

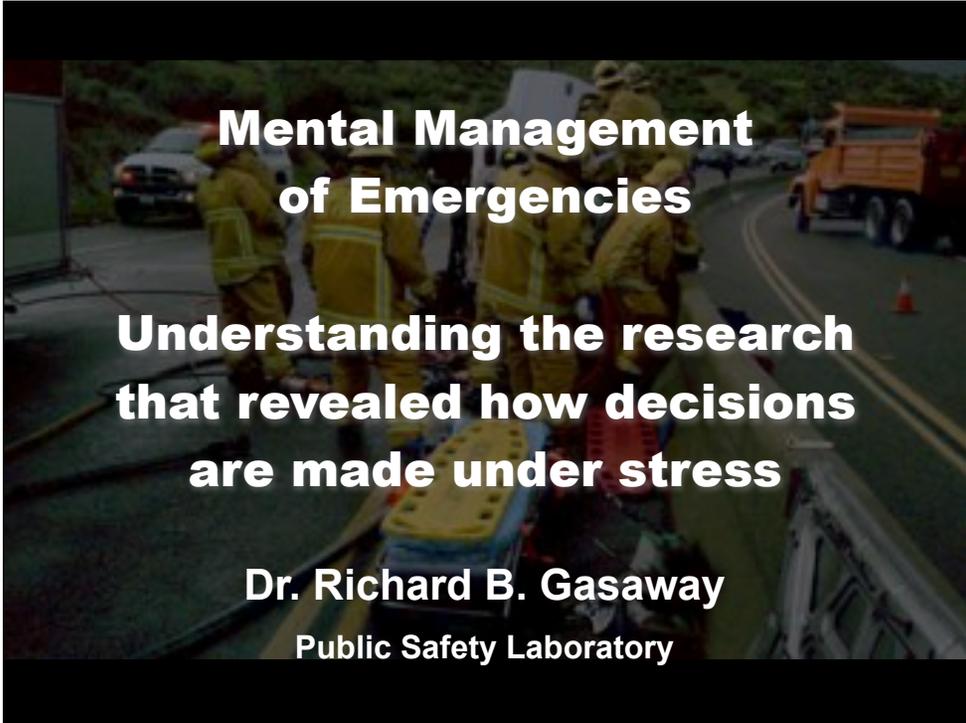
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If you are interested in hosting a program, please contact Dr. Gasaway at
www.RichGasaway.com or Support@RichGasaway.com

A photograph of an emergency scene at night or in low light. Several firefighters in yellow gear are gathered around a stretcher on a road. An orange utility truck is visible in the background. The scene is dimly lit, with some lights from the vehicles and equipment providing illumination.

Mental Management of Emergencies

**Understanding the research
that revealed how decisions
are made under stress**

Dr. Richard B. Gasaway
Public Safety Laboratory

The goal of this program to help you understand the how and the why of high-stress decision making.

Deep Knowledge

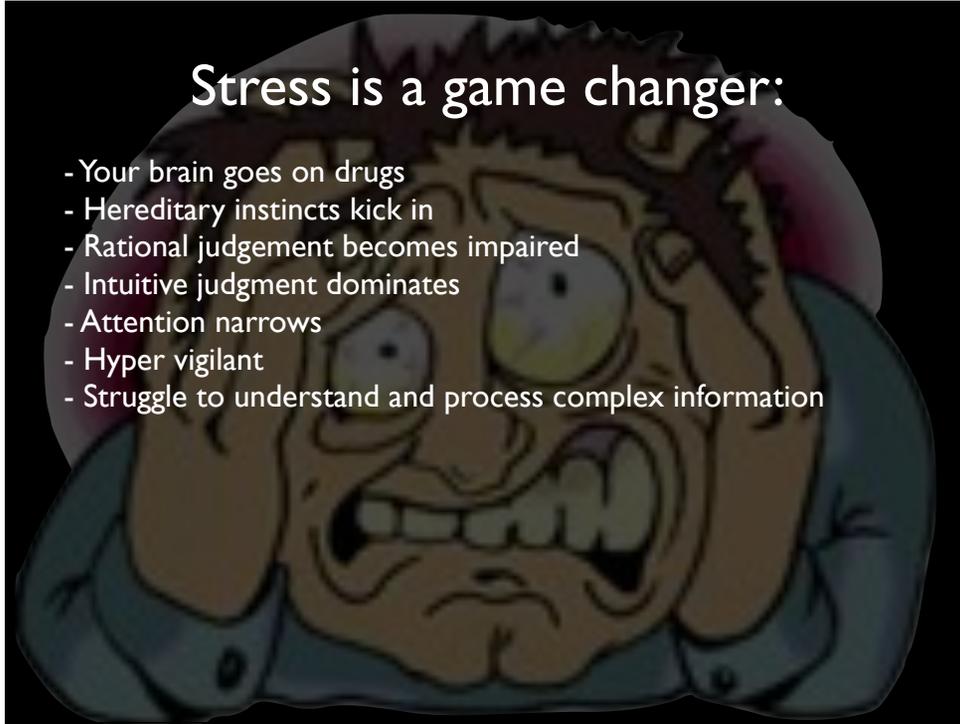
Two major influences on
decision quality

Stress

Expertise

Stress is a game changer:

- Your brain goes on drugs
- Hereditary instincts kick in
- Rational judgement becomes impaired
- Intuitive judgment dominates
- Attention narrows
- Hyper vigilant
- Struggle to understand and process complex information



What is the maximum value of US coins a person can have in their possession and still be unable to make change for a dollar?

Why was this problem so easy to solve?

