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Behavior Based Safety BPS 2323

Basic Principles to Prevent and Treat Human Problems

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ACKNOWLEDGEMENT

I sincerely thank to Miss Junaidah Zakaria, who also taught this topic in the Occupational Safety and Health Program, Universiti Malaysia Pahang. Without her assistance, this work might not be possible.



Chapter Description

At the end of this chapter, student should be able to explain about failure and success oriented of safety goal and human learning model to relate those items together.

Expected Outcomes

Students able to explain:

- What failure oriented safety goal is about
- What success oriented safety goal is about
- Three type of human learning models and its relation to setting up a safety goal.

References:

1. Geller, E.S. (2001). "Working Safe, 2nd ed". Lewis Publishers.
2. Geller, E.S. (2005). Behavior-Based Safety and Occupational Risk Management. *Behavior Modification*. 29(3):539-561.

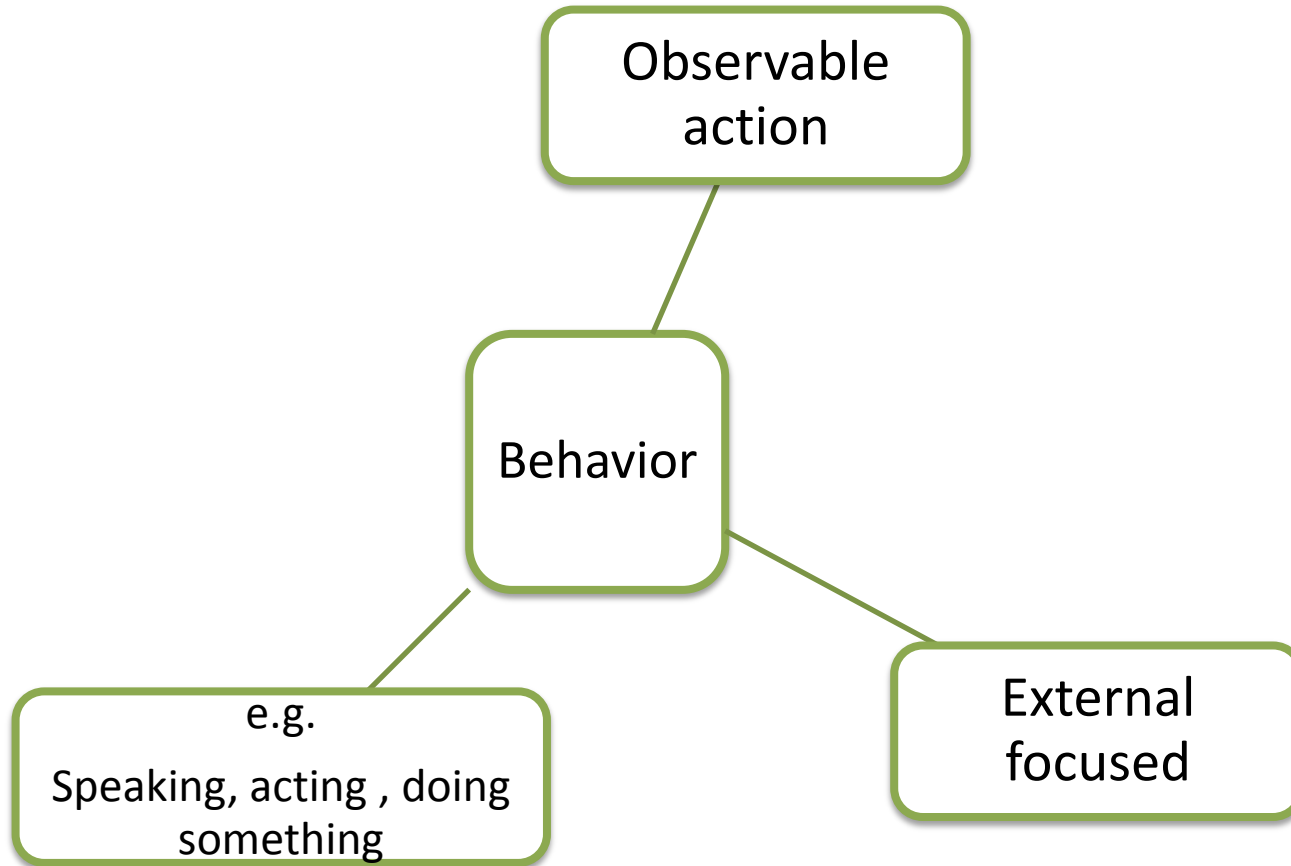


Content

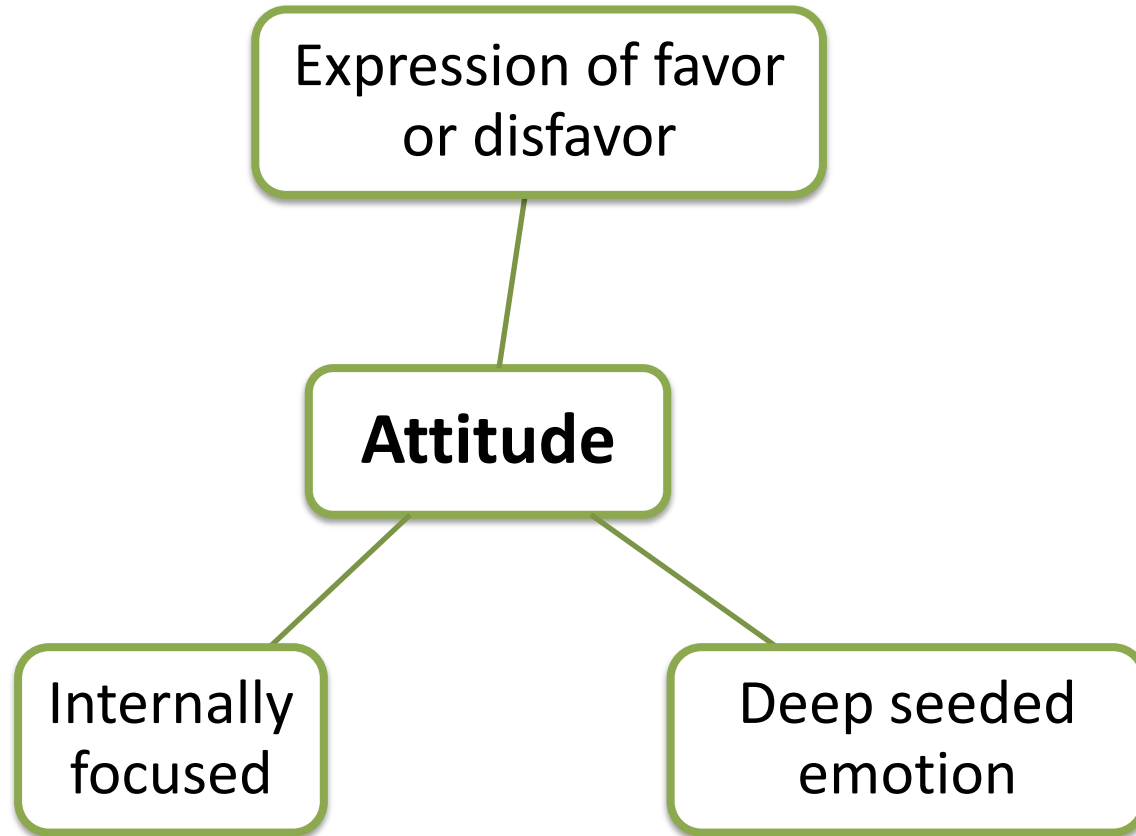
- Introduction of behavior and attitude
- Failure oriented safety goal
- Success oriented safety goal
- Human learning model



Introduction



Introduction



Introduction

What Behavior?

need to be increase or decreased to treat the problem.

What environmental conditions?

supporting undesirable behaviors or inhibiting desirable behaviors?

