How People of High and Low Trait Stress React to State Stress and Pleasure

Robin Hennessey
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Messiah College
TRAIT AND STATE STRESS

Abstract

This study examined whether or not people of high versus low trait stress react differently to the induction of state stress or pleasure. It consisted of 66 undergraduate students from Messiah College (44 females, 22 males) who first completed a trait stress survey, then experienced either stress or pleasure induction, by means of spending 5 min recalling personal stressful or pleasant memories, respectively. Next, participants completed a state stress questionnaire. Results suggested that those who identify with high trait stress likewise reflect high state stress compared to those with low trait stress. This finding appears to be generalizable outside the college population, and future research should aim to increase the power of the stress and pleasure inductions in an attempt to find further significance.
How People of High and Low Trait Stress React to State Stress and Pleasure

Stress

Stress is something that all people experience. It enters our lives at a fairly early age and remains for the duration (Dana, 1984). It is an accepted term that everyone believes they understand, but is actually quite complicated. Stress can be defined as “a state of mental tension and worry caused by problems in your life, work, etc.” or, “something that causes strong feelings of worry or anxiety” (Stress, n.d.). Furthermore, too much stress can cause physical and/or psychological problems (Dana, 1984). One can also measure stress by determining the extent to which people find their lives to be unpredictable, uncontrollable, and overloading (Cohen, 1986). Various tests can be used as tools to measure the above, such as the Perceived Stress Scale (PSS), or the Hassles Questionnaire, in which people indicate their stress level in accordance with the daily hassles they experience (Dohrenwend & Shrout, 1985).

Thus, there is more than one way to view stress. However, the gist of the term is remains relatively stable regardless of who is attempting to define the term. For instance, stress is never viewed positively; no one enjoys being stressed. When considering all of the above definitions, experiencing stress seems to be somewhat synonymous with feeling overwhelmed. Because stress is so ubiquitous it has been researched quite extensively. For instance, people have studied topics such as components of stress, high levels of stress, stress in relation to sadness, and stress induction.

Components of Stress

Stress Alleviation

Multiple studies have been performed in an attempt to discover how to alleviate stress. Although there is no way to rid oneself of stress completely, a broad range of things appears to
help lessen the amount of stress on experiences. For instance, Smith and Woods (2012) discovered that chewing gum helps to relieve stress. The more gum students chewed over the course of two weeks, the less stress they reported experiencing, and the more work they reported accomplishing.

Another aid in stress relief is having good emotional support, which has been found to help neutralize the effects of stressful experiences (McKinley, 2013). It seems that having emotional support from friends and/or family decreases both stress and the frequency with which people make potentially harmful decisions. However, McKinley (2013) also discovered that confidence in one’s problem solving abilities had just as much of an impact on one’s level of stress as did having emotional support. Thus, it appears that believing one can overcome his or her problems decreases the likelihood of experiencing the negative emotion of stress.

**Stress Correlates**

Many researchers have also looked into aspects of life that tend to co-occur with stress. For instance, Burt and Paysnick (2014) used part of the Psychosocial Maturity Index, as well as two stress questionnaires (The Life Experiences Questionnaire and the Undergraduate Stress Questionnaire) to discover that college students with behavioral and emotional problems and a weaker sense of self-identity were more likely to experience stress. Furthermore, people who had a strong sense of self-identity were less likely to experience life stress and to have higher grades. It is possible that the other factors may be causing or influencing the high or low levels of stress with which they correspond.

Another study examined first year college students specifically. It found that students who were well adjusted to their environment, got enough sleep, and had better moods also experienced less stress (Ari & Shulman, 2012). Furthermore, students’ ability to transition into
college life affected their stress levels. Those who were able to better adapt to college life were typically less stressed. However, only about half of the students who participated in this experiment were initially well adjusted; approximately 40% were not able to adjust, and the remaining students started as maladjusted, but were able to adapt before their first year ended.

**Trait Versus State Stress**

There are two different types of stress. The first is trait stress. The word “trait” refers to a characteristic that is consistently present in a person. Therefore, a person with high trait stress is consistently feeling stressed, whereas a person with low trait stress is generally not very stressed. The other type of stress is state stress. This is distinct from trait stress, as “state,” in a psychological context, refers to one’s feeling(s) at a given moment. So, a person with high state stress is experiencing high amounts of stress in a specific moment. This stress is temporary, not a prolonged or typical state. Therefore, when measuring stress, it is important to make a distinction whether trait or state stress is being measured (Cervone & Pervin, 2013; Spielberger, 2010).

