# **Encouraging People to do Resilience**

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**Abstract.** The hypotheses to encourage people to do resilient activity are proposed. The importance of positive attitude as well as technical and non-technical skill of those who try to achieve resilience is discussed. In order to encourage people who do not stand at the position of doing resilience as their job, importance of self-efficacy is discussed. Based on the discussion, an attitude model of resilience is proposed. Organizational management which allows individuals to achieve resilience is also discussed referring to the styles of keeping fruits as examples.

### 1 INTRODUCTION

In order to prevent the unusual situation getting worse, flexible treatment is wanted to be done by the people who encounter the situation. This is resilience activity.

It seems that resilient activity has variety. For example, it has time width in it. Resilience in emergency must be performed within a limited short period of time. Emergency medical care is the example. On the other hand, some resilience may have time margin in it. Resilient activity to cope with illegal acts in an organization is the example. If resilient activity to correct it is not made, an organizational accident may arise (Komatsubara.A 2008). Resilience activity is needed not only in industries but also in communities of civil life at large. The example of resilience in civil life is the rescue operations by the person who happened to meet a traffic accident.

The style of resilient activity is various as mentioned above. However, from the view point of individual who performs resilient activity, the following three components, shown as Fig.1, are required in order to enable the resilient activity successfully.

- 1) Technical skill: The specific skill corresponding to the situation is indispensable. In industries, training for resilience is wanted to be done until people can perform it as skill-based behavior.
- 2) Non-technical skill: This means such CRM skill as situational awareness and decision-making. Communication skill is also important to attain good situational awareness and teamwork.

3) Positive attitude: Even though they have enough technical and non-technical skill, resilient activity will not be made unless they have positive attitude to fight with the situation.

In this paper, encouraging people to do resilience will be discussed. Especially enhancement of the attitude of those without professional or occupational mission to perform resilience will be studied.

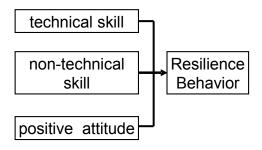


Fig.1. Components which enable Resilience Behavior

#### 2 STANDPOINT OF ACHIVING RESILIENCE

If we consider the position of those who do resilience, we notice that there are four cases in relation with two aspects. One aspect is whether the resilience is expected as professional job or not. Another aspect is whether they shall receive direct damage or not if they do not achieve resilient activity.

Case 1) Achieving resilience is expected as professional job. Furthermore, if resilience is not achieved, direct damage will be imposed on themselves.

Aircraft pilots are the typical example. Pilots are exactly in the position to cope with emergency. Unless they will carry out resilient operation, they themselves must receive serious damage or injury directly. Operations at the accident of Aloha Airlines Flight#243 in 1988 is a good example of this resilience.

Case 2) Achieving resilience is expected as a professional job. However, if resilience is not achieved at all, direct damage will not be imposed on themselves.

Emergency medical staffs are the example. The patient needs urgent medical treatment. However, even if adaptable measures are not given, medical staffs will not receive direct damage. However, if the patient died due to their poor resilient treatment, they may be strongly rejected socially. In this meaning, it is the same as the case of 1.

In the cases of 1 and 2, good technical and non-technical skill is required as professional. Since direct damage will be imposed on them in the case of 1 if resilient activity is not achieved, a positive attitude inevitably is required of them. However, in the case of 2, resilient activity will not be made if they do not have positive attitude, even if they have enough technical and non-technical skill. In this case, this poor attitude is from the lack of social justice, and it is often strongly influenced by corporate or organizational culture, such as excessive cost pressure (Komatsubara.A. 2008)

Case 3) Achieving resilience is not their professional job. However, if resilience is not achieved, direct damage will befall them.

In the winter of Japan in 2008, a limousine driver fainted away suddenly at his bad health by influenza, while driving the bus on a highway. Therefore, the bus began to lose a course. The passengers in the bus noticed this. Then, one of them operated the handle from a driver's side, and hit the bus-wheels to curbstones to stop the bus. Though this resilience is not his professional job, he might die due to the traffic crash unless he did this behavior in spite of feeling of fear. In this meaning, it can be said that he was temporarily in the professional position to do resilience.

