Optimizing Stress with a Microsoft Visual Basic.Net Control

D. A. Adenugba
Department of Physics
The Federal University of Technology, Akure
P.M.B 704, Akure, Ondo State. Nigeria

ABSTRACT

Human response to stress varies in time and space greatly. Sleep and fear of God are vital stress reducer. A customized server, dvRTFCls that enhanced the usefulness of Microsoft Visual Basic.NET RichTextBox control was developed using Microsoft Visual Studio 2010. dvRTFCls contains twenty six functionalities that were exposed in a client application, StressSoft to seamlessly display medical stresses, types, symptoms, causes and remedies in various ways and colours to meet users' dynamic tastes and needs. One hundred wellannotated stress diagrams could be shown. dvRTFCls has unlimited applications to display text with differs attributes. It was shown that sleep and knowledge of God could effectively reduce stress. Godly fear, which removes distresses and enthrones Eustress, was comprehensively discussed; the effect of stress on productivity was also addressed. It was established that the Holy Bible is adequate to drastically reduce stress, if the divine injunctions in it are adhere to. Software developers will find the customized control and generic method for data inputs in this work beneficial in their works. Researchers and Medical personnel, besides distressful folks, will tremendously gain from using StressSoft package.

General Terms

Distress, sleep, knowledge, eustress

Keywords

RichTextBox control, fear of God, stress, StressSoft

1. INTRODUCTION

There is no single definition for stress owing to its subjective nature. Stress has several meanings; and there are different types, each with its own characteristics, symptoms, duration and treatment approaches [1-6]. Stress response, also known as fight-or-flight, varies widely from one person to another. However, stress is a normal physical response to events that threatened or upsets one's balance [4]. Stress, according to [7], is the pressure of life...a normal part of life. Baum (1990), as quoted by American Psychological Association (APA), defined stress as any uncomfortable emotional experience accompanied by predictable biochemical, physiological and behavioural changes [8]. It is the feeling of being overwhelmed, worried or rundown [1].

Stress could broadly be categorized as Physics or non-human stress and Medical or human stress. Stress is not a function of age and is not gender sensitive. It affects people of all ages and genders, and can lead to both physical and physiological health issues [1]. Medically speaking, there are good (eustress) and bad (distress) stresses [1-6, 9-17]. Eustress aids better performance but distress causes upset and myriad health

problems. As eating is part of live, so is stress. Stress cannot be eliminated; it is part and parcel of God's creation. There are internal and external factors responsible for stress. There are several symptoms of stress, which are divided into four groups namely, physical, mental, emotional and behavioural symptoms [1-3]. Each of these categories has stern effects on the human body which, if left untreated, could lead to permanent debilities, illnesses and even sudden death. Insomnia (sleep disorders) and cold extremities are examples of physical symptoms of stress as figure 1 shows; other examples could be seen for other symptoms in this figure. Excessive stress is ruinous; it is a potential promoter of unhappiness.

RichTextBox Control (RTBC) is a powerful intrinsic control, similar to Text Boxes, which could be employed to develop word processor and create formatted text [18-24]. With the adept manipulation of the exposed functionalities of RTBC, text could be clothed with charming attributes which human eyes crave for everywhere every day. RTBC generates Rich Text Format (RTF) code internally; and the RTF is a language that utilizes tags (commands) to specify the formatting of a document [18]. It is not only text that RTBC could load and display; it is capable of loading and displaying images along with the text, but without allowing text to be entered on either side of the images after being loaded. Therefore, the necessary text should be inserted in the images before uploading in RTBC. Apart from RTBC documents being without special characters, the tags are based on ASCII strings. Also, RTF documents are easily exchanged among different operating systems and computers [18]; hence the choice of the control for this work. More so, RTBC could be used to develop a full-blown word processor application and this benefit, which is expected to be tapped in future, further supports its use in this work.

Our objectives in this paper are to discuss human stress, types, response, symptoms, causes and effects. We shall focus on how sleep and fear of God aid stress elimination (avoidable ones) and reduction (unavoidable ones) and enhance productivity. A customized server for the functionalities of RTBC will be developed and the server will be exposed in a client application, StressSoft to display various aspects of stress.

2. STRESS TYPES AND RESPONSE

There are avoidable and unavoidable stresses; short-term (acute stress) and long-term (chronic stress) (see figure 1). We have Post traumatic stress disorder which is as a result of serious accident or natural disaster. Each of these stresses has its characteristics as seen in figure 1. Stress response is the way human body reacts sharply and automatically to real or



imaginary threats or upsets. It is the body's way of protecting the individual [3, 16]. Stress response slows down nonessential body functions like digestive and immune systems and heightens blood pressure; state of alertness and breathes, and make the muscles to be tensed up. When in the right dose, stress helps stay focused, energetic and alert to meet challenges [1-6, 25].