**High Levels of Stress**

**Effects of High Stress**

We have already determined that stress is a negative presence in people’s lives, but it affects more than just our mood. There are multiple symptoms associated with high levels of stress. For instance, individuals who are highly stressed tend to suffer physically, such as experiencing headaches or fatigue (Ferguson & Lawrence, 2013). In addition, the presence of stress affects one’s decision-making capabilities. Those who are experiencing stress have less self-control, and therefore are more likely to make choices contrary to long-term goals. For instance, if one is on a diet and becomes stressed, the dieter becomes more likely to break the
diet (Perspectives on neuroscience and behavior, 2016). Thus, stress affects more aspects of people’s lives than one may initially assume.

**Gender Differences in Stress**

Males and females also appear to react differently to stress. Hamaideh (2012) discovered that males and females display their stress in distinct ways. For instance, males’ reactions tend to be more behavioral and cognitive. If a male is stressed, he will likely think about the stressor or act in reaction to it. On the other hand, females usually have a more emotional reaction. Their mood is more likely to be affected by the presence of stress in their lives. Furthermore, females’ stress is more likely to stem from frustration, conflict, pressure, or change than males’ stress. Thus, certain situations will typically cause greater amounts of stress in one gender over the other. For example, a female is more likely to be stressed after an argument with a friend than is a male.

**Stress and Anxiety**

Stress and anxiety are intricately related. This can be seen at the microscopic, biological level. For instance, there are certain alleles that, if present in a person, make that person more likely to develop anxiety when presented with the same stressor as someone without the allele (Ming et al., 2015). In general, stress tends to increase levels of anxiety, although stress is not the only way to induce anxiety. Furthermore, anxiety, on its own, can be a diagnosable disorder (Generalized Anxiety Disorder), but this disorder can often be mediated by decreasing stress levels (Reichmann & Holzer, 2016). Therefore, it seems clear that stress and anxiety tend to be comorbid.

In one study, people were categorized as either “high anxiety non-repressors” or “low anxiety non-repressors.” Those who had high anxiety were typically not able to recall memories
from as early in life as were people with low anxiety. Furthermore, the people with low anxiety had a significantly greater number of early memories relating to the emotions of happiness, anger, fear, and wonder. People high in anxiety were able to recall slightly more sad memories than were the people with low anxiety (Davis & Schwartz, 1987). Thus, having high amounts of anxiety significantly affects one’s memory. Seeing as anxiety and stress are closely related, it is likely that stress plays a role in this negative outcome, and therefore contributes to yet another negative outcome.

**Stress and Resiliency**

One study aimed to study both resiliency to stress and factors related to resiliency. Resiliency, in this context, is one’s ability to recover or withstand the stress he or she undergoes. Tugade and Fredrickson (2004) began their study by inducing stress in participants. This goal was achieved by telling participants that they would have to give a public speech and that the speech would be recorded. After participants had been alerted to this task, the researchers took measures of the participants’ resiliency, physiological stress indicators, and positive emotions. Results showed that people who scored high on resilience were less likely to experience stress, as indicated by their heart rate. Participants who experienced positive emotions also experienced less stress. Therefore, there are personality factors that may combat stress: those who are naturally positive and/or resilient typically will not experience stressors to as great a degree as others.

**Stress and Sadness**

**Similarities**

Stress and sadness have remarkable similarities. To begin, they are positively correlated with each other, and they are both negatively correlated to happiness- at least in schizophrenics.
(Kimhy et al., 2006). Furthermore, stress is a major component of General Anxiety Disorder, while sadness is a major component of Major Depression. These two mental illnesses are often comorbid (Breslau, 1985). Thus, it is logical to assume that stress and sadness often go hand in hand. In addition, one study found that nurses who experience occupational stress also reported sadness caused by their work 37% of the time (Josefsson, 2012). This, again, demonstrates how closely related stress and sadness are to one another, while also reinforcing the knowledge that they are not interchangeable.

