



## MEASURING STRESS

### ABSTRACT

*Talentonic Stress Index uses the four-way view by Steward D. Friedman in his book “Total leadership” for deriving an index to assess an individual’s stress level. We tested this hypothesis to measure short-term stress and the culture fit stress for a manufacturing organization. We concluded that four distinct types of individuals emerged as result and each type had distinct ways with which they could manage their respective stress*

# Contents

- 1. Measuring Stress Based On The Four Way Attention Chart ..... 2
  - 1.1. The Concept and the Hypothesis ..... 2
  - 1.2. What Determines Quantum of Stress? Are all the Four Aspects Equally Stressful? ..... 2
  - 1.3. Should all of us be Pitching for a Perfect 25/25/25/25?..... 3
- 2. Talentonic’s Adaptation of the Concept and It’s Application ..... 3
  - 2.1. Talentonic Stress Index ..... 3
  - 2.2. A Case Study..... 4
- 3. Extrapolation of Data to Create a ‘Stress Profile’ for the Organization..... 6
  - 3.1. What Each Category Means ..... 7
- 4. Conclusion..... 8

# 1. Measuring Stress Based On The Four Way Attention Chart

---

## 1.1. The Concept and the Hypothesis

***One of the major causes of stress is the imbalance between time devoted to, and importance of, the four factors of a person's life: Work, Family, Self and Community.***

Balancing between what is important and what needs time is often the cause of stress. Talentonic recently conducted a series of workshops for a manufacturing organization to understand how they distribute time and importance to various aspects of life, and how this distribution helps them manage stress.

We used the four-way model by **Stewart D. Friedman**<sup>1</sup> in his book “**Total leadership**” for measuring an individual's stress level.

The four-way view shows how one manages the allocation of time and energy—the amount of attention one pays to the various people and projects—and so helps assess whether one is actually doing what one cares about doing. The four-way view, as described by Friedman is based on factors given below:

- a) **Work:** your job, what you do for a living or, what you're aiming to do next
- b) **Family:** can include the people (or animals) you live with, your family of origin (parents, siblings, and others), or your family of creation (spouse, significant other, children, and others).
- c) **Self:** your emotional health, intellectual knowledge, physical health, leisure, and spiritual life.
- d) **Community:** including friends, neighbors, social groups, religious institutions, charitable activities, political committees, membership in nonprofit organizations

## 1.2. What Determines Quantum of Stress? Are all the Four Aspects Equally Stressful?

Albert Bandura, a Stanford University psychologist, in the 1960s explored the potential of the feedback loop to affect behavior and was a pioneer in the study of behavior change and motivation. Bandura observed that giving individuals a clear goal and a means to evaluate their progress towards that goal greatly increased the likelihood that they would achieve it.

Applying Albert Bandura's concept to the four domains, there is higher likelihood of **work (immediate performance feedback, career)** creating potential stress. Followed, in decreasing order, by **family** (wife/children), **self** (health /learning) and finally **community**. Neglect of the community factor, in terms of time spent, may not even be noticed in the short/ medium term. Our hypothesis therefore is that the same quantum of imbalance in the four aspects would cause different levels of stress. Our experience (not yet based on data) is that imbalance in work will cause the highest amount of stress, followed by family, self and community.

---

<sup>1</sup> “Total Leadership - Be a better leader, Have a richer life” . Stewart D. Friedman, Wharton

We therefore used the following weightage for the four factors in terms of their relative potential to create stress.

- Work: 0.35
- Family: 0.3
- Self: 0.25
- Community: 0.1

### 1.3. Should all of us be Pitching for a Perfect 25/25/25/25?

There is no ideal score, as the distribution is determined by an individual's choice. It is important to think about the relationships between the different parts of life. The closer one can get to entirely 'overlapping domains,' the more likely one can be the person one wants to be. One goal of the Total Leadership process is to produce harmony among the four domains. One can learn how each circle impacts the other.

