

2024年香港房屋委員會工程和物業管理安全研討會

建立心理安全感，錯誤中正確前行

楊冠全博士

首席顧問



• 高處/離地工作墮下意外(13宗)

- 荃灣工廈工人15樓搭棚 疑跣腳墮地當場身亡 **2024年7月20日**
- 工人檢查照明設施時 從金屬梯具墮下死亡 **2024年7月**
- 葵涌醫院二期重建 科文竹棚墮斃 **2024年3月21日**
- 啟德巨棚19樓飛墜壓人 2死3傷 **2024年2月20日**
- 油塘地盤男工6米墮地 留醫一日傷重不治 **2023年12月8日**
- 店舖裝修男工電線絆倒撞傷頭 兩日後不治 **2023年11月21日**
- 消防局地盤男工 疑4米高電線槽墮地不治 **2023年10月10日**
- 垂直升降台倒塌 工人維修天花9米墮亡 **2023年8月7日**
- 薄扶林地盤39歲冷氣男工人墮樓 留醫一日不治 **2023年6月10日**
- 山頂白加道重建地盤男工高處墮下 留醫兩周不治 **2023年3月28日**
- 安達臣地盤男工疑失足 15層樓飛墮平台不治 **2023年3月21日**
- 柴灣7旬地盤工意外墮樓 送院搶救不治 **2023年2月14日**
- 港珠澳大橋人工島男工3米高墮下昏迷 兩日後不治

• 吊運/負荷物移動機械/升降台意外(5宗)

- 葵涌浩景臺地盤 工人遭泥頭車及挖泥機夾頭亡 **2024年7月25日**
- 啟德體育園死者被夾於升降工作台與金屬構築物之間 **2024年5月8日**
- 山頂普樂道重建地盤男工被挖掘機撞倒 重創送院亡 **2023年11月23日**
- 東涌地盤工疑遭吊運鐵枝擊中亡 **2023年11月10日**
- 土瓜灣地盤工人被夾斃於叉式起重車與動力操作升降工作台之間 **2023年5月16日**

• 觸電意外(3宗)

- 將軍澳樂頤居發生懷疑觸電意外工人不治 **2023年12月5日**
- 科學園男工天台裝太陽能板觸電不治 **2023年9月10日**
- 航天城東路男工人假天花觸電亡 **2023年8月19日**

2023-2024年建造業致命意外個案



• 密閉空間意外(3宗)

- 源禾路渠務工人疑沙井內吸入硫化氫 4人送院2人不治 **2024年4月23日**
- 兩工人維修地底冷氣管道 疑吸硫化氫中毒送院不治 **2023年9月24日**
- 海水化淡廠地盤 漆工水缸底塗防水漆猝亡 **2023年7月4日**



• 受困於倒塌或翻側的物件(1宗)