Human stress, like non-human stress, is elastic in nature. At a certain point, it is quite useful; however, beyond this point, the point we shall call human elastic limit, stress is harmful. Human elastic limit is the maximum limit a human being can attain under stress and when the stress is released, he regains his original self. Beyond human elastic limit, mood, productivity, relationships and quality of life are badly affected [2-3, 16]. The patient may be in state of coma, diseased permanently and even kick the bucket. That is, he could not regain his original self. Human elastic limit may be recoverable, flexible and responsive to treatment; but beyond its elastic limit, originality of self is impossible.

3. STRESS SYMPTOMS, CAUSES AND TOLERANCE LEVEL

Anything that poses a challenge or threat to the well-being of man is a stress [9], which often gives warning signs. Stress symptoms are the warning signs that excess stress is present in the body, ready to unleash its effects on the body and mind, or already at work wreaking havoc in the life of the possessor. Stressors are situations and pressures, negative or positive, which cause stress. Stress is part of nature. God, the Creator of the universe and things therein, wanted it so. Why did God command the children of Israel to rest on the Sabbath day (Saturday)? The answer is in Exodus 31:17, which reads thus: "It (Sabbath) is a sign between me and the children of Israel forever; for in six days the Lord made the heavens and the earth, and on the seventh day He rested and was refreshed" (Exodus 31:13-15, 17). Researchers unanimously agreed that all stress cannot be eliminated but managed to enhance daily performance and aid healthy living. Stress can motivate and help individual to perform under pressure [1-11, 13-17]. Stress is responsible for overloads that elevate fight-to-flight hormones which have a negative long-term effect on health and happiness [9-10].

Sabbath day resting refreshes the body and mind; and prepares the Jews for the next week work. On the Sabbath day the Jews were refreshed physically and spiritually. If the 21st Century living beings could adopt a day of rest in which there would be no work, but complete solemn assembly and rest, the number of hospital in our land will reduce by half; distress will turn to eustress; increased violence will turn to increased love and peace. Since Sabbath day was given to the Jews alone in those days (Exodus 20:8-11) and not commanded by Christ to be observed for worship, we are not advocating a Sabbath day of rest but any day of rest. Sunday, though adopted as a day of worship by Christians, is not the very day of rest we are canvassing for in which everybody will mandatorily cease to work, rest and be refreshed physically and spiritually. The Environmental Sanitation day in Ondo State in Nigeria between 7am-10am every last Saturday of every month assisted the State to stay clean. What of a day of rest and refreshment?

Stress tolerance level varies from one person to another; it is a function of many factors which, according to [3], includes quality of relationship, the supportive friends and family network; attitude and general outlook on life; emotional intelligence and genetics. Stress tolerance level is also swayed by sense of control, knowledge and preparation and ability to cope with emotions. Excessive stress is bad as it causes distresses. The mind and body suffer for it, and alters the individual behaviour. It can lead to incorrect judgment and decisions. Stress does not only affect the body, it has serious effects on the mind and behaviour of each person in various ways.

4. STRESS EFFECTS AND MANAGEMENT

Stress, according to [10], is the response of the nervous system to stressors that are too large to handle. It is the internalize result of external overloads. Some stresses such as excessive intake of stimulant and improper sleep are avoidable; some are unavoidable like natural disasters. Stress management is all about managing oneself, situation and environment. It has been said that managing stress is all about taking charge of thoughts, emotions and schedule. Stress management involves changing the stressful situation...and making time for rest and relaxation [4]. The sure solution to stress is rest and refreshment. Some natural inner strength like mental balance, normal functioning of the nervous system, grace and good humour have been identified as the great reliever of stress [10]. King Solomon said, "The spirit of a man will sustain him in sickness, but who can bear a broken spirit?" (Proverbs 18:14). The inner-self, the spirit and the soul (I Thessalonians 5:23), is the real-self, not what is seen outside, the body. This inner-self is strengthened to withstand life vicissitudes through belief in God. Previous results received through trust from God reinforce the present. The body may be emancipated, if the soul and spirit abide in the body, the person is still a living being; but upon the departure of the real-self, the person is dead (James 2:26).