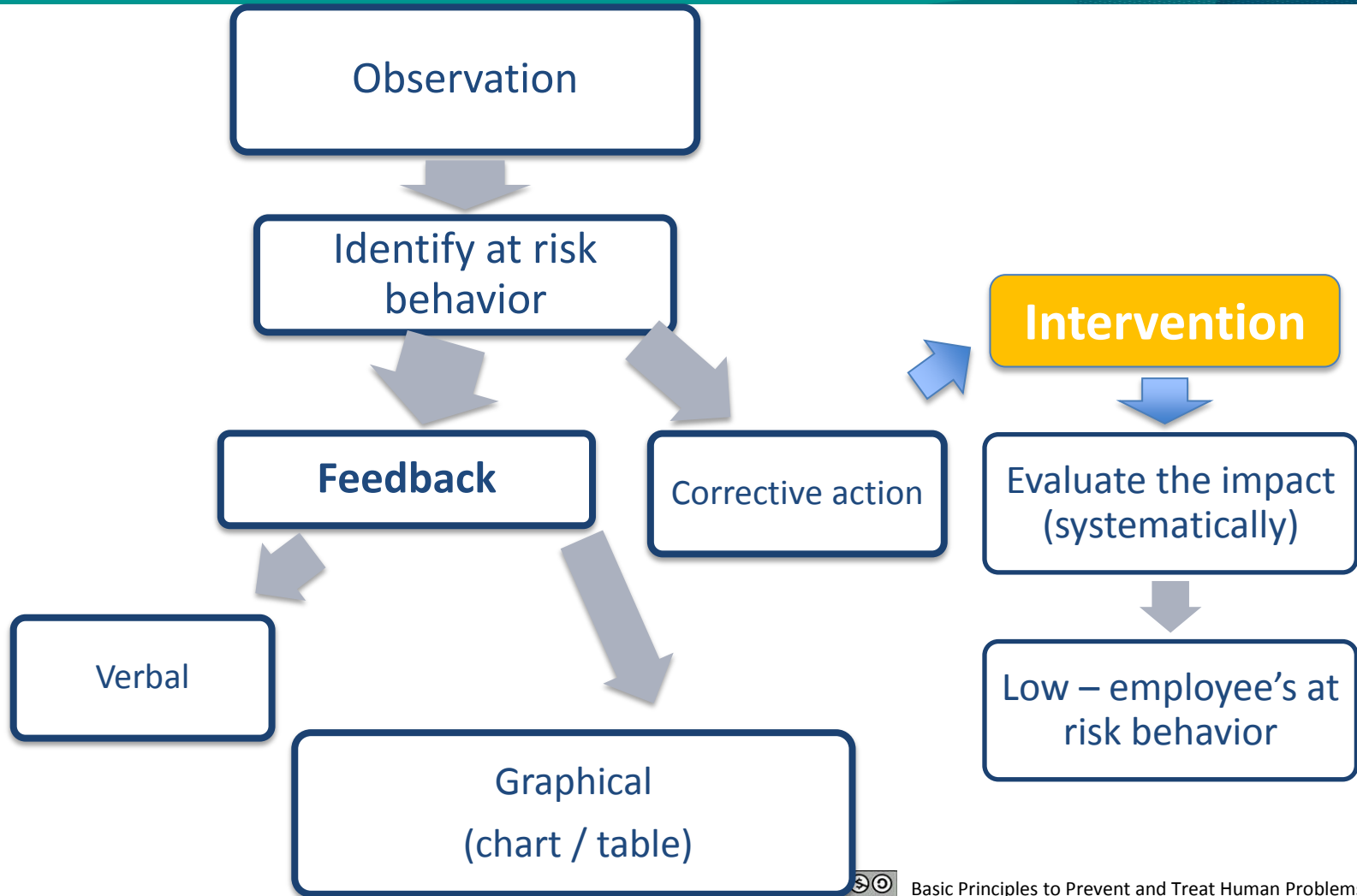
What environmental or social conditions

can be changed to decrease undesirable behaviors and increase desirable behaviors.

