applications for COVID-19 pandemic, *Diabetes MetabSyndr, 14*(4), 337- 339.

Vansteensel, M. J., Kristo, G., Aarnoutse, E. J., & Ramsey, N. F. (2017). The brain-computer interface researcher's questionnaire: from research to application, *Brain-computer Interfaces, 4(*4), 236-247.

Woodrow, B. (2015). *Cyber-humans: Our future with machines*, Springer ISBN: 3-319-25048-9.

Woodrow, B., & Alexander, W. (2017). Cyborgs and enhancement technology, *Philosophies 2*(4), 2-18.

World Bank (2018). *Nigeria – GINI index*, Retrieved from https://knoema.com/atlas/nigeria/topics/poverty/income-inequality/GINI-index on January, 12, 2020.