The first step towards managing stress is recognizing its existence; and avoids, if possible, the stressor(s) [4, 10-11]. He who does not recognize he has a problem remains perpetually in that problem. Anyone who knows his fault, the Yorubas said, will not remain long on his knees. Similarly, anyone who knows his stress problem will not slip into chronic stress situation; he will quest for help at the right time and place, and make necessary lifestyle changes towards achieving normal stress level. Through self-help, selfmanagement and medication stress could be managed [9]. Self-help consists of division of labour, improved lifestyle, meditation, nutrition; talk with supportive folks, relaxation techniques, better behavioural choices, replacing negative self-talk with coping self-talk, enhanced amount and quality of sleep and assertiveness. Physical activity increases body's production of free-good endorphins, a type of neurotransmitter in the brain. Besides, it assists in mild forms of anxiety and depression treatment [1, 4, 13].



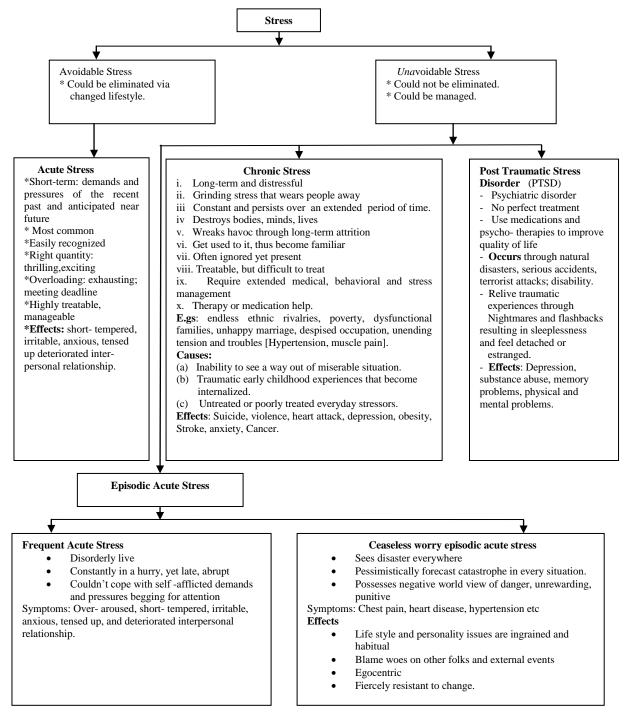


Figure 1: Types of Stress and Characteristics Adapted from www.apa.org and Melinda et al; 2012

Although the word stress was not taught by Christ, the concept of stress is well- established in the Holy Bible. God created it and proffered solution to it right from the creation of the world. The Holy Bible is adequate to help us manage stress spiritually and physically. Jesus Christ knows the importance of stress; and the means of managing it. During a stressful time, sufferer is expected to breathe because of the benefits of being relieved of stress. Breathe relaxes the muscles, decreases the heart rate and thus lower the blood pressure [4, 26]. Experts advice that folks should "Think to

yourself that your body is calm and at peace" [4]; because as you think in your heart so you are (Proverbs 23:7). Besides, studies revealed that belly breathing during stressful situation helps sufferer to relax. Relaxation in front of TV or with alcohol or drugs or tobacco has been described as a false state of relaxation that is only temporary [26]. Therefore, individual is counseled to hold his/her breath for several seconds, keeping the air inside belly thus expanding the diaphragm and lungs. Then, slowly exhale through the mouth, feeling hands and abdomen going down [4]. Quite interesting and thrilling a



research finding! These findings corroborated our assertion that God did not only create stress, but put the management technique in each person. Breathe is part of life; God created it; practice it frequently (as we are told), so as to master your stress and your stress will not master you. This breathing exercise demand concentration, thus focus on it and block out all other thought , and if the exercise feels painful or uncomfortable, it should be disengaged from, and help should be sought from experts [4], not quacks who will complicate issues rather than solving them.

4.1 Sleep

The human nature of Christ was revealed in the boat on the sea as He refreshed Himself with good sweet sleep, the boisterous wind notwithstanding (Matthew 14:1-12; 8:23-27). The task of the day was taken its toils on the human nature of the Lord Jesus Christ. Human flesh is susceptible to stress occasioned by fatigue. Sleep, undisturbed sleep, is a sure panacea to stress as several researches unveiled [3-5, 9-11]. Why are professional physicians in the constant habit of adding sedative to the drugs given to their patients? Is it not to induce sleep which the body craves for and the patients declined to obtain naturally? The Lord who created human being created sleep to refresh him of his toils, and release him of his stress. "The sleep of a labouring man is sweet," King Solomon correctly noted, "whether he eats little or much; but the abundance of the rich will not permit him to sleep" (Ecclesiastes 5:12).