If you are a doctor, is the objective to earn money and meet the material needs of your loved ones or is there something about it that makes you feel proud about the impact you are having on the community? How does this feeling affect how your friends and family see you? Further, what would you have to change to make this feeling grow and be more a part of your everyday experience of your work and career? Would you have to act differently, or would you have to think differently about what you're accomplishing through your work?

That's a great example of harmony as different from just mathematically looking for a theoretical balance between hours worked and hours spent with community.

## 2. Talentonic's Adaptation of the Concept and It's Application

---

### 2.1. Talentonic Stress Index

1. **Short-Term Stress (SI):** This measures the stress in the short term, caused by any imbalance, discounted for their weightage. Deficit in one factor, gets serviced from the other factors and causes stress.

The short-term stress would be calculated as follows:

$$SI = \sum_{i=1}^4 DiWi$$

Where  $Di$  – deviation in time and importance absolute terms on each aspect  $i$ ,  $Wi$  is the weightage of each aspect  $i$

2. **Culture Fit Stress Index (CFI):** CFI measures the stress caused due to the deviation in the importance of each factor from what is 'socially acceptable' to the organization. Its lights out at 6 pm and you are sitting there until midnight. Everyone is working over the weekend and you are home with family. You invite your colleagues for dinner and they turn up without their spouse. No one turns up for the mini

marathon. After a while, you sense that you do not fit and are not at equilibrium with how others interact with the 4 factors. Either you have to change or others should.

CFI is measured as deviation from the organization average distribution, discounted for the weighted importance of each factor.

$$CFI = \sum_{i=1}^4 DiWi$$

Where  $D_i$  is deviation in importance from organisation average in absolute terms on each aspect  $i$  and  $W_i$  is the weightage of each aspect  $i$

## 2.2. A Case Study

Talentonic recently conducted a series of workshops for a manufacturing organization across levels to understand how people at various hierarchical levels distribute time and importance to the four factors causing stress as per Steward D. Friedman, as described above and how this distribution causes or helps them manage stress as per his hypothesis

### The Methodology

All participants were asked to distribute time and importance to the four factors such that the total score for each time and importance is 100. It was explained to them that there is no ideal score, as the distribution is determined by an individual's choice.

### The Data

For instance for the test case of Ravi (Fig1) and his Organization (Fig 2), the data is given below :

Fig 1

	Work		Family		Self		Community		Total	
	I	T	I	T	I	T	I	T	I	T
<b>Ravi</b>	50	65	20	15	20	15	10	5	100	100

Where I – Importance of the factor; T – Time devoted

Fig 2

	Work (I)	Family (I)	Self (I)	Community (I)	Total
<b>Ravi</b>	50	20	20	10	100
<b>Average for Org</b>	50	27	13	10	100

Where I – Importance of the factor

### The Calculation for SI

#### The Short-Term Stress (SI):

The short-term stress would be calculated as follows:

$$SI = \sum_{i=1}^4 DiWi$$

Where  $D_i$  – deviation in time and importance absolute terms on each aspect  $i$ ,  $W_i$  is the weightage of each aspect  $i$

$$\text{SI for Ravi} = (15 \times 0.35) + (5 \times .3) + (5 \times 0.25) + (5 \times 0.1) = 8.5$$

This can be interpreted, as Ravi's stress level due to not devoting time as per importance is 8.5.

### The Referral Benchmark for SI

Some stress indices from our data have been given below in figure 3 for reference:

Fig 3

	Work		Family		Self		Community		SI
	I	T	I	T	I	T	I	T	
<b>High</b>	40	85	40	10	10	0	10	5	27.25
<b>Low</b>	65	70	15	12	15	13	5	5	3.15

Where I – Importance of the factor; T – Time devoted

### The Conclusion for SI for Ravi

From the data and the referral benchmark we can conclude that Ravi is moderately stressed.