- 洪水橋地盤工 遭3噸預製石屎組件擊斃 **2023年9月21日**

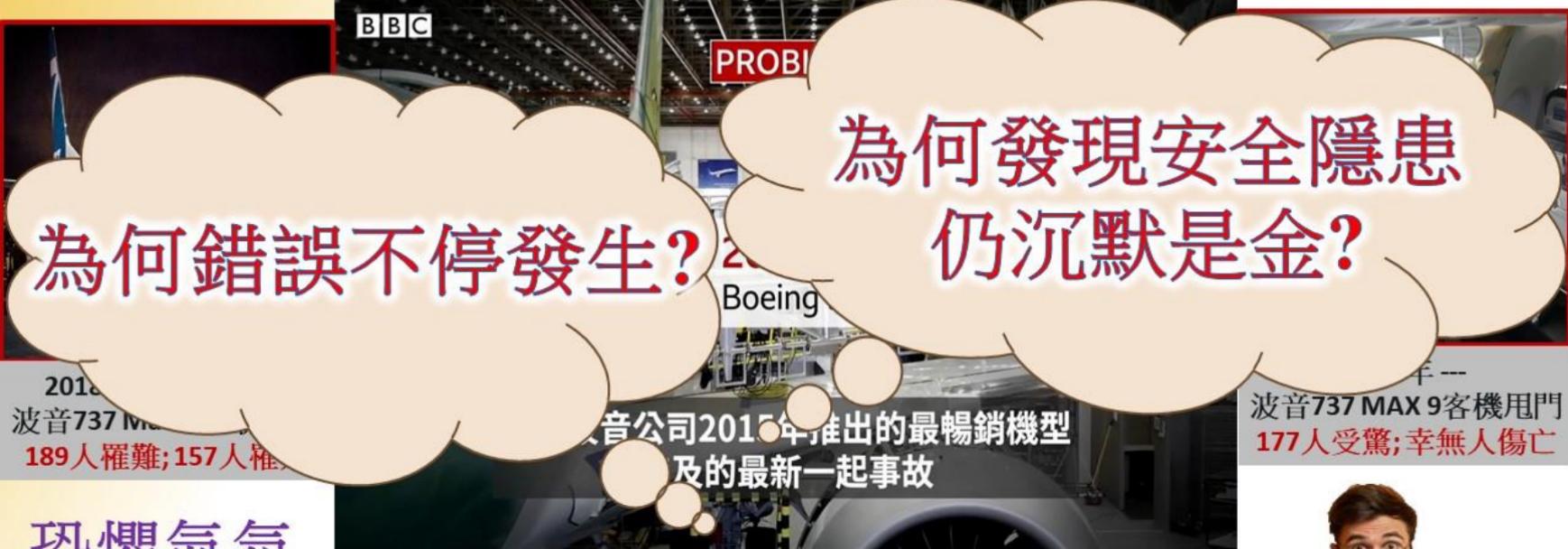
• 拆卸工程意外(2宗)

- 中葵涌村拆屋 塌地台砾石屎壓死男工 **2023年11月8日**
- 元朗廢棄村屋塌牆 壓死拆卸工人 **2023年8月19日**



意外統計截至2024年7月30日；資料來自本地報章報導





恐懼氣氛

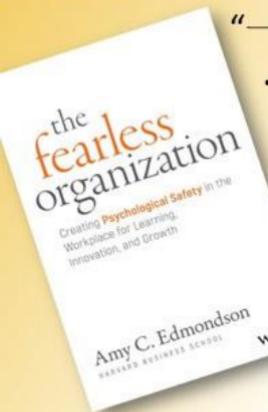


建立心理安全感 (Psychological Safety)

“一種人們可以**自由表達自我、安心做自己的氣氛**。

....一種信念，即個人**不會因為說出自己的想法、問題、擔憂或錯誤而受到懲罰或羞辱**。”

Ref: "The Fearless Organization", Professor Amy C. Edmondson (Harvard Business School)

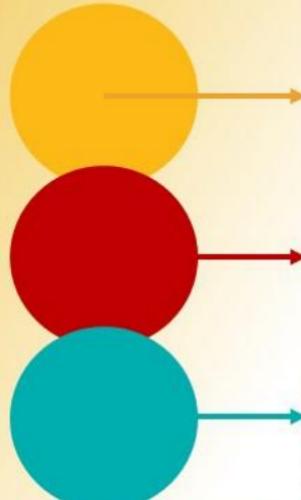


這是正確的做法!



建立心理安全感，錯誤中正確前行

3種錯誤的類型



基本型

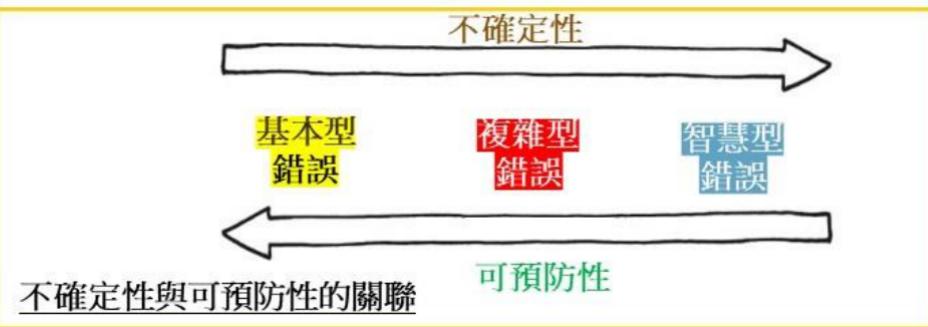
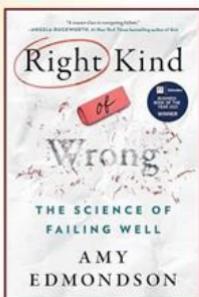
通常可以避免的錯誤、失誤