If man does not over work, eat well, rest at the appropriate time and be contented with what he possesses, long life, as procured in olden days, will be his portion. Why was Jonah fast asleep in the ship carrying him to Tarshish as he was running away from the Lord? (Jonah 1:1-17). Anxiety and worry have literally eaten him up. He has been commissioned to go to Nineveh, the great city to deliver God's message to the sinful people. He has heard; he could not hide himself or pretend he has not been commissioned. His unwillingness to go as instructed triggered actions in him which included worry, depression and agitation. The mighty tempest on the sea as Jonah tripped to Tarshish could have prevented a normal stress person from sleeping like his co-travellers; but Jonah, the runaway messenger of God, was deep in sleep as he was heavily under stress (Jonah 1:1-9). Research findings had shown that there is strong link between insomnia and chronic stress. Consequently, 7-8 hours of sleep, elimination of distractions in the bedroom and regular time each night to bed has been recommended [1, 4].

Sleeping time, place and need for each individual are not the same. Out of the fifty people questioned whether or not they willingly sleep in the afternoon, only four of the respondents could occasionally and deliberately sleep in the afternoon. Amazingly, among the elites ninety-five percent of them have no time to sleep at all, just like the market women who stay in the market throughout the day. When asked what occupied their day, respondents appear to tilt to one side: from lecture room to the Laboratory and then to the library. Nature, instead of self, compels most elites to sleep. Are Nigerians really sleeping? In the night with heat, without electricity most times, could they really sleep? Sleep has no master. Several accidents on our highways could have been prevented if people take sufficient sleep before driving. Jonah could have been involved in a first class accident if he has driven by himself to Nineveh. Jonah was under stress and had no rest until he delivered the message of God.

4.1.1 Fear of God

Fear is not a novel phenomenon; it has been from the creation of the world. It is experienced by both old and young; servant of God and of the devil at various times and place. Several times God allayed the fear of His servants (Genesis 15:1; 21:17; 1Samuel 12:20; Isaiah 41:10, 43:5; Luke 1:30; 2:10). Fear appears in more than one hundred and fifty places in the Holy Bible. Fear, according to the Oxford Advanced Learner Dictionary, is to be frightened of somebody or something or of doing something. We have the fear of man, fear of death (Hebrews 2:15) and the fear of God. Man's fear ensnares (Proverbs 29:25). The fear of death torments and enslaves; makes life stressful and miserable. However, the fear of God implies "reverence for God which leads to obedience because of one's realization of His power, as well as His love to man"[27]. The delight of Christ is in the fear of God, the Father (Isaiah 11:3).

4.1.2 Some causes of fear

There are so many causes of fear, which include the followings. When night falls fear comes to most children and youths, and even some adults. Fear (respect) is attached with authority (Proverbs 20:2; Romans 13:7). Sudden death provokes fear, especially when the deceased is young and/or there are some mysteries surrounding the demise. The death of Ananias and Sapphirah brought great fear to all who heard of the sudden death (Acts 5:5, 11). Unfounded superstitions could inflate folks with fear. Some people create fear, artificial fear, to gain or continue to gain some undue advantage(s) of certain people or situation. Fear (reverence) may exist in a relationship such as in the case of master-servant (Matthew 1:6; Ephesians 6:5; 1 Peter 2:18). The sight of an angel or spirit by mortal beings brings fear (Luke 1:12).

The sight of dangers creates fear and the fellow sighting it takes to his/her heels. David, the son of Jesse, ran away from Saul, the first King in Israel on several occasions (1Samuel 21:10; 23:26). Fear abounds everywhere, every day and time. Fear of what to eat and drink; fear of divorce and ill-health; fear of failure and unemployment are just few of the countless fears in the world. Science and Technology do not eliminate fear, but to some level reduces it, especially in the developed nations. In the advanced nations, there is no fear of power failure, infringement of citizens' fundamental human rights, but then they are soaked in the fear of terrorist attack and high rate of divorcement. Thus, what is a fear to one may not be a dread to another. Fear could be given and received as a gift either for good or bad (Jeremiah 32:40; 49:5).

4.5.2 Merits of Fear

The fear of God could turn distress to Eustress. God did not give us the Spirit of fear to ensnare us but of power, love and sound mind (2Timothy1:7). The fear we receive from God is to reverence Him, not to frighten us. We should not pray for fear, but we should pray for the *fear of God* which aids us to fervently love Him and then love our neighbours. When we fear God we reference Him and demonstrate our unalloyed love for Him. The love we have for God is visible in keeping His commandments (John 14:15; 15:14) and in loving our human fellows (Matthew 25:31-46). Other advantages of possessing the fear of God are: There is life, fountain of life in the fear of God (Proverbs 8:13; 14:27; 19:23). An evil doer is a stressful person *before* the evil is committed, *during and after* the evil exercise. Therefore, there is no rest, yes no peace for the wicked (Isaiah 48:22). "Do not be wise in your own



eyes, fear the Lord and depart from evil" (Proverbs 3:7-8; 16:6). Worship in Spirit and truth demand the fear of God. Therefore, acceptable worship should be in the fear of God (1 Samuel 12:24; Psalm 2:11). Anyone who genuinely fears God is immune against doing evil. Just as kerosene is immiscible with water, so could a good person not partner with evildoers (Exodus 23:1-2; Proverbs 13:20). Consequently, there is no fear in love, but honour, purity, singleness of heart in worship, because genuine love casts out fear and brings perfection.