**Differences**

Despite how often they coexist, stress and sadness are markedly different from each other as well. For instance, people experiencing stress are usually hyper-aroused, physiologically. Their heart rates increase and they become more alert. People experiencing sadness, on the other hand, are less aroused than usual. They tend to be sluggish in both thoughts and movements (Ng, Ahishkiye, Miller, & Meyerowitz, 2015). Anger is more like stress in this regard, because it also involves hyper-arousal (Techer, Jallais, Fort, & Corson, 2015).

A second study on nurses revealed that nurses react differently to patients who are hyper-aroused versus under-aroused. Researchers looked specifically at patients who were either angry or sad. While the hyper-aroused, angry patients elicited more instrumental behaviors from the nurses for help, the nurses’ affective reactions to sad patients were much stronger (Sheldon et al., 2009). This suggests that people’s level of arousal affects how others react to them; so stressed people will typically be treated differently than sad people.

**Relationship Between Stress and Sadness**

Stress and sadness are also related in more unexpected ways. For example, people who cope well with stress tend to respond to stressful situations with sadness (Ng et al., 2015;
Zimmer-Gembeck, Lees, & Skinner, 2011). This is the case for both children and people with Post-Traumatic Stress Disorder (PTSD). Research participants who coped well with PTSD were more likely to recall sadness in relation to their traumatic event, where as people struggling to manage their PTSD tended to recall sensory experiences (Ng et al., 2015). Therefore, sadness, though an unpleasant emotion, is actually a positive reaction to stress. This suggests that stress may actually cause sadness, and when it does the sadness should be viewed as a healthy emotional response.

**Mood Induction**

**Stress and Stress Induction**

Stress often occurs because people are surprised and/or lose control of a situation (Martín-García et al., 2015; Papini & Dudley, 1997). Papini and Dudley (1997) stated that, “Surprising reward omissions produce an emotional reaction with physiological and behavior consequences… [and] are followed by pituitary adrenal activation, changes in immune function, odor emissions in rodents… and increases in locomotion, aggressive behavior, drinking, and eating” (p. 175). These reactions are indicators of stress in both rodents and humans, and are the reactions typically measured by researchers to determine whether or not stress induction was successful.

**Methods of stress induction.** One setting in which stress induction has been studied is a mini-golf course (Kaiseler, Polman, & Nicholls, 2012). In this experiment, the researchers used multiple means of stress induction on their participants. These included giving the participants a curvy putter, telling the participants that they would be evaluated, telling participants that their monetary reward would be decreased every time they missed, endangering the participants’ goals, and preventing participants from being able to concentrate. The combination of these
actions by the researchers proved sufficient in creating stress, as measured by other means (e.g. heart rate).

Researchers have also used modified Stroop tasks and mental math to induce stress (Delaney & Brodie, 2000; L’Abbate, Simonetti, Carpeggiani, & Michelassi, 1991). Delaney and Brodie (2000) induced stress in participants by giving them a limited amount of time to complete three different Stroop tasks (one utilized nonsense words, one utilized incongruent color words, and one utilized incongruent colors with words associated with colors, such as sky being in orange ink though it is associated with color blue), and one mental math activity. L’Abbate, Simonetti, Carpeggiani, & Michelassi (1991) had previously demonstrated that performing mental math increased stress, as indicated by people’s heart rates.

Tugade and Fredrickson (2004) also induced stress in participants, although they did it in a very different manner. When participants arrived for the experiment they were surprised with the knowledge that they would have to give a speech in public. They were also alerted to the fact that the speech would be recorded. These steps were adequate in causing individuals to experience stress (as measured by other means, such as heart rate). Therefore, there are multiple ways and multiple settings in which researchers are able to induce stress in their participants.

**Methods of Sadness and Pleasure Induction**

It is clear that researchers are capable of inducing stress in their participants, but this is not the only mood researchers can induce. For instance, they have also managed to induce sadness and pleasure. Lane et al. (2009) induced sadness by presenting a sad film clip, then having participants recall sad personal experiences. They induced happiness in other participants in a like manner: by presenting a happy film clip and having participants recall happy personal experiences. Thus, numerous moods can be drawn out of participants, and the same task (in
relation to different emotions) can be effective in manipulating participants to feel two very different emotions.