Case 4) Resilience is not obligatory. Moreover even if resilience is not achieved, direct damage will not befall them.

In 2005 in Japan, a serious railway accident occurred. A local train was driven recklessly and overturned at a curve to crash. 106 passengers and the driver were killed. 562 passengers were injured. Just when this accident occurred, a limited express was approaching from the opposite direction but the driver of the limited express did not notice the accident because emergency radio system equipped at the local train was broken because of the crash. As one housewife who happened to be walking aside the railway noticed the approaching of the express, she immediately pushed emergency-button of nearby railroad-crossing. So the signal turned to red, and the opposite limited express stopped. Therefore, another accident beyond did not occur. Although her behavior was very simple, it was very good resilience that should be admired.

We everyone may accidentally encounter such situations as the cases of 3 and 4. However, we may not have enough technical skill to deal with the situation. Therefore we may not be able to make flexible behavior for the specific situation. However, the behavior of the housewife shows that there are cases that serious accidents can be prevented even if the resilient behavior is simple.

However, in these cases, their feelings to try the resilient activity may be complicated, because their behavior may make the situation worse.

Furthermore, in the case of 4, they can have bystander's attitude. If they have bystander's attitude and do nothing, they do not need to take responsibility for it even if they may suffer for remorse later.

Bystander's attitude may arise not only in civil life but also in the organization where

each worker works in specialized ways to belong to different work-units in a same company. Actually, in the train accident mentioned before, several employees of the railway company who happened to ride in the same train left the accident spot without rescuing wounded people to go to their everyday work. Of course, as contribution might be small even if they took part in rescuing, they might have bystander's attitude.

**Table 1.** Summary of the attitude which should be enhanced in each case

		Direct Damage is imposed ?	
		Y	N
Resilience is Job or Mission?	Y	Case 1	Case 2
		Professionalism, <i>but</i> inevitable	Professionalism, especially social justice
	N	Case 3	Case 4
		Avoid fear	Avoid fear & Bystander's attitude

#### 3 DISCUSSION

This paper discusses further how to overthrow the bystander's attitude of the case of 4.

### 3.1 Overthrowing bystander's attitude

# (1) Attitude Model for achieving resilience

When a person encounters a certain event which wants resilience, whether he/she does resilient activity or not is left to his/her own decision, at last.

Figure 2 shows the relation with resilience attitude and behavior. This model shows that resilience will not be made if the balance inclines to the left, but will be made if it inclines to the right. In the people who conduct resilient activity as their job or mission, it is expected that driving factors have been well developed, and that the braking factors are removed.

The examples of driving factors are;

- Consciousness of responsibility; Feeling that "It is my responsibility to do it"
- Self-efficacy; Feeling that "I can do it"

On the other hand, the examples of braking factors are;.

- Attitude of bystander
- Feelings of fear towards the event and doing resilient behavior

In the case of 4, like the housewife mentioned before, the feeling of self-efficacy may include that of "I may do it" in addition to "I can do it". Moreover, "I should do it" may be included that originates from social ethics and the feeling of self-sacrifice.

# (2)Approval as the feedback from society

The resilient activity may make the situation worse. If the resilient behavior succeeds, no

problem will arise. This will reinforce their self-efficacy. On the other hand, especially in the case of 4, if their behavior makes the situation worse, their feelings must be complex. If there is climate to allow the result, and accept and praise their courage to do resilience, their self-efficacy will be encouraged. To the contrary, if blaming climate exists toward the undesired result, bystander effect will be enhanced. This makes people, organizations and society go into the direction of braking resilience. This means that self-efficacy and bystander's attitude have reverse relation. It also means that no-blame culture should be accepted or encouraged in some aspects, regarding just culture of safety culture (Reason J. 1997). That is, the person who tries resilience should be fundamentally accepted irrespective of the result, unless he/she is carrying out recklessly. In order to overthrow bystander effect, it is thought that daily small good resilience should be admired to encourage self-efficacy.