"There is no fear in love; but perfect love casts out fear: because fear has torment. He that fears is not made perfect in love" (1John 4: 18). To say, "There is no fear in love" is to say there is no distress in love. To say, "Perfect love casts out fear" is to say that in love there is Eustress. To say, "Fear involves torment" is to say there is distress in fear, fear other than God's. To say, "He who fears has not been made perfect in love" is to say ungodly fear is distressful, which creates anxieties and woes for mankind. The other implication is that God should be feared, believed in and trusted for everything, and distress will vanish into thin air (John 14:1-2). Indeed, the fear of God makes people not to do evil or cease from doing evil (Genesis 20:11). A wicked person has no fear of God and he/she is distressed. Holiness, without which no man can see God (Hebrew 12:14), finds perfection in the fear of the Lord (2 Corinthians 7:1). Wisdom and knowledge reside in the fear of the Lord (Jobs 28:28; Psalm 111:10; Proverbs 1:7; 9:10; 15:33; Isaiah 11:2-3). To fear God is to obtain His wisdom and uncommon knowledge. A wise person treasures the fear of God (Isaiah 33:6).

God's fear that gives Eustress is cleaned and indestructible (Psalm 19:9). Godly fear is required for service (Hebrews 12:28). Biblical answers are to be given with meekness and fear (respect) (1Peter 3:15). He who genuinely fears God controls his distresses, and lives a meaningful life. Rulers, regardless of the level of their authority or where their dominions are situated, are to rule in the fear of God (2 Samuel 23:3). Kingdom established in wickedness would crumble; but kingdom founded upon righteousness will stand for ever. There is long life in the fear of the Lord (Proverbs 10:27). Contentment is procured in the fear of the Lord (Proverbs 15: 16). Satisfaction removes all avoidable stresses and effectively manages the unavoidable ones. In the fear of the Lord is protection (Proverbs 14:26).

The fear of looming judgment could induce one to live in line with laid down commandments. We are to work out our Salvation with fear and trembling (Philippians 2:12). Those who fear God will be glad (Psalm 119: 74). Jesus asks us not to fear man because the fear of man is harmful to success, growth, progress and healthy living (Matthew 10:28). But knowing the benefits of godly fear, Christ said we should fear God. Apostle Peter, corroborating what Christ said earlier, said, "Honour all people. Love the brotherhood. Fear God.

Honour the king" (1 Peter 2:17). "By humility and the fear of the Lord are riches and honour and life" (Proverbs 22:4).

5. STRESS VS PRODUCTIVITY

Life will not only be boring without stress, it would probably feel pointless [9-10]. Stress is a feeling that's created when we react to particular events. It is the body's way of rising to a challenge and preparing to meet a tough situation with focus, strength, stamina, and heightened alertness [15]. With the right dose of stress, inner creativity and intelligence can be expressed fully to earn happiness and fulfilled life ambition [9-11]. Normal stress can enhance productivity greatly; but distress is an enemy of progress. Therefore, Eustress (good stress) is very essential to human existence as it provokes certain nervous system and hormones to activate the body to put up a defense against perceived or real threats.

Without it, it will be difficult or unthinkable for a mother to run into a smoke to fish out her babe. The hormones, such as adrenaline and noradrenaline, in human body, are God's. The stress in the body is to be used to manage the body for high productivity and life activities. For practical stress reduction, Natural Stress Relief (NSR) which uses transcending technique has been advocated [10]. NSR is said to be a more attractive, inexpensive alternative to Transcendental Meditation capable of procuring efficient and effective development of self-actualization. Transcending, a unique practice leading to a unique state of consciousness, is a remarkably effective method for producing state of rest much deeper than sleep that can dissolve chronic stresses [9-10]. Unchecked long-term stress could cause serious health problems like heart disease, depression, blood pressure, etc [12-13]; thereby reducing the obesity, diabetes productivity of the sufferer. Stress gives extra strength, extra push [9-10]; increased energy and alertness [11]; encourage one to meet a deadline or get things done [12]. Stress triggers inner creativity and intelligence [10] to do extraordinary feats or flees from, or fights back against danger. That is why stress response is called fight-or-flight response, a body sympathetic nervous system reacting to a stressful event [9]. Frequent negative thinking produces unhappy living and miserable life. A persistently negative response to challenges will eventually have a negative effect on health and happiness [9]. Such a pessimist will be odious to people around due to frequent complaints, nasty comments and nagging.