**Present Experiment**

Participants in the present study first completed a questionnaire designed to measure trait stress, as described above (Cervone & Pervin, 2013; Spielberger, 2010). This experiment also made use of Lane et al.’s (2009) strategy of listing personal experiences to induce emotion, although I induced happiness and stress (not happiness and sadness). Although their method had not previously been used to induce stress, it is logical to assume that it would work to induce stress as well, because sadness and stress are both positively correlated to each other and negatively correlated to happiness (Kimhy et al., 2006).

After listing their personal experiences participants completed a second questionnaire designed to measure state stress. Then the state stress scores of high- and low-stress people who experienced happiness were compared to their counterparts who experienced stress. The researcher hypothesized that people high in trait stress would react differently to inductions of both pleasure and stress (as measured by the state stress questionnaire) than people low in trait stress, because people’s typical reactions to stress and/or pleasure may be part of what causes their levels of trait stress. Furthermore, it was predicted that the mood induction would cause people of high versus low trait stress to react to the mood induction to a different degree than each other.

**Method**

**Participants**

The study consisted of 66 students (22 male, 44 female) recruited from psychology classes at Messiah College with an average age of 19.5 ($SD = 1.29$). They were assigned to
conditions based upon when they could attend the experiment. There were 32 participants who experienced the stress induction, 13 who qualified as having low trait stress and 14 who qualified as having high trait stress. The pleasure induction condition consisted of 34 participants, 13 who had low trait stress and 14 who had high trait stress. Students were assigned to the emotion induction groups by convenience and were rewarded with either class points or bonus points for participation.

**Materials**

This study utilized two questionnaires (one measuring trait stress and one measuring state stress) and a blank sheet of printer paper. The trait stress questionnaire was split into two sections. The first section asked for demographic information, including gender, age, amount of time spent in college, and school of college major. The second part consisted of 21 questions, each of which were rated on a 5-point scale (where 1 = *Always True* and 5 = *Never True*). The questions were based off of the Stress Management Society’s “How Vulnerable Are You to Stress?” test (How vulnerable are you to stress, n.d.). Most items were kept exactly as written. However, four were removed, and three questions were intentionally reworded so that participants using a response set could be detected. A participant with a score between 21 and 44 was determined to have low trait stress, whereas a participant with a score between 49 and 105 was considered to have high trait stress. The cutoffs for these groups were determined by excluding scores around the median in such a way that would create fairly even numbers of participants in each condition.

The state stress questionnaire included 10 questions, with responses ranked on a 5-point scale. Questions regarded topics such as current level of irritation, coping skills, and feelings of control. These questions were based on Be Mindful’s Perceived Stress Scale, but all questions
were altered in order to ascertain state, rather than trait stress, and in such a way that answers could be scaled (Perceived Stress Scale, 2015). The surveys can be found in Appendix A.

**Procedure**

First, participants were told that they were participating in an experiment that was studying mood. Then they were given the trait stress questionnaire. They completed both the demographic and stress-related portions. Then, one group experienced stress induction by writing down as many personal, stressful experiences as they could in 5 minutes, on a blank sheet of paper. If within that 5 minute time frame students ran out of memories to list, they wrote about one of the most stressful memories they had listed in detail. After completion of this task, the participants completed the state stress response sheet. The other group followed nearly the exact same procedure. However, they experienced pleasure induction, rather than stress induction. Instead of writing down personal, stressful experiences for 5 minutes, the people in this condition wrote down personal, pleasant experiences. Finally, students were elaborately debriefed.

The researcher then compared how people with high trait stress reacted to stress and pleasure induction versus how people with low trait stress reacted to stress and pleasure induction. In addition, the researcher examined how people with high trait stress reacted to stress versus pleasure induction, and how people with low trait stress reacted to stress versus pleasure induction. These results were analyzed using a $2 \times 2$ (Type of Induction x Level of Trait Stress) all-between ANOVA with state stress being the dependent measure.

**Results**

The means and standard deviations of state stress ratings can be found in Table 1. Results revealed a main effect of trait stress on state stress, where $F(3, 54) = 12.71, p < .001$,
η²_{part} = .20. There was no main effect for mood induction, although there was a trend toward significance (see Figure 1), nor was there an interaction effect between trait stress and mood induction on state stress.