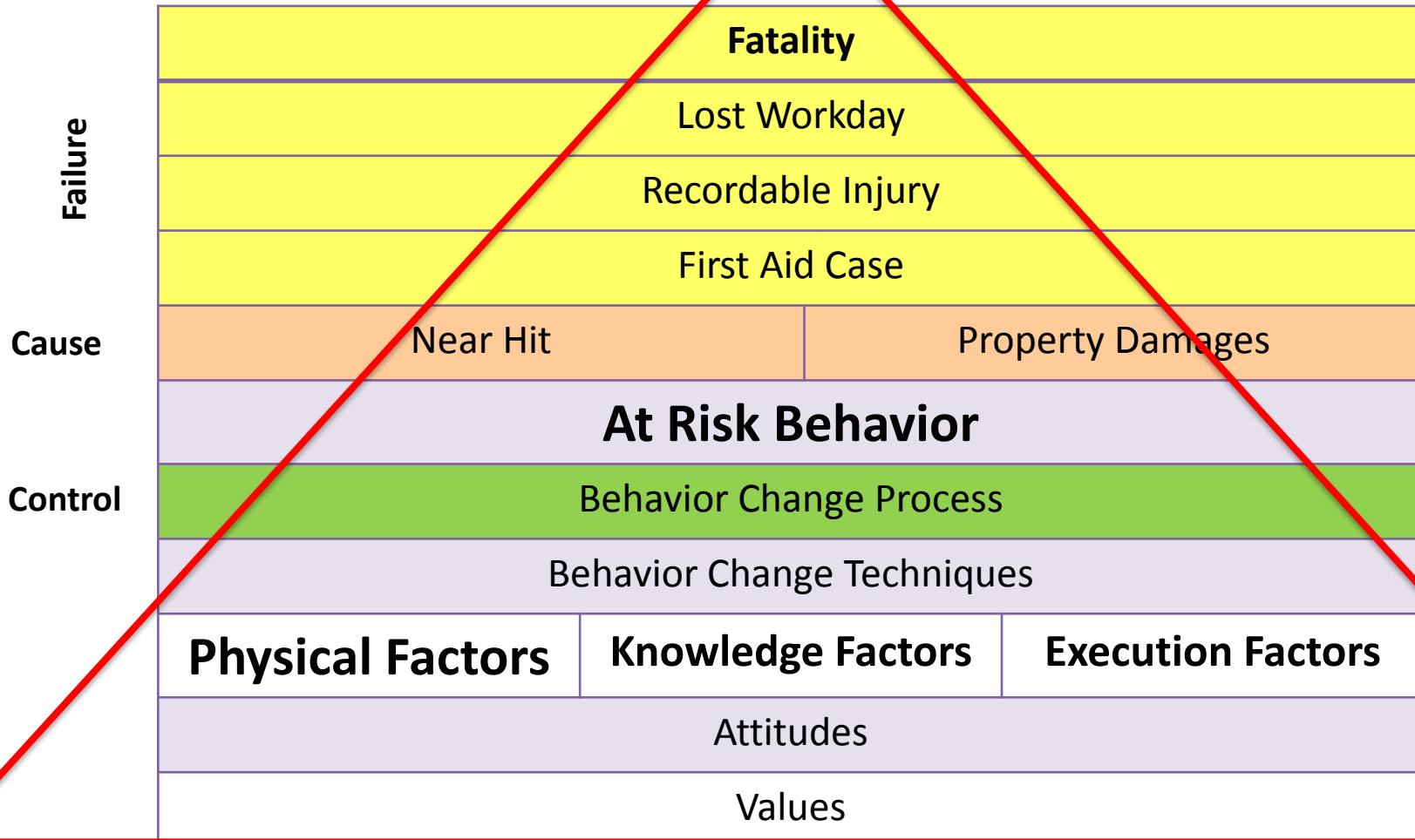
Reducing at Risk Behavior

- BBS can decreased at-risk behavior in order to avoid failure.
- At risk behavior - major cause of progressively more serious incidents, from a near hit to fatality.