6. STRESSSOFT AND RICH TEXT BOX

CONTROL

A flexible client application was developed with Microsoft Visual Studio 2010 where the functionalities of a server, dvRTBCls were exposed. The splash screen, not shown for lack of space, has two menus. By clicking Next menu or press F2, figure 2 is displayed for use.



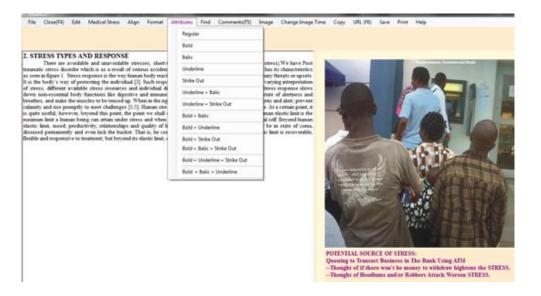


Figure 2: People Withdrawing Using ATM at Owomamowo Commercial Bank

Rich text box control (RTBC) has all the vital and necessary functionalites require to create word processor [18-24]. To customize them, as we did, will swiftly assist the use of RTBC, besides eliminating errors in frequent coding when using the intrinsic control, and in giving reliablity to the user of our server.

Table 1 contains the methods in our server. The second and third columns gave the name of the methods and the tasks performed respectively. The client working interface shown in figure 2 has sixteen main menus and varying number of submenus. Under Medical Stress menu there are seven submenus for displaying different aspects of stress in RTBC. The Align menu helped us to align selected text left, center and right. The dvChgFont method changed selected text font to the one selected by user in a displayed font dialog box. The first overload showed apply button and has two arguments of reference RTBC and Font dialog box. When the apply button was clicked, the selected text could immediately be viewed and the change(s) required could still be altered before exiting the dialog box. The second overload has only a reference RTBC as argument. The Font dialog was instantiated in the method and shown to user without apply button. There was thus a delay in viewing the effect(s) of the selected option(s) on the selected text. This was the method summoned for the third submenu of Format menu. The choice of which one to use is left to the user, but one thing is clear, flexibility and comfort have been given to the user of our server and application.

To deselect (not highlight) a string in RTBC (dvRTBIn), as we did for some Find methods in Table 1 S/n 9-12, and position the cursor at the beginning of the located string a method was called. The other twenty five methods in Table 1 enable lot of operations to be performed with RTBC. The LoadFile and SaveFile methods of RTBC could easily be utilized to upload one of five file types which could be specified through RichTextBoxStreamTypes enumeration. To

read non-rtf file to RTBC, StreamReader was instantiated in the method (Table 1, S/n 15) and its ReadToEnd method was summoned to read the entire file content(s), which was assigned to the rtf property of the RTBC; to get the rtf codes assign it to text property. By setting the Modified property to false, we indicated that the RTBC has not been modified since last read, thus when user is to exit an application using our server he/she won't be prompted to save before exit. To write RTBC content(s) to a file, a new instance of StreamWriter was created; and its Write method, to which was passed the text to output, was called. Methods 15-16 were cleaned up before exiting them. The Change Back Colour submenu of Format menu was not disabled as was the case with the other submenus, since RTBC back colour could be changed at any time. However, if RTBC wasn't visible no colour would be altered and user would be informed to make the control visible. When editing operation has not been done, cut, copy and paste menus remained disabled under Edit menu.

Upon text upload into RTBC these menus are enabled, except redo menu which becomes enabled only when undo menu is The dvEnabu function was called SelectionChanged event. There are three submenus under Find main menu. When Find String submenu was clicked, dvChkFind function was called to verify if RTBC is visible. If visible, a customized control would be displayed for the string to find entry; the highlight check box was checked by default. On clicking Ok button, if there was any string entry, dvFindTxtInRTB method (see Table 1, S/N 12) would be summoned to locate the entered string. If found, the status strip was displayed with informed comment and the customized control hidden from sight, else a message box with informed comment was displayed right inside the customized control. It would still be visible for string entry; and when the close button was clicked the control was made invisible. Other submenus share the same working pattern; if the check box was deselected the string would not be highlighted upon being located.