**Discussion**

The hypothesis that people with high versus low trait stress would react differently to a state stress questionnaire was supported. Participants with higher trait stress tended to have higher state stress, while people with lower trait stress tended to also score lower in state stress regardless of the type of emotion induction. Thus, it appears that one’s traits are consistent with one’s current state. This makes sense, as one’s personality tends to mediate numerous aspects of a person. Even though this finding was only in regards to stress, it seems likely that other traits would also affect a person’s mood. In other words, traits likely affect one’s state in multiple settings. This is also an interesting finding, as it suggests that trait and state stress may not be such distinct entities as described by Cervone and Pervin (2013) and Spielberger (2010).

On the other hand, mood induction did not have a significant effect upon a person’s state level of stress. However, there was a trend, in which those who experienced the pleasure induction had slightly lower state stress than those in the stress induction condition. Thus, it seems that this form of mood induction may not have been strong enough, but that a method of mood induction similar to this one, but more powerful, may have significantly affected participants. Nonetheless, it holds that with only 5 minutes of remembering pleasant or stressful memories, one’s state is not significantly affected; this task alone did not much enhance or diminish one’s mood. This was somewhat surprising, as Lane et al. (2009) did find this to be a successful technique for inducing sadness and happiness. However, it is important to note that they also included either a sad or pleasant video clip in addition to the recollection of personal
experiences, and instead of having participants list the experiences, they had participants read out a script of three specific experiences.

Contrary to my hypothesis, participants’ trait stress and the mood induction did not interact with each other. People of high and low trait stress seemed to react similarly to each other given the induction of either stress or pleasure. This research suggests that if a highly stressed person undergoes stress, he or she will experience the same increase in stress as a person who has low trait stress (who experiences the same stressor). Likewise, if a highly stressed person experiences pleasure, he or she will experience the same decrease in stress as a person with low state stress who experiences that same pleasurable experience. Thus, these findings suggest that while one’s trait stress does affect state, the degree to which one’s state changes in reaction to a stressful or pleasurable situation remains constant, regardless of whether one has high or low trait stress.

This study clearly had its limitations. To begin, the sample size was relatively small. Noting a trend toward main effect suggests that a larger sample would produce significant results in regards to mood induction. In addition, my mood induction technique was not as powerful as I would have liked. Adding another element (such as including a video clip corresponding to the proper mood), or even making the task last longer may have given me a second set of significant results. Furthermore, it is possible that a standardized test would be more sensitive than the ones I used to measure stress, and this may have produced more significant results.

In addition, one could have chosen to consider both the demographic information and the personal memories participants listed when considering the results. Hamaideh (2012) discovered that males and females react differently to stress. It would have been interesting to see if males and females had been affected differently in this study. However, there were not a sufficient
number of male participants to get reliable data for this in all four conditions. Researchers could also consider male and female differences in stressful or pleasant life events by reading the types of memories participant’s listed in the allotted time. A researcher could also count the pleasant and stressful memories to see if people of low trait stress or high trait stress typically have greater numbers of either stressful or pleasant memories. This would be similar to what Davis and Schwartz (1987) did with participants who qualified as having high or low anxiety.

There is much to be done in the future to build upon this research. For instance, it would be advisable to increase the power of the mood induction by simply extending the length of time spent recalling personal memories. Other potential options to strengthen the mood induction include adding stressful and pleasant tasks to each condition, or having participants watch stressful and pleasant video clips. In addition, more comprehensive, reliable, and/or valid measurements of stress could be used.

It is important to note that many of my findings, though found using college students, are likely applicable outside of the college setting. There is nothing to suggest that college students have different reactions to stress and pleasure than do other people, so the results of this research could easily and logically apply to many populations. In addition, the finding that one’s traits influences one’s states in a given moment seems applicable even beyond the realm of stress. Therefore, one can draw fairly general and important assumptions based upon the results of this experiment.