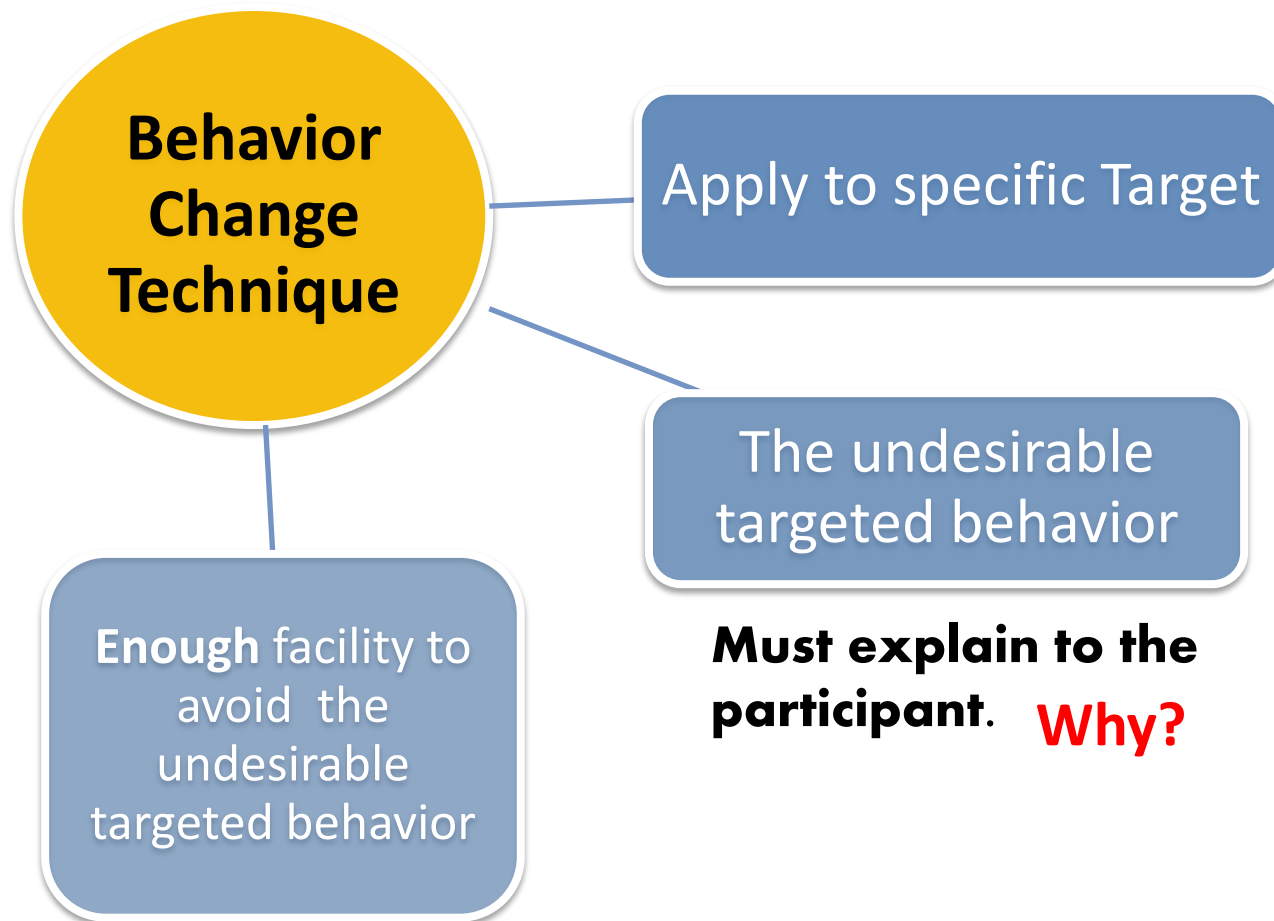
Steps in BBS



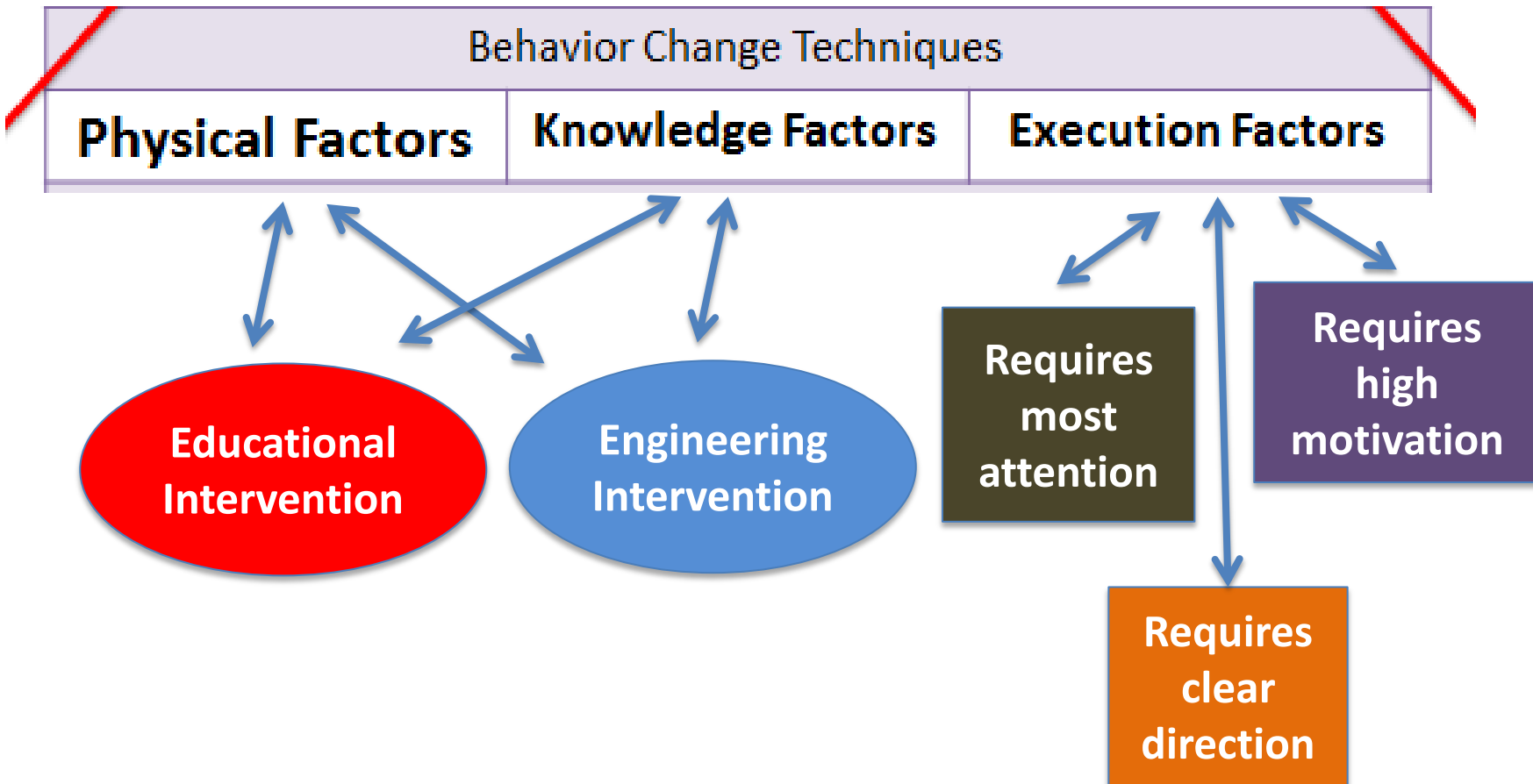