Table 1: Methods in dvRTBCls Server

S/n	Name	Task(s)
1	dvAlignTxtInRTBC	It aligned text left, centre and right in RTBC.
2	dvChgBackColour	It changed the back colour of RTBC.
3	dvChgRedoTxt	It changed the redo menu text to reflect the last operation.
4	dvChgTxtForeColour	It changed selected text colour to the one selected by user in a displayed colour dialog box. The second overload used the colour supply by user as argument instead of through colour dialog box.
5	dvChgUndoTxt	It changed the undo menu text to reflect the last operation.
6	dvCopyRTBCContent	It copied source RTBC content(s) to a destination RTBC.
7	dvCopyRTFContentToCtrls	It copied source RTBC content(s) to one of textbox, list box, combo box, RTF and List (of String).
8	dvCutRTBCContent	It deleted the selected text upon confirmation from the user, if or not to delete the text.
9	dvFindNextReplaceTxtInRTB	It located the next string and if found, replaced it with the newly supplied string and highlighted it. The second overload would find the string and replaced it without highlighting it.
10	dvFindNextTxtInRTB	It located the next string and highlighted it; the second overload would not highlight the next located string.
11	dvFindReplaceTxtInRTB	There were two overloads of this method which permitted supply text to be located, highlighted and replaced by another text; or not selected but located and replaced, in a RTBC.
12	dvFindTxtInRTB	There were two overloads of this method which permitted supply text to be located and highlighted, or not selected but located, in a RTBC.
13	dvGetRTFCodes	It returned the RTF codes of the RTBC text.
14	dvGetSelectedTxt	It returned selected text, if any.
15	dvOpenReadToRTBC	It has two overloads. The first one got file name through OpenFileDialog box, opened it and loaded its content(s) to a reference RTBC. In the second overload, the file name was supplied as the second argument. It checked if the file existed before use; and that its extension is .rtf.
16	dvOpenRTF	It opened user's rtf file, but did not load the file content(s) to RTBC.
17	dvOpenWebSite	It opened any executable file or web site. It used the Start method of the Process class.
18	dvPasteItemInRTBC	It pasted any item that could be pasted in RTBC.
19	dvRedoLast	It has to redo the last operation.
20	dvSaveASRtf	It checked if RTBC has been modified; if so, it used the supply file name. But if no file name was supplied, it prompted user for a file name to use.
21	dvSaveRtf	It saved RTBC content(s) to user's supply file, depending on the RichTextBoxStreamTypes enumeration specified.
22	dvSelectTxtAll	It selected all text in RTBC.
23	dvShowSelectionInRTB	It selected part of text in RTBC based on the specified starting point and length of the text to select. If no length was specified, it selected from the starting point to the end; and made the highlighted text visible.
24	dvShowSelectionSetAutoWordInRTB	It enabled a word to be selected and made it visible.
25	dvUndoLast	It undid or restored the last operation.
		· · · · · · · · · · · · · · · · · · ·



One hundred diagrams to illustrate various parts of stress were generously provided and could be displayed at varying times. The entire file names for the images were uploaded at form load event. The images could be displayed for viewing independent of the stress text. The start submenu under Image main menu showed the image in a picture box control (see fig. 2). The fictitious Owomamowo Commercial Bank shown in figure 2 with people queuing up to use their ATM card was the future desire of the researcher. As soon as the submenu was clicked its text was changed to stop and the picture box control hidden from sight and the timer, which was enabled at start, was disabled.

Image viewing time could be controlled the way user wanted through Change Image Time menu. Besides start submenu, there are six other submenus under Image main menu which helped us to set the timer interval for showing images from 1-5 seconds. The Others submenu allowed users to specify other times. The method, dvGetInput, which prompted user for time to use, is generic; it could be used to get any input from user, hence an object reference was used. The second string argument was the message to display in an input dialog box, while the third string argument was the Input dialog box title and the last argument was the initial value to show in the dialog box. The use of dvGetInput method in several applications justified its existence. User was allowed to alter selected text attributes via one of thirteen submenus as shown in figure 2. Besides viewing internally available pictures, external ones could be uploaded into RTBC. Again, current, previous and external images could be copied through Copy submenu of Image menu. The Copy main menu permitted text (not image) to be copied to clipboard.

When the Detecturls property of RTBC was set true, the control has the automatic capacity to format URL within the text as a hypertext [18]. When the link was clicked, LinkClicked event was fired, and codes in dvOpenWebSite method would be executed. We didn't qualify the enter Process class, since we have imported Diagnostics namespace before entering the class (i.e. Import System. Diagnostics). The codes were wrapped up between Try... catch ... Finally ... End Try statement to report error, if any, in the process of opening user's supply file(s) or site(s). Whether or not error occurs the Detecturls property was reset to the default false value in the finally section. Error trappings were inserted in all our codes and informed message was returned as we deemed fit; for instance, if user decided to cancel input operation or supply invalid input(s), message was issued.