複雜型

導致系統失效的多重原因故障

智慧型

「好的錯誤」：在沒有重大損失的情況下提供有意義的啟示



Ref: "Right Kind of Wrong: The Science of Failing Well", Professor Amy C. Edmondson (Harvard Business School) 6

甚麼領導風格可以提高團隊成員心理安全感？

領導風格與心理安全感之間的關係

標準化迴歸係數¹

權威性領導

-0.08

0.22

協商性領導

支持性領導

——顯著效應
----條件效應²

挑戰性領導

正向的團隊氛圍

0.77

心理安全感



1: Standardized Regression Coefficients

2: 正向團隊氛圍影響挑戰性領導風格對心理安全感的效應

領袖可以運用協商性、支持性領導風格

來建立心理安全感，

及後發揮挑戰性領導風格，讓團員從錯誤中學習

領導風格和心理安全感的關聯性

經常表現出
此行為

20%

領袖

62%

62% 受訪者匯報這些領導風格的
同時，也匯報了心理安全感

26%

領袖

72%

72% 受訪者匯報這些領導風格的
同時，也匯報了心理安全感

協商
與支持

很少表現出
此行為

41%

領袖

27%

27% 受訪者匯報這些領導風格的
同時，也匯報了心理安全感

13%

領袖

32%