"Thanks Card" which Japan Airlines has voluntarily adopted is very suggestive (Komatsubara A. 2008). This card is the size of a name card. With feeling of admiration, a staff writes a warm message and gives this card to those who performed something good, which includes small resilience. The staff who received the card feels happiness, and self-efficacy is fostered. In the staffs who gave the card, the resilience awareness would be fostered. This means that this card has educational effects for awareness of resilience.

#### 3.2 Organizational Style which allows Resilience

In highly systematized organizations where each job is separated one another, people may take bystander's attitude, like the employees of the railway company mentioned before. When they take the bystander's attitude, resilience will not be performed. However, it may be from organizational structure of bringing bystander's attitude, rather than individual's problem. Let us consider the management style of keeping fruits in a box. This is compared to the management system of organizations. There are some ways.

*Orange Box*; Japanese oranges are usually put and kept in a big box roughly. They are soft and flexible. Each determines its position so that they may harmonize with the whole. If one orange is lost, other oranges will move smooth to compensate it immediately.

In the organizations of this style, each people keep watching mutual work each other. When some troubles happen at some members, other members can help smooth. In this meaning, it is the organizational style in which resilience is easily taken.

However, there are some weak points. The whereabouts of responsibility tend to become ambiguous. Even if one orange is lost, it is difficult to notice it from outside. That is, accountability would be difficult to be expressed. Furthermore, since oranges touch directly each other, if one orange rots, it will spread immediately and whole oranges will rot easily. This means an epidemiological accident can be occured easily. Therefore overall audit for organizational culture should be needed.

Apple Box; The storage positions to keep apples in a box are usually determined previously. The apple which suits the size of the position is put in. Positioning, i.e., management system is first. When a certain apple is lost, it can be noticed immediately. So it is easy to achieve accountability. Each apple is isolated and apples are robust. Therefore, even though one apple rots, it does not spread to other apples. An epidemiological accident, accordingly, seldom happens.

However, other apples do not compensate a lost apple, without the handling by a manager. That is, it is essentially hard to develop resilience. Moreover, if the management system is so rigid, organization easily cannot catch up with inside and outside changes. Since each apple is isolated to be independent, even if one apple is completely rotten, it is almost impossible to notice from other apples. Therefore focused audit should be made.

These two management styles suggest the organizational design which is suitable for management and resilience. The former style is of traditional Japanese organizations. It is expected that every person will be flexible, and organizational management is also so flexible. That is, it is easy to achieve resilience. However, it is hard to express accountability to the exterior. The latter is the organizational design which begins with management system. Probably, it is the view of European and American organizational design. It is easy to achieve accountability and hard to cause an epidemiological organizational accident. However, the organizational members inside may not achieve resilience easily.

We should ask for the organization which encourages resilience with management system. For example, management of peaches is suggestive. Peaches, which are soft, are usually kept in contact with each other with soft cover to prevent direct touch, and each position is also clear in a box to some extent.

# 4 CONCLUSION

In order to encourage resilience, this paper pointed out that individual who tries resilience needs technical and non-technical skill, and positive attitude. As to attitude, it was pointed out that attitude of professional is required at industries. On the other hand, in the resilience which an average citizen achieves in civil life, the importance of not lapsing into bystander's attitude was pointed. It is same at the organization which takes some management system rigidly, too. Even if the resilient activity resulted in failure, no-blaming seems to be important to increase self-efficacy for resilience. Moreover, the organizational style to encourage individual resilience was also discussed in this study. The discussions in this paper are hypotheses. Further study must be continued.

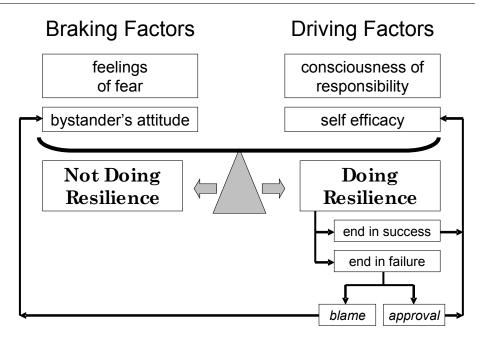


Fig.2. Model for the Relation with Resilience Attitude and Behavior

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