7. PERFORMANCE

Those who truthfully and intimately partner with God, and sincerely imbibe His fear, not the fear of the world, adequately cope with all stressful situations. Worldly fear is destructive, but godly fear gives life and unique blessings. It has been shown that stress could be eliminated or normalized using the Holy Bible divine teachings. All the methods in dvRTBCls server were comprehensively tested and found to work to specifications. Provision of common application utilities like save, print and edit aided people to easily and quickly use StressSoft package without having to extensively learn its menus and submenus before use. Since the color and font of selected text could be changed to emphasis any part of the text, StressSoft package could be utilized real-time to teach and formulate lecture note with varying colours and fonts for easy reading, assimilation and recollection. The

provision for comments through Comments menu which could be formatted to any length, printed and saved added flexibility to the package and Physicians would find it handy for use. StressSoft package was attractive, accurate and quite flexible to use.

8. CONCLUSION

Some of the rich functionalities exposed by RTBC have been customized to display types, symptoms, response, causes, effects and remedies of stress. The Holy writ, it has been shown, could effectively succour stress reduction through the fear of God, knowledge and sound sleep. The customized find methods should include match case searching, and the customized control should include check box control for match case specifications. The questions asked on sleeping time of some elites are greatly insufficient; the elite folks asked are limited in scope. Comprehensive research in Nigeria to address the sleeping quality, pattern and time of broad spectrum of the society in the face of inimical economy and social upheaval is required. Additional well-annotated distressful pictures should be included in StressSoft to further enhance its usefulness.

8. REFERENCES

- [1] Lyle, H. Miller and Alma Dell Smith. The Stress Solution. www.apa.org/helpcenter/stress-kinds.aspx
- [2] Effects of Stress. www.stress.org/ topic-effects.htm
- [3] Melinda Smith, Robert Segal and Jeanne Segal. 2012. Understanding Stress: Symptoms, Signs, Causes and Effects. www.helpguide.org//mental/stress-signs.htm
- [4] www.mtstcil.org/skills/stress/ (Free course on stress is available here).
- [5] www.stresscourse.tripod.com/ id24.html
- [6] Information gathered from www.ais.org
- [7] Obayemi Nike. 2010. Stress Management. A 2-Day TrainingWorkshop for Clerical Officers. Theme: Performance and Evaluation Course.
- [8] Baum A. 1990. Stress, Intrusive Imagery and Chronic Distress Health Psychology. 6, 653–675.
- [9] Christian Nordqvist. What is Stress? How to deal with Stress www.medicanewstoday.com/articles/145855.php
- [10] www.nsrusa.org/about-stress.php
- [11] www.apa.org/helpcenter/understanding-chronicstress.aspx
- [12] www.wikipedia.org/stress
- [13] Peter Crosta. What is Anxiety? www.emedicinehealth. com/stress/article-em.htm
- [14] Information gathered from www.nlm.nih.gov /medlineplus/stress.html
- [15] Information gathered from www.mayoclinic.com
- [16] Information gathered from http://kidshealth.org/teen/your_mind/emotions/stress.html



International Journal of Applied Information Systems (IJAIS) – ISSN: 2249-0868 Foundation of Computer Science FCS, New York, USA Volume 4– No.2, September 2012 – www.ijais.org

- [17] Stress Management Tips for Parents of College Students in the Aftermath of the Virginia Tech Shootings. www.apa.org/helpcenter/tragedy-aftermath.aspx
- [18] Evangelos Petroutsos 2010. Mastering Visual Basic .NET. Sybex, Inc.
- [19] RichTextBox.www.startvbdotnet.com/controls/rtb.aspx
- [20] RichTextBox Control. www.developerfusion.com/article /16/richtextbox-control/
- [21] Scott Lysle. 2007. Word Processor with an Extended RichTextBox Control. www.c-sharpcorner.com /uploadfile/scottlysle/wordprocessor02042007234628pm /wordprocessor.aspx
- [22] RichTextBox Control in VB.Net. http:// mindstick.com/articles

- [23] How to get Paragraphs in a Rich Edit Text Box in .NET.www.ehow.com/how-12047218_paragraphs-richedit-textbox-net.html
- [24] Sivaraman Dhamodaran. 2012. Using RichTextBox Control in Dot NET Application. www.c-sharpcorner.com/uploadfile/6897bc/using-richtextbox-control-in-dot-net-applications/
- [25] Isiofia Nkechi Angela. 2005. Stress and Our Health. Joy Bearers Publishing Press. Pp. 1-121.
- [26] D'Arcy Lyness. 5 Ways To Deal With Anxiety. www.codeproject.com
- [27] Alexander Cruden. Cruden's Complete Concordance to the Old and New Testaments. Hendrickson Publishers. 209-211.