32% 受訪者匯報這些領導風格的
同時，也匯報了心理安全感

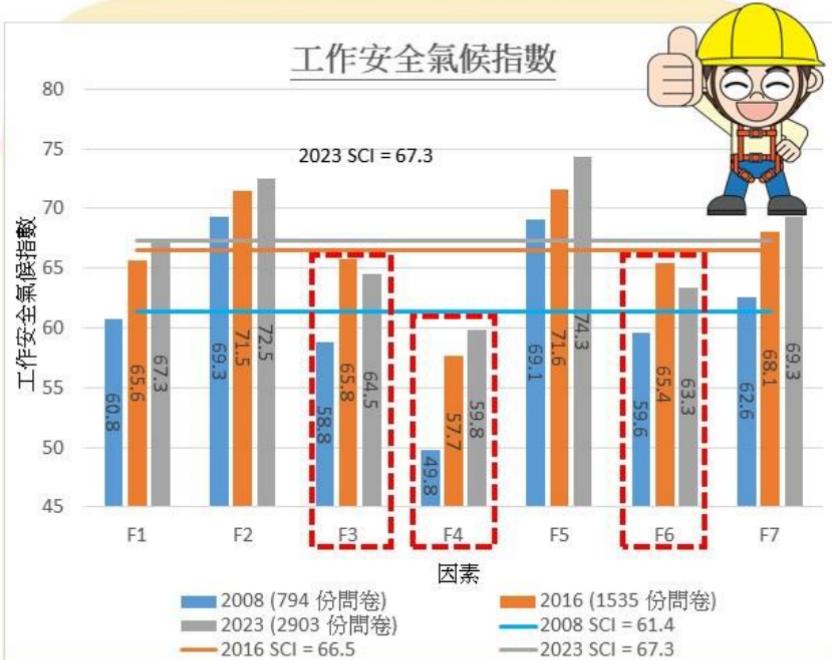
很少表現出
此行為

挑戰性

經常表現出
此行為

錦囊(一)活用工作安全氣候指數調查

房委會工地:工作安全氣候指數調查結果



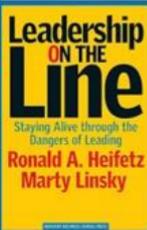
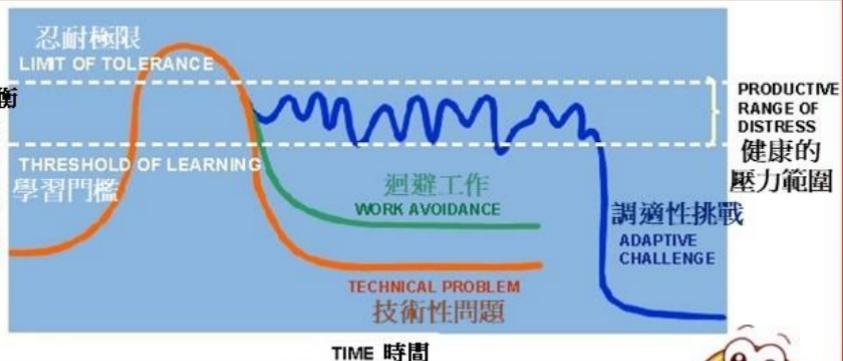
因素3. 冒險行為及對工作風險的認知
因素4. 對安全守則及程序的認知
因素6. 安全工作態度及同事間的影響

建立心理安全感，錯誤中正確前行 錦囊(二)發揮調適性安全領導力 (Adaptive Safety Leadership)

調節溫度，有序地協調矛盾：

改變現況須要揭露隱藏着的矛盾，所以會產生張力和提升溫度

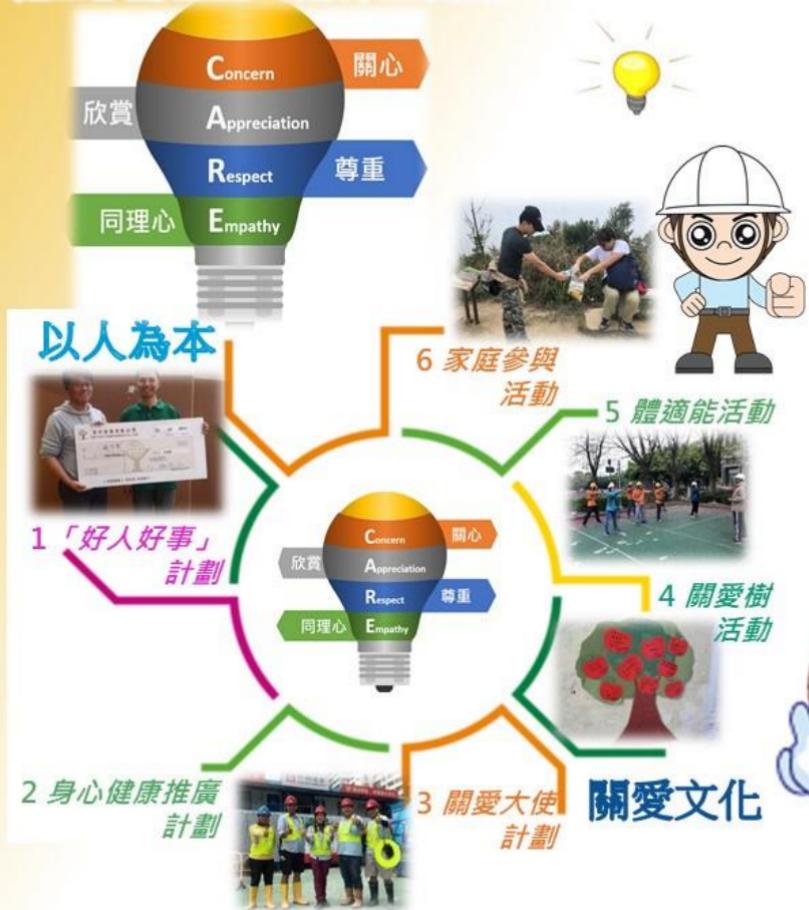
失衡
DISEQUILIBRIUM



調適性領導力的過程

Ref: "Leadership on the Line", Professor Ronald A. Heifetz (Harvard Business School)





零傷亡願景運動

培育預防文化 保障寶貴生命

VISION ZERO

Safety. Health. Wellbeing.



