

# Dstrsr<sup>TM</sup>

**Rising Towards Serenity** 

## Dstrsr<sup>TM</sup> - Rising Towards Serenity

#### **Executive Summary**

Stress stinks and we need to reduce it – especially in a mobile-driven world where our devices demand constant attention. Sometimes we need to look outside ourselves for help in taking advantage of those precious few minutes a day that can be used to modulate our stress and help us rise toward serenity when our stresses threaten to overwhelm us. Such is the genesis of Dstrsr<sup>TM</sup> (pronounced "De-Stressor"), a revolutionary mobile application that monitors your stress level and provides you with breathing room by giving you a StressBreak<sup>TM</sup> when your stress gets too high. Dstrsr<sup>TM</sup> also learns what types of activities have a negative impact on your stress level and warns you before you engage in them if your stress level is already high. Finally, Dstrsr<sup>TM</sup> can modify your browsing experience to help you moderate your stress before your stress level becomes problematic.

## Dstrsr<sup>TM</sup>

In today's modern world, stress is <u>literally</u> a killer. Study after study has linked increased levels of physiological stress with an increase in the incidence, severity, and morbidity of disease conditions. Increased stress levels can raise blood pressure and increase inflammation in the body which is linked to greater odds of contracting heart disease and various cancers. Similarly, increased levels of physiological stress can form a vicious psychological stress feedback loop wherein a person experiencing a high-stress episode may react negatively with other people in such a way that the original person becomes increasingly stressed. This can lead to poor psychological heath, damaged relationships, and potentially further exacerbate physical ailments.

One algorithm for stress detection that has been developed is the use of Heart Rate Variability (HRV). In a nutshell, the interaction of the sympathetic and the parasympathetic nervous system (PSNS), which respond to stress, influences the variation of heart rate from one beat to the next. For example, in a non-stressed person, heart rate may vary due to factors such as breathing. Conversely, it has been determined that a person experiencing stress has a lower HRV than a relaxed person. That is, their heart beats more uniformly – too uniformly! https://en.wikipedia.org/wiki/Heart\_rate\_variability#HRV\_analysis

Several HRV apps are on the market, such as SweetBeat HRV by Sweetwater Health which is an app that runs on the iOS systems. SweetBeat can measure HRV from either a dedicated heart monitor or a fitness device such as a Fitbit. SweetBeat includes an alarm function if it detects that a user has entered a high-stress region based on HRV.

http://www.sweetwaterhrv.com/index.shtml

http://www.megaemg.com/products/

Dstrsr<sup>TM</sup> Page 4 of 12

However, we have noticed that most HRV monitoring apps are terrible in helping users reduce their stress in the real world. Frankly, in most situations people are busy and just ignore their HRV readings and get on with their day. Also, we have identified the lifestyle shift to "always-on" mobile as a contributing factor in increased stress in the modern world. For example, with mobile, people want to have an instant response from you and just keeping up with responses to e-mail, text, voice, and social media can add to stress – even if the informational content of the message is welcome, much less when the actual message is bad.

#### Dstrsr<sup>TM</sup>- How We Help You Beat Mobile Stress

Dstrsr<sup>TM</sup> uses the SweetBeat HRV monitoring app in conjunction with a fitness tracker such as a Fitbit to identify when a user is in a high-stress situation and then leap into action. Instead of operating as a passive, stand-alone app like other systems, once Dstrsr<sup>TM</sup> detects that you are under stress, Dstrsr<sup>TM</sup> cuts off one of your greatest sources of stress – the constant press of communication – in order to give you a StressBreak<sup>TM</sup> and allow you to recover.

#### StressBreak<sup>TM</sup>

During a StressBreak<sup>TM</sup> Dstrsr<sup>TM</sup> cuts off e-mail, messaging, and voice calls – both inbound and outbound – as well as internet surfing - in order to give you a break to recover and center yourself. We can cut off both incoming and outgoing messages because Dstrsr<sup>TM</sup>. is installed on your phone and prevents apps that run e-mail, messaging, or making calls or a browser from being run and/or shuts them down if they are already running. (During shutdown, we give you a 10 second warning so that you can save your work if necessary, but typically drafts of all messages are kept by their respective apps.)