STRESS IN THE ROOM

High

✓ Low

SUBJECT MATTER KNOWLEDGE

Novice

✓ Expert

CONFIDENCE WITH THE DECISION

Low

High

How much does it cost?



_____ cents

Why was this problem so easy to solve?

STRESS IN THE ROOM

High

✓ Low

SUBJECT MATTER KNOWLEDGE

Novice

✓ Expert

CONFIDENCE WITH THE DECISION

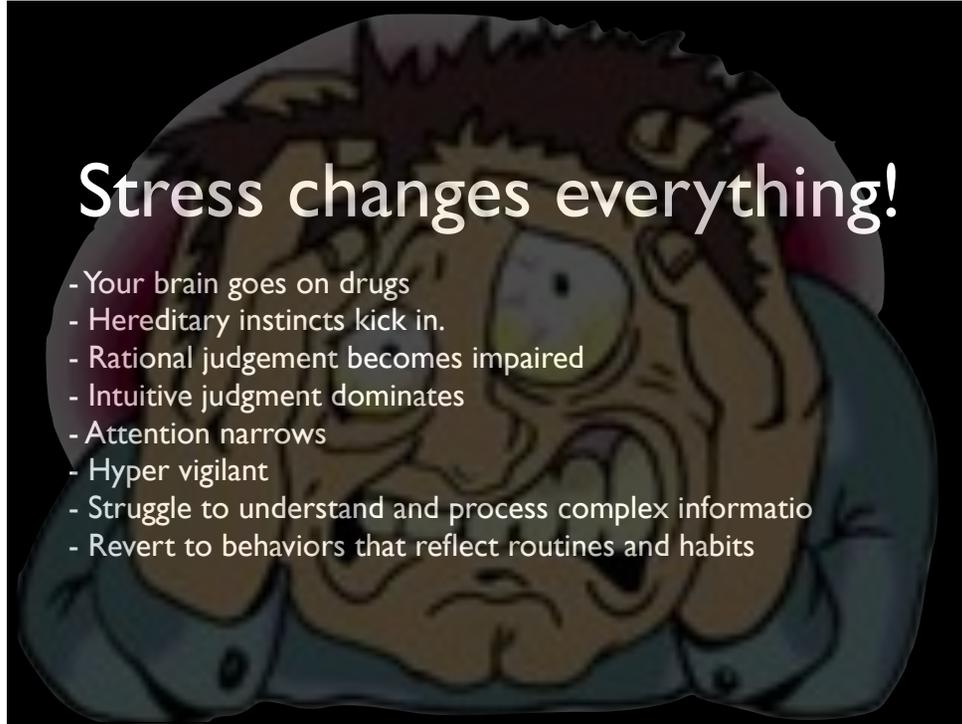
Low

✓ High

What is the maximum value of US coins a person can have in their possession and still be unable to make change for a dollar?

Stress changes everything!

- Your brain goes on drugs
- Hereditary instincts kick in.
- Rational judgement becomes impaired
- Intuitive judgment dominates
- Attention narrows
- Hyper vigilant
- Struggle to understand and process complex information
- Revert to behaviors that reflect routines and habits



Realistic and repetitive training builds muscle memory that can save your life.



Gary Klein's
great discovery...



Decision Making Process

1. Define the problem
2. Identify decision criteria
3. Allocate weights to the criteria
4. Develop the alternatives
5. Evaluate the alternatives
6. Select the best alternative (the decision)
7. Evaluate effectiveness of the decision

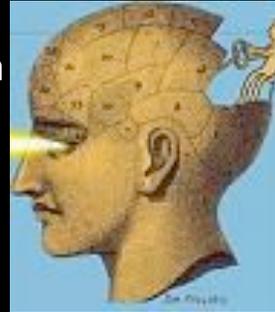


How did you use this process at the fire scene?

1. Define the problem
2. Identify decision criteria
3. Allocate weights to the criteria
4. Develop the alternatives
5. Evaluate the alternatives
6. Select the best alternative (the decision)
7. Evaluate effectiveness of the decision

Recognition-Primed Decision Making Process

1. Size-up situation quickly
2. Focus on most relevant information
3. Recognize “typical” ways of reacting
4. Run mental models of options
5. Forming expectations of outcomes
6. Detect unusual things and problems and seek explanations
7. Make a decision and a plan of action



Recognition-primed decision making under stress requires:

1. Situational Awareness
 - Paying attention
2. Tacit Knowledge
 - Unconscious knowledge



Stored experiences...

Pattern matching...

Information chunking...

According to research conducted at Cambridge University, it doesn't matter in what order the letters are in a word. The only important thing is that the first letter and the last letter are in the right place. The rest can be a total mess and you can still read it without a problem.

Facts are the clues and cues that
prime your recognition.

Without facts (points of reference)
your brain struggles to form a
pattern match.

cdRAgcnio to nhtorae duyts nodcutdce in het
socomrlas reeh ydoat, it mecosbe llyunfpia vdieetn
fo who hcmu a osrepn glesgtrsu to dear emhtosgin
fi het trifs dan tasl rtetel era ont in het hgtir apelc.

According to another study conducted in the
classroom here today, it becomes painfully evident of
how much a person struggles to read something if
the first and last letter are not in the right place.

Recognition-primed decision making under stress requires:

1. Situational Awareness
 - Paying attention
2. Tacit Knowledge
 - Unconscious knowledge
3. Ability to conduct mental simulations
 - Predicting future events through modeling
4. Self-Confidence
 - Be able to trust your gut... your intuition

Thank you to the members of our military,
past and present.





I have a favor to ask...

Pay it forward



Helping you see the bad things coming...
in time to change the outcome.

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