BBS – Failure Oriented



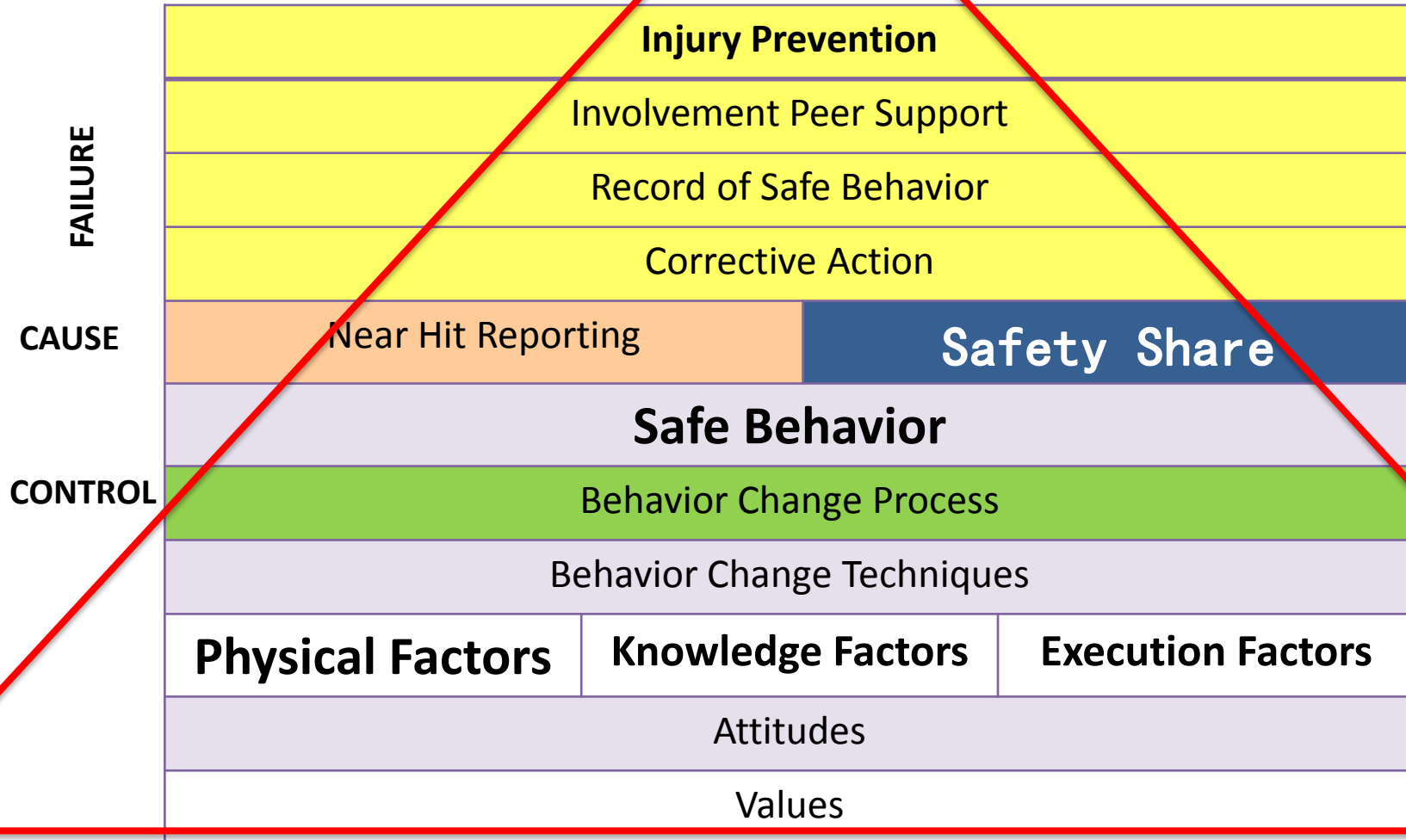
Behavior Change Technique – Failure Oriented



