The Science of Security

The Psychological Impacts of Security Awareness Programs
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So, what’s the big idea?

1. Spending money on security awareness does not always equal behavioral change
2. “Bad Guys” are not the only reason for Security Awareness
3. Talking to a Psychologist does not mean that something is wrong

Take a Positive Psychology Approach
State of the Union - Security Awareness Training

• The costs for security education is on the rise
• Most companies see the user as being the last line of defense
• There has been minimal evolution to the distribution of cybersecurity training
Show Me the Money

- Difficulties keeping up with the bad guys
- Last line of defense is becoming more important
- Average spend on training is $300K a year
Time for a Change

- Security Training is more than a compliance activity
- Taking advantage of gorilla marketing and mass media sharing methodologies
- Embed security training as a push for cultural change
Security Awareness as a Science

• Awareness training is all about **behavior**

• Psychology is the study of the mind and **behavior** - it plays a big role in cybersecurity
A New Lens on Psychology

• Traditional psychology focuses on what is wrong with a person

• Positive psychology is a scientific approach to studying human thoughts, feelings, and behavior with a focus on strengths instead of weakness

• Build the good instead of repairing the bad
Positive Psychology in a Nutshell

Focuses on positive events and impacts in life

1. Positive Experiences
2. Positive States and Traits
3. Positive institutions
Time to go with the “Flow”

• Being completely involved in an activity for its own sake
• Your whole being is involved
• Shift Security Awareness and Training efforts to stay in the “Flow” Zone
Create Awareness Programs with PERMA in Mind

Positive Emotions
Engagement
Relationship
Meaning
Achievement

Culture
Positive Emotions

• Positive emotions are more than just happiness
• Can broaden or increase our thoughts and actions
• Can impact our habitual ways of thinking
Engagement

• Engagement is about being totally absorbed by a present task where time and self-consciousness seem to cease.

• Everyone finds enjoyment in different things which lead to immersion into a specific tasks or activity.
Relationship

• Relationships are one of the most important aspects of life
• Having strong relationships help build trust
Meaning

• It’s all about having a purpose
• Explore the greater impact being aware

How to keep the company secure
How to keep your team and/department secure
How to keep your stuff at work secure
How to keep you and your family secure
Achievement

• Having goals or ambition can give people a sense of accomplishment
• Set realistic goals and reward when those goals are met
Mitigate Risk Through Cultural Change
Key Takeaways

- Having a good awareness program is not about money
- Think like a marketer
- Focus on what’s right instead of what’s wrong
- Create positive experiences for participants
- Balance skill & challenge
- It’s all about cultural change
Recommendation

1. Conduct brainstorming activities that encourage team to push beyond limits
2. Create a security training & awareness council that meets quarterly to help coordinate programing
3. Be aware of different learning methods when creating security awareness and training
Questions?