Once the communication apps are killed, Dstrsr<sup>TM</sup> either displays a picture, launches a destressing application such as a virtual zen garden, and/or plays relaxing music as selected by the user. The StressBreak<sup>TM</sup> display continues for 5 minutes or until the HRV is back to normal, but incudes an "Abort" button if the user is in an emergency situation,

Although the point of the StressBreak<sup>TM</sup> is to give you a "time out", users can configure Dstrsr<sup>TM</sup> to individually allow or disallow any of the inbound or outbound channels for e-mail,

text, voice, and browser. Users can also select whether or not they want an automatic response to be sent when they are enjoying their StressBreak<sup>TM</sup>.

#### <u>StressBuddy</u><sup>TM</sup>

In line with the individual communication mode inbound/outbound selection, Dstrsr<sup>TM</sup> includes a StressBuddy<sup>TM</sup> mode where all communication modes are shut down except for an outgoing phone call to a phone number that has been pre-entered for a StressBuddy<sup>TM</sup> – someone who helps you overcome stress. The StressBuddy<sup>TM</sup> can be anyone, a girlfriend, spouse, even your Mom!, so that during a StressBreak<sup>TM</sup> all other responsibilities are postponed and you have a few uninterrupted minutes to talk with someone who helps you beat stress. We also include a setting for a maximum number of times per day that a StressBuddy<sup>TM</sup> can be called and if that number is met, just a regular StressBreak<sup>TM</sup> screen is displayed so that you do not become an imposition on your StressBuddy<sup>TM</sup>. Also, the user can select multiple StressBuddies<sup>TM</sup> that can be called in sequence.

#### Pre-cog<sup>TM</sup>

Dstrsr<sup>TM</sup> also keeps track of what you might be doing on your phone and records what actions you were taking that might have raised your stress level. For example, when we see an increase in HRV above a certain threshold, we note whether you are e-mailing or browsing, or if you are texting or calling who you are talking with. Once we have a sufficient sample set, we can use your past HRV information to estimate the potential HRV impact <u>before</u> you engage in the activity – and then warn you away from the activity if it is likely to push your stress level

over your threshold. For example, if you have called Bob 5 times before and on average it has decreased your HRV by 6, then if you are less than 6 away from your high-stress threshold and you attempt to call Bob, we display a warning that based on past experience a phone call with Bob will put you over your stress threshold. This can allow you to pre-treat yourself before your phone call with Bob or postpone your phone call with Bob to another time. In terms of pre-treating, Dstrsr<sup>TM</sup> includes a StressBreak<sup>TM</sup> trigger button so that you can bring on a StressBreak<sup>TM</sup> at any time you might feel the need to lower your stress.

#### BrowseMaster<sup>TM</sup>

BrowseMaster<sup>TM</sup> is an optional add-on for Dstrsr<sup>TM</sup> that can be used to help lower your stress level while browsing. With BrowseMaster<sup>TM</sup> you can browse the internet normally until you reach a certain stress level. At that time, you can select one or more of the BrowseMaster<sup>TM</sup> features to kick in. One feature operates as an ad blocker that substitutes all adds with a stress-reducing image or color. In this regard, we note that most ads are a predetermined size, so we include a small set of images in those sizes of happy people and scenes that are likely to reduce stress. If we encounter an ad that is not in the predetermined size, we display a light blue colored image in that ad space (light blue has a calming effect). Another feature of BrowseMaster<sup>TM</sup> is that we identify and block all comments. We have identified reading the comments for a YouTube video, for example, as a source of stress, so if your stress level is getting high, we just block them.

Dstrsr<sup>TM</sup> Page 8 of 12

#### Extended StressBreak<sup>TM</sup>

When you trigger a StressBreak<sup>TM</sup> yourself, we give you the option of just triggering a regular StressBreak<sup>TM</sup> of 5 minutes in length or a longer StressBreak<sup>TM</sup> that can be set in terms of length of time or until a certain time. This can be useful if you need a longer break or if you want to have an overnight break. If you select a longer StressBreak<sup>TM</sup> we then give you the option of allowing an outgoing auto-generated message to be transmitted if you receive one or more of a text, e-mail, or voice call during the StressBreak<sup>TM</sup>. This is much like the auto message that might appear when someone sends you a text while you are driving and can operate to inform people of why you are not immediately responding to them.