Behavior Change Technique – Failure Oriented



BBS – Success Oriented

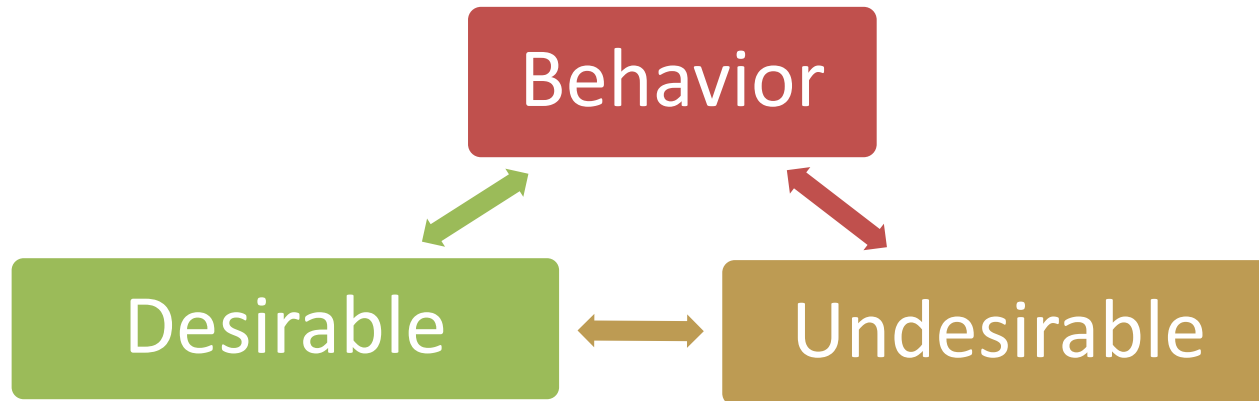


Safety Share

Reporting on something ... *positive*



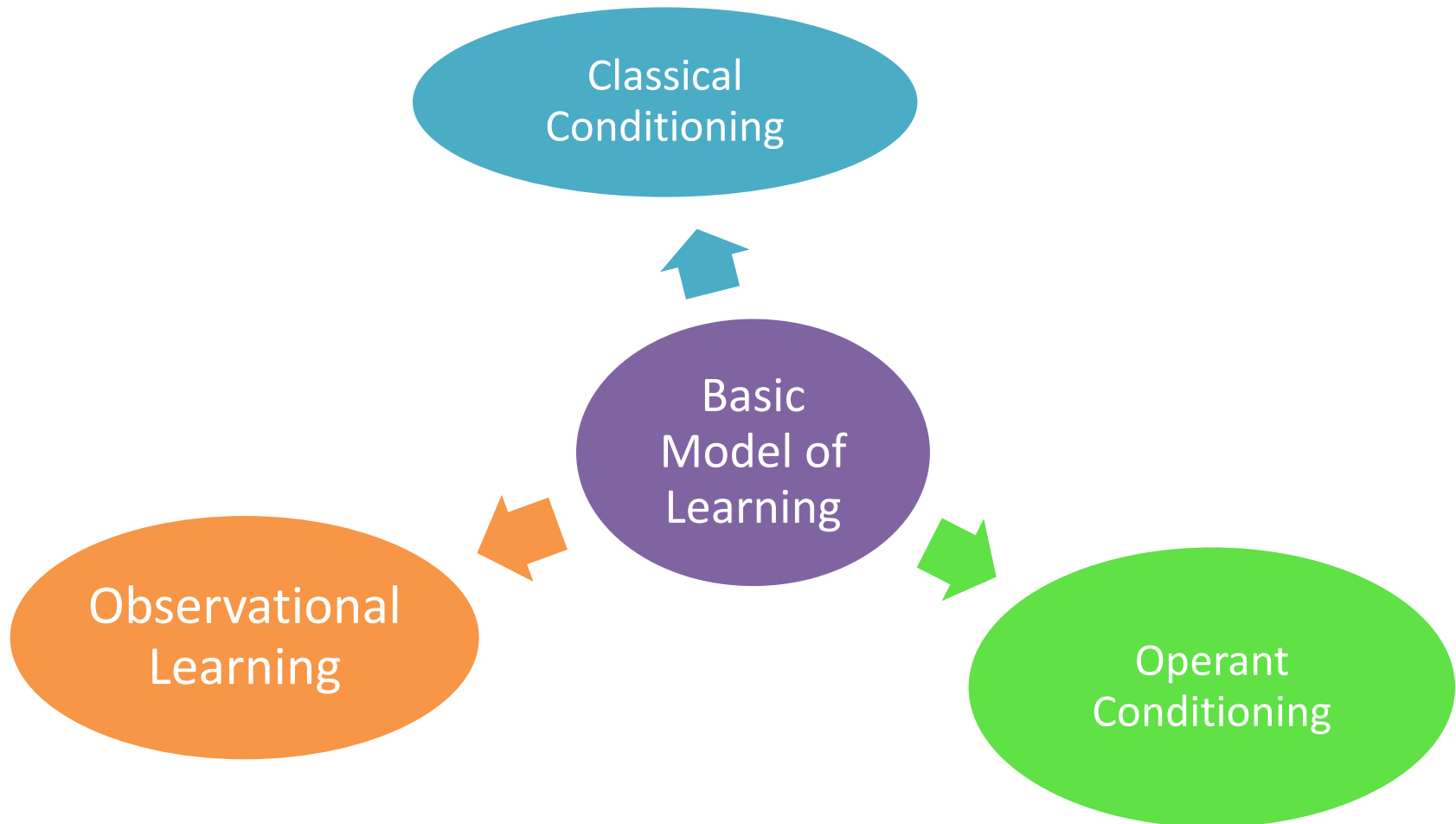
Learning from Experience



Behavior – learned by experience

Behavior – can be changed with **new** learning experience

Basic Model of Learning



Classical Conditioning

Conditioned Stimulus (CS) **elicits** → Conditioned Response (CR)(involuntary)

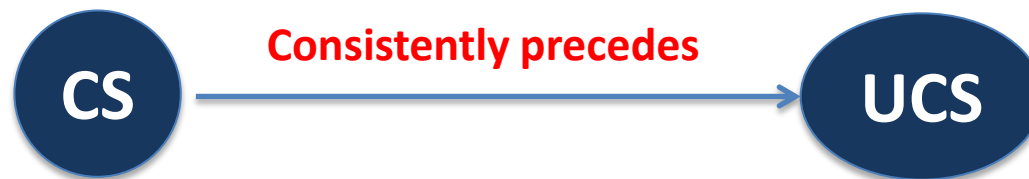
Unconditioned Stimulus (UCS) **elicits** → Unconditioned Response (UCR) (involuntary)

Unconditioned Stimulus
*naturally and automatically
triggers a response*

Unconditioned Response
unlearned response that occurs
naturally in response to the
unconditioned stimulus.



- ❑ Smell of fried chicken (UCS) – mouth water (UCR)
- ❑ Police traffic writing speeding ticket (UCS) – feeling nervous (UCR)



1 Smell of Food (UCS) → Mouth Water (UCR)

2 Bell of microwave oven (CS) → Mouth Water (UCR)
indicate that food is ready

Operant Conditioning

Do X ==> Y happens ==> Feel good

==> Do X more

A child screams.



Parents pay it lots of attention,
which is pleasant.



The child screams more often.

Operant Conditioning

Employees finishing projects to receive praise or promotions from employer.

The promise of reward , **increase** in behavior,
but it **can also** decrease behavior.

the **use of punishment** can be used to prevent undesirable behavior.

Observational Learning

Vicarious
Consequences



Is an Indirect
Reinforcement

Receive awards
(special attention) for
certain behavior



Likely to **copy**
behavior

Observational Learning

Seeing others getting
punished

**Vicarious
Punishment**

learn

Avoid these
behavior

Overlapping Type of Learning

- Simultaneous influence more than one learning type.
- Operant learning – likely to include classical (emotional) conditioning.
- Same goes to observational learning

Conclusion

Workplace adopted operant behavior, most of the times. (perform to gain positive consequences (reward) or to negative consequences (injury))

Classical conditioning – occurs at the same times (emotional reactions) – stimulus cues surrounding the experience of receiving the consequences.

By watching or observing, we learn to make decision (to do or not to do). It is an ongoing process.



Thank You