In conclusion, much has been learned from this study. Some significance was found, in that trait stress does appear to affect state stress. Furthermore, it seems likely that mood induction of stress and pleasure could affect one’s state stress, if the mood induction is strong
Though the study certainly had some shortcomings, there are many ways in which the research could be enhanced and furthered in the future.
References


Table 1

**Measures of state stress as a function of Emotion Induction and Trait Stress**

<table>
<thead>
<tr>
<th>Emotion Induction</th>
<th>Trait Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td></td>
<td>$M$ (SD)</td>
</tr>
<tr>
<td>Pleasure</td>
<td>28.36 (7.40)</td>
</tr>
<tr>
<td>Stress</td>
<td>30.14 (5.58)</td>
</tr>
</tbody>
</table>

*p < .001
The higher the score the greater the state stress
Figure 1

*State Stress Means*

$p < .001$

The higher the score, the greater the stress
Appendix A

*Survey 1- Demographics and Trait Stress*

1. Gender: M F

2. Age: a) 18  b) 19  c) 20  d) 21  e) 22 or older

3. Number of semesters completed (not including the current one):
   a) 1-2  b) 3-4  c) 5-6  d) 7-8

4. School of your major:
   a) Arts  b) Business, Education, and Social Sciences  c) Humanities  
   d) Science, Engineering and Health  e) Interdisciplinary Areas

<table>
<thead>
<tr>
<th></th>
<th>Always True</th>
<th>Often True</th>
<th>Sometimes True</th>
<th>Seldom True</th>
<th>Never True</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. I eat at least one hot, balanced meal a day</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I get 7 to 8 hours of sleep at least 4 nights a week</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I have at least 1 person who lives nearby from whom I can ask a favor</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I exercise to the point of perspiration at least twice a week</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I am an appropriate weight for my height</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I drink fewer than two cups of coffee, tea, or soda a day</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I have a network of friends, family, and acquaintances on whom I can rely</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I confide with at least one person in my network about personal matters</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. I am generally in good health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. I am able to speak openly about my feelings when angry</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I do something for fun at least once a week</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I recognize stress symptoms</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I take quiet time for myself during the day</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. I am calm when I am kept waiting/stuck in traffic/late for a meeting</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I have regular calm conversations with the people I live with about domestic problems, e.g. chores, money, and daily living issues</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. I try to do everything myself</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. I race through my days</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. I complain about time wasted and the past</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. I feel organized and in control</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. I am able organize my time effectively</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. I recognize when I am not coping well well pressure</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Survey 2 - State Stress

26. How upset do you currently feel?

<table>
<thead>
<tr>
<th>Unbearably Upset</th>
<th>Very Upset</th>
<th>Moderately Upset</th>
<th>Slightly Upset</th>
<th>Not at All Upset</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

27. Right now, how much control do you think you have over the important things in life?

<table>
<thead>
<tr>
<th>Complete Control</th>
<th>More Control Than Not</th>
<th>Half Control</th>
<th>Less Control Than Not</th>
<th>No Control at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

28. How stressed do you feel right now?

<table>
<thead>
<tr>
<th>Completely Stressed</th>
<th>Very Stressed</th>
<th>Moderately Stressed</th>
<th>Slightly Stressed</th>
<th>Not at All Stressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

29. How confident are you currently in your ability to handle your personal problems?

<table>
<thead>
<tr>
<th>Completely Confident</th>
<th>Very Confident</th>
<th>Moderately Confident</th>
<th>Slightly Confident</th>
<th>Not at All Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

30. Do you feel that things are going your way presently?

<table>
<thead>
<tr>
<th>Completely</th>
<th>Very Much So</th>
<th>Moderately</th>
<th>Slightly</th>
<th>Not at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

31. Do you think that you are able to cope with everything you have to do today?

<table>
<thead>
<tr>
<th>Completely</th>
<th>Very Much So</th>
<th>Moderately</th>
<th>Slightly</th>
<th>Not at All</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

32. Do you feel that you are currently able to control the things that irritate you?

<table>
<thead>
<tr>
<th>Completely</th>
<th>Very Much So</th>
<th>Moderately</th>
<th>Slightly</th>
<th>Not at All</th>
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</thead>
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<td>5</td>
</tr>
</tbody>
</table>

33. Do you think that you are currently on top of things?

<table>
<thead>
<tr>
<th>Completely</th>
<th>Very Much So</th>
<th>Moderately</th>
<th>Slightly</th>
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<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

34. If something unexpected happened (that was out of your control) right now, how frustrated would you be?

<table>
<thead>
<tr>
<th>Completely</th>
<th>Very Much So</th>
<th>Moderately</th>
<th>Slightly</th>
<th>Not at All</th>
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<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

35. Do you feel like the difficulties you are presently facing are piled up so high that you cannot overcome them?

<table>
<thead>
<tr>
<th>Completely</th>
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<th>Moderately</th>
<th>Slightly</th>
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