# Product Features Under Development Dstrsr<sup>TM</sup> Work

We currently only monitor on the user's phone, but the phone may be in wireless IP connection with an application running on another device such as a PC or laptop at work – or even multiple devices. Consequently, when the phone determines that a StressBreak<sup>TM</sup> is called for, it can send a StressBreak<sup>TM</sup> signal to the application on the PC and the PC can then mimic the phone by displaying the StressBreak<sup>TM</sup> screen. Usually texting and voice are not an issue, but the PC may lock out or shut down e-mail and/or browser access. The user can configure this to happen at the same time for all of their devices so as to avoid just trading the phone for the computer. The BrowseMaster<sup>TM</sup> aspects may also be implemented on the PC to help modify your browsing experience to help you moderate your stress before your stress level becomes problematic.

Additionally, we are developing this solution as an enterprise-level workplace stress management program which can be as part of a corporate wellness program. In this regard, stress levels of employees can be centrally monitored and employees experiencing chronic high stress can be assisted and/or workflow may be adjusted.

## Dstrsr<sup>TM</sup> Social

We have several modalities of integration of  $Dstrsr^{TM}$  into social media that we are currently developing. One thing that we are working on is having the user's stress status automatically post to their Facebook account. We are not sure if we want to implement more of a "current state" indication that just identifies their current state, or just post when the user's stress threshold is triggered – or both. We can also display when they press the "abort" button so as to use peer pressure to get them to not abort and instead try to reduce their stress. We can also post statistics about how many times they needed a StressBreak<sup>TM</sup> in the last 30 days and then how many times they aborted it, kind of like an "abort-ratio" with a lower abort ratio being better.

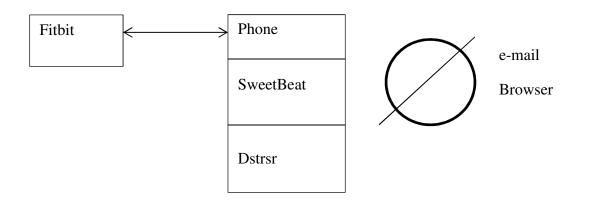
We are also considering some type of badge or award for when people repeatedly serve as a StressBuddy<sup>TM</sup>- kind of like the start ranking on ebay. Someone who has served as a StressBuddy<sup>TM</sup> a lot could be designated as a Dstrsr<sup>TM</sup> Hero<sup>TM</sup>. The Hero<sup>TM</sup> selection may also involve a feedback score from the people the Hero<sup>TM</sup> was helping.

Finally, phone calls of a sufficient length, we can determine whether a person usually raises or lowers the stress level of the person receiving the call – we know who is calling from their phone and we know their stress level from the fitbit. Our cloud-based solution allows us to form a database for a specific person based on the response they provoke in the receiver. Thus, the caller can be classified as typically a "Stressor" or a "Dstrsr<sup>TM</sup>," and for those that typically raise HRV significantly on an average call, they can be awarded the title of Angels<sup>TM</sup>. Also, we note that just by people knowing that the stress they produce in others is being tracked, they are little to produce less and this can lead to a host of solutions that arise under game theory.

Dstrsr<sup>TM</sup> Page 11 of 12

## Figure

You asked us to provide a figure for our invention, but I was not sure what you wanted, so here is a graphical representation of a StressBreak<sup>TM</sup>.



Dstrsr<sup>TM</sup> Page 12 of 12

#### **Other Patents**

The CEO passed on your recommendation to search the PTO's website, so I did. I made a list of the patents below. The CEO says that all of these patents look pretty close to what we came up with. However, the CEO says that you are the best patent attorney around and that you will be able to find a way to get us our patent without infringing on these other patents.

Patents: US 2015/0364057 A1 US 2015/0351655 A1 US 2015/0302156 A1