所有與工作有關的故事、疾病
及傷害都是**可以預防的**



生命是**不能妥協的**

我們需要**培育預防文化**，因這是
實現零傷亡願景的唯一方法

Hearts & Minds

 +  = **OHS**

你有否在團隊裏建立心理安全感？

你有否從錯誤中成長？



This is a clip from the 31 July 2024 recording of the
Hong Kong Housing Authority
"Safety Forum 2024 for Works and Property Management Services"

The speaker on stage is Dr Winson Yeung
Principal Consultant of Occupational Safety and Health Council
His topic is

"Establish Psychological Safety and Forge Ahead from Mistakes"

(00:23)

Permanent Secretary Ms Rosanna Law
Distinguished guests, friends from the industry, hello everyone
First, on behalf of the Occupational Safety and Health Council
thank you to the Housing Authority for the invitation
to participate in today's forum

Just now, we talked about the Olympics
I am sure many of you have watched the Olympics
and cheered for the Hong Kong team

A few days ago, there was an interview
that left a lasting impression on me
An athlete had just won a medal
and the reporter asked how he felt
What did the athlete say?

He shared his thoughts
He said the success you see today
only represents 1% of success
Behind that 1% success

there is actually 99% of failure

that people do not see

This sharing gave us a lot of inspiration

Often in our work on occupational safety and health

we have many successful experiences

But behind these successful experiences

there must have been many failures too

And when facing these failures

how to build a team with a positive sense of psychological safety

how to learn from mistakes and keep moving forward

is actually very important

I won't go into too much detail here

because many speakers have already shared a lot just now

One of the key messages is that

the fatality rate in the construction industry in recent years

not just the fatality rate, but the number of fatalities

has not improved

Each year, there are about a dozen to twenty deaths

Each of these fatalities is tragic

because they not only involve the loss of life

but also the breakup of twenty or more families

which is something none of us want to see

In fact, no one wants accidents to happen

But as we saw in the video

even a small action can bring change to a construction site

Just now, Deputy Director Mr Daniel Leung also explained

that if, on a site
someone like Sarah in the video
communicates more with workers
and understands more about the safety and health issues they face daily
and listens to their opinions more
we can build trust
With this trust, we can establish psychological safety
which is very important for preventing accidents
If the whole team lacks trust
accidents can keep happening

For example, some of you may have noticed in recent years
that Boeing aircraft had a series of accidents
On the left side, you can see that a few years ago
two aircraft crashed
killing over 300 people
In this incident
to improve fuel efficiency
they redesigned the engines
but the redesign was flawed
Did the staff know about it?
Yes, they did—but why didn't they speak up?
Because they were rushing to deliver the aircraft
And when you are rushing
There is no time to redesign
Gradually, this created a culture of fear
and staff did not dare speak up
Actually, penalties were imposed after these accidents
If you have read the news

you may have seen how much they were fined

These 2 incidents resulted in over 200 million US dollars in penalties

That is nearly 2 billion Hong Kong dollars—a staggering amount

But did this huge fine lead to improvements?

If you look at the right side

another accident happened earlier this year

This time it was even more serious—look at this photo

an entire aircraft door had fallen off

Originally, the design had five rivets securing the door

When damage was discovered, replacements were made

But for some reasons

after the replacement, only one rivet was left

four were missing

You can see that accidents continue to happen

Even though penalties were imposed

Why has not there been improvement?

Clearly, we need to think more deeply

When the whole team lacks trust and psychological safety

many problems will arise

We keep seeing repeated mistakes

but have we really learned from the pain?

Second, even when staff notice safety risks

they still remain silent

If you are interested in studying psychological safety

Harvard Professor Amy C. Edmondson defined it this way

She mentioned what psychological safety is!