### The Calculation for CFI

Culture fit index is calculated as follows

$$CFI = \sum_{i=1}^4 DiWi$$

Where Di is deviation in importance from organisation average in absolute terms on each aspect i and Wi is the weightage of each aspect i

$$\text{CFI for Ravi} = (0 \times 0.35) + (7 \times .3) + (7 \times 0.25) + (0 \times 0.1) = 3.85$$

This can be interpreted as Ravi is stressed due to not giving enough importance to various aspects as 3.85 in comparison to his work peers.

### The Referral Benchmark for CFI

Some stress indexes have been given below in figure 4 for reference

Fig 4

	Work		Family		Self		Community		CFI
	I	T	I	T	I	T	I	T	
<b>HIGH</b>	80	70	10	20	5	8	5	2	<b>18.1</b>
<b>LOW</b>	50	80	30	10	10	5	10	5	<b>1.65</b>

Where I – Importance of the factor; T – Time devoted

### The Conclusion for CFI for Ravi

This is an indication that he is quite close to the average and that he would not be very stressed.

### 3. Extrapolation of Data to Create a 'Stress Profile' for the Organization

---

Based on the research, following interpretations can be made with respect to STSI:

Fig 5

<b>Interpretation</b>	<b>Range</b>
High SI	Above 14
Low SI	Less than 13.9

Based on the research, following interpretations can be made with respect to CFI:

Fig 6

<b>Interpretation</b>	<b>Range</b>
High CFI	Above 9.9
Low CFI	Less than 9.8

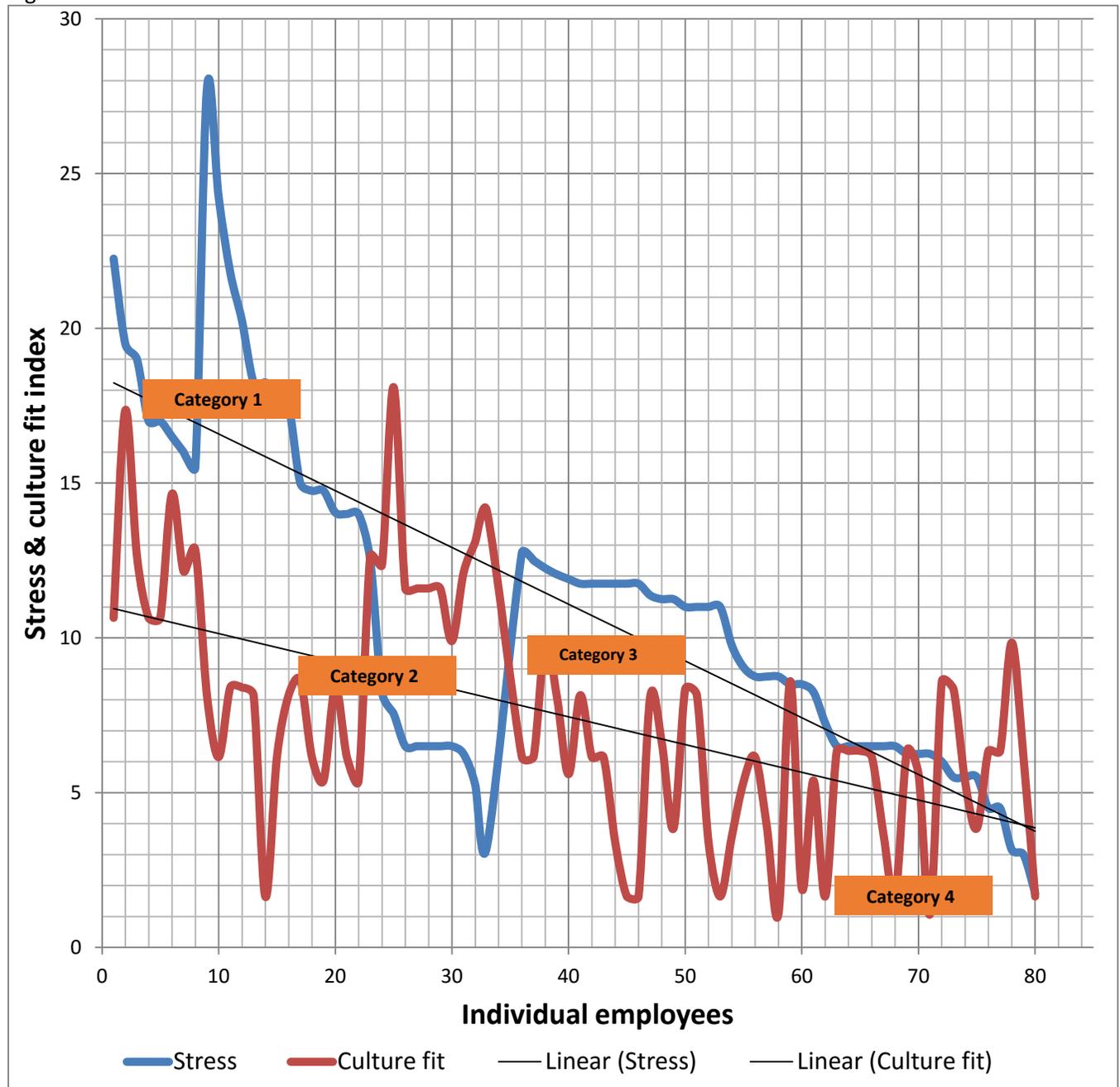
Based on the scores on SI and CFI, four categories could be created as described in Figure 7 :