Simply put it means fostering an environment
where employees can feel safe to share their thoughts
Moreover, once they express their opinions
They won't face punishment or consequences later
Frontline staff are very familiar with site conditions

Why do not they speak up?
Because they fear being criticised as ignorant
being blamed, or seen as troublemakers
Many years ago, I visited a Toyota factory
The president of the factory said something very insightful
He said he valued staff feedback
So on the production line, there was a yellow cord
He said when staff saw a problem
they could pull the cord
Pulling that cord was not easy
Because it triggered a lot of follow-up actions
Red warning lights would flash
The whole production line would stop
Then a team leader would come over to discuss

what the issue is?
If it were you, would you dare to pull the cord?
You should have to consider whether your employer really values safety
But what was the outcome?
There were over 1,000 cord pulls
When staff saw that their employer valued their opinions
and prioritised safety
psychological safety slowly developed

and they became willing to speak up

I am also thankful to my boss

because she recommended this book to me

and I learned a lot from it

Also, Amy C. Edmondson recently published a new book

I am not promoting books

but she made a very good point

In the Boeing aircraft incidents

mistakes kept happening

So we need to analyse the types of mistakes

Some are basic

But some are complex

involving systemic issues or human factors

Many times, the accidents that happen in Hong Kong

are getting more severe

In the past, a scaffold collapse was already a major incident

But in the last two years, suspended working platforms have fallen

and even tower cranes have collapsed

Has the team really built psychological safety?

Look to the right side of this slide

When psychological safety is low

people only report good news, not bad news

Many issues are kept quiet

or swept under the rug

The best scenario, in their minds, is that no one finds out

So if we want to build psychological safety

Look at this diagram

the key is to establish mutual trust

When psychological safety is in place
staff will be willing to speak up about problems
and then have honest discussions to find solutions
This is very important for strengthening safety culture
What kind of leadership style can enhance psychological safety across the team?

According to a McKinsey report
they surveyed over 1,500 professionals
to study how different leadership styles affect psychological safety

On the far left of the chart
is the authoritative leadership style
This kind of leader is very powerful
can make all decisions

But does it help build psychological safety?
No—it actually has a negative effect
So what's the best approach?

It is the one circled in the middle of the chart
a combination of consultative and supportive leadership
If you only adopt one of them in isolation, the effect is not as strong

But combining both consultative and supportive leadership
produces better results

And what about challenging leadership?
Look at the bottom right of the chart
What does this mean?
If a leader does not consistently offer consultation
meaning they neither engage in discussion nor provide support
then when there is a challenge to tackle
only 32% of respondents feel

that the company has a positive team atmosphere

On the other hand, if the leader provides both support and consultation

Based on collaboration

a sense of psychological safety is established

When challenges come

employees are more willing to accept them

They will speak up about problems

and want to solve them together

So we need to make good use of leadership styles

consultative leadership

supportive leadership

combined with building psychological safety

and then implement challenging leadership

But let me mention one quick point

Only 26% of leaders can actually manage all these leadership styles

That means only one in four leaders can do it

So there is definitely a lot of room for improvement

Finally I want to share a useful tip with everyone

To build psychological safety

making good use of the Safety Climate Index survey is very important

More than ten years ago

the Occupational Safety and Health Council and Tsinghua University

already collaborated on researching the Safety Climate Index Survey

It covers 7 factors and 38 questions

The most important thing is to understand employees' views

Sometimes when I visit sites

some people tell me that doing safety audits is already unbeatable

But it must be clear
safety audits only target the system
But to understand people's thoughts
you must conduct the Safety Climate Index Survey
I am very grateful to the Housing Department's support
for including this software in new contracts
and requiring contractors to implement it
The three factors mentioned earlier by the Deputy Director
factors 3, 4 and 6
also have room for improvement
This room for improvement must be communicated with the workers
Some misunderstand that after the survey and completing the charts

The task is done
But actually the survey is just the beginning
I hope there will be many group discussions
For example factor 3 shows more risky behaviours
When I spoke with some workers
I asked why risky behaviour was important
They said safety depends on good luck
and if you are lucky accidents won't happen

We need to correct this wrong belief
and let them know the company has many procedures
and proper implementation is the most important
Then factor 4 showed another issue
their awareness of rules and procedures was low
They felt company procedures were too many and complicated
and might not reflect the real hazards

What can we do?

If contractors know about this problem

the whole team needs to sit down and communicate more

Think about how to simplify and visualise the rules

so workers can understand them more easily

So sincere discussion is very important

Also this reflection meeting was arranged by my superior

which is adaptive leadership

I also have many adaptive issues

Actually anyone can participate even without problems

Last year I attended a learning session

Harvard scholar Ronald A. Heifetz said it very well

We tend to solve problems technically

For example if a crane collapses

we stop using welding and use bolts and nuts instead

But does using bolts and nuts solve all problems

The hardest to solve are human issues

unsafe behaviour

wrong values and attitudes

On the bottom left of this diagram

we need to understand people's different characteristics

Some are destructively indifferent

they see your mistakes but say nothing

Some are evasive

never speaking the truth

Some are aggressively hostile

scolding immediately after mistakes

After understanding these traits

you cannot just leave them alone

you have to communicate with them

When communicating

In the top left corner, you will notice

the orange line continuously rising in temperature

If you challenge their wrong values

they will naturally resist

This is an inner issue you cannot easily change

If you keep communicating

you must use the process on the bottom right

through continuous observation reading and intervention

reduce these internal conflicts to the blue line

This is a manageable level

This is not easy

To share an example

last month the Civil Engineering and Development Department

invited the Occupational Safety and Health Council

to hold a site safety reflection meeting

What was special about this reflection meeting

We gathered six project teams

consultant companies and contractors

and brought up accidents from each project for discussion

The day was very productive

There were two crane collapse incidents

two site fire accidents

and two involving angle grinder or portable circular saw

During discussions

a consultant company cleverly said

that according to the man machine material method environment analysis

the accidents were proven unrelated to the consultants

Then I wondered if it was related to the contractors

They said no relation either

That is strange so why did the accidents happen

They said it was a human issue, the workers' fault

Because the workers bypassed the safety switch

allowing the crane boom to exceed the maximum operating radius

causing the crane to overturn

After listening I thought it was not just the workers' fault

The workers definitely had issues

But let's consider can the system be improved

Then I asked how the worker bypassed the safety switch

Actually there was a key that when inserted and turned

could bypass the safety switch

I asked who kept the key

They said the crane operator kept it

There is no reason the operator should keep a key

that can bypass the safety switch

So could the system be improved

The key could be kept by the main contractor

Or over the key slot

a transparent cover could be installed

No one should be able to bypass the safety switch at will

There are many solutions

So safety work is not only about sharing successes
Through honest discussion of accidents
many problems can find solutions

Finally the key tip is
how to build a people centred caring culture
I am very thankful to the Housing Department
because several years ago they had pilot projects
and worked with contractors to study how to build caring cultures
Through good deeds programmes
mental and physical health promotion and caring ambassador programmes
Through these initiatives
workers can feel the company cares about them
thus building psychological safety
To some extent it encourages cooperation at work
At least while working as you see in the bottom right
It will be safer
happier and more efficient

The image in the middle is the Safe Working Cycle
which have been implemented for over 10 or 20 years
The Housing Department and Development Bureau have strongly promoted them
Some practitioners mentioned to me
that the current Safe Working Cycle
seem to be reduced to just the morning briefing
So I specifically remind everyone
Besides the morning briefing
there are also pre work hazard identification activities to identify hazards

The most important is the toolbox talk
which subtly reminds workers
fewer reminders can lead to more incidents occurring
Finally quoting the International Social Security Association
which promotes a Vision Zero campaign
It is mentioned that all work related accidents
diseases and injuries are preventable

Life is non-negotiable
I hope after today's forum
Everyone will think about
whether your team
has really built psychological safety
In your sharing today
within the entire company and team
was there any focus solely on sharing successful experience
Besides success do you
also honestly share failures
and think about solutions
Finally I urge everyone here
to foster a culture of prevention together
to safeguard precious lives
Together, let's strive for the goal of zero incident

Thank you all

Thank you for watching

(09:36)