Fig 7

	<b>High CFI</b>	<b>Low CFI</b>
<b>High SI</b>	Category 1 ( 8 members)	Category 2 (14 members)
<b>Low SI</b>	Category 3 (13 members)	Category 4 (46 members)

A graphical representation of the four categories has been presented in Figure 8

Fig 8



### 3.1. What Each Category Means

**Category 1:** These individuals are the most stressed; High strung. Out of form with the culture of the organization. They are stressed because of the large imbalance between how they are spending time on the four factors of Total Leadership vis a vis the importance they assign to these factors. In addition they are cultural mis-fits. The choices they make are quite different from the choices being made by a large number of their colleagues. Most likely candidates for a career/ job change.

**Category 2:** These individuals have high stress because of the compromises they make on a regular basis. However they are not the odd man out. In fact they fit in quite well with the rest of the group. If they are working a 60-hour week so is everyone else.

**Category 3:** These individuals are working as per their priorities and allocating time in a balance which works for them. However this is not the culture of the organization. So while these folks are at peace with themselves, the organization may not be at peace with them.

**Category 4:** These individuals represent the norm in the organization. They define the culture, and in a sense represent it. Low level of stress overall. At peace with themselves and stable. These are champions and can help others in the organization manage their stress level better.

## 4. Conclusion

---

The hypothesis aims to establish that inability to manage time as per the relative importance of the four aspects causes stress.

The data collected from the organization and the model developed above has been validated with the observations from HR and the leadership. It holds true. Stress is caused by the imbalance between time spent and the importance of the 4 factors. Going home early or late, spending more or less time with family may be one answer but not a great one. Sitting with your wife and children and stressing about work, or vice versa is not the balance that is being sought. That's mathematics. ! Converging the four factors in your mind & life is the answer. Along the way, we need to recognize that culture risk also needs to be understood and managed. This does not mean that we should all aim at becoming little robots walking in single file, conforming to the current organizational paradigm.



**Jan 2016**

Strictly private and confidential.

Not for further distribution without express written permission

**Talentonic HR Solutions Private Limited**

1007 , 10<sup>th</sup> Floor, BPTP Park Centra, Sector 30, Gurgaon, India

T: +91 124 4280231, W: [www.talentonic.com](http://www.talentonic.com)