The Human Side of Informatics: Promoting Wellness

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Conflict of Interest

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Has no real or apparent conflicts of interest to report.
Agenda

• Introduction
• Didactic presentation; the science of cognition behind what we experience
• Audience interaction with participation and input
• Questions
• Supplemental materials
Learning Objectives

• Define information behavior, civility, wellness, mindfulness, and resilience
• Describe human cognitive processing in relation to information load and stressors
• Discuss methods for promoting civility and reducing incivility in the workplace
• Practice methods that increase resilience to stressful situations
• Develop strategies to improve wellness in the workplace
Information Behavior

- Both active and passive information seeking and information use are modified by cognitive processes and require manipulation of data elements. These are stressors affecting wellness.
- Information must go into and come out of our brain. How the human brain acquires, processes, and retains information affects the usage of available data, and our reactions to it.
- Long-term potentiation (LTP) underlies forming memory and requires brain synapse modification in which a long-lasting enhancement occurs with repetitive stimulation of synapses.
- LTP has an early phase of 1–3 hours and a late phase up to 24 hours. Recall & review during these periods aid LTP.

Cognitive Load / Memory

- Working memory for active information processing includes both short-term and long-term memory components.
- Acquisition of new information is limited to only 5 to 9 separate pieces of new information into short-term working memory at any time.
- Between 2 and 4 of these pieces can be processed simultaneously, and only for a few seconds.
- Almost all of this new information is lost after 20 seconds unless it is refreshed through review.
- Learners may go through multiple cycles of learn forget before the new information gets into working memory.
- Long-term memory supplies immediate access to multiple informational items simultaneously.
Cognitive Limits

- There are cognitive limits to acquisition of information through reading.
- **Novices** read at a rate no more than 150 words per minute (WPM) for comprehension, and with high stakes scenarios may read no faster than 50 WPM.
- Content experts skim and scan at 400–600 WPM. Experts can become frustrated with novices and experts designing information systems may overlook difficulties encountered by novices attempting to acquire new information.
- Information transfer through an electronic health record (EHR) requires reading, and EHR usage for patient care may be considered a high-stakes task.
Visual Learning

- Most people are visual learners (modes: visual, auditory, reading / writing, kinesthetic) and also multimodal (more than one mode simultaneously), which is NOT the same as multitasking (which really multisequencing).
- The visual mode of learning may have advantages for memory storage.
- Visual long-term memory representations can be detailed. Long-term memory for objects in scenes can contain more information than only the gist of the object.
- Human memory is capable of storing fairly detailed visual representations of objects over long time periods.
Memory Formation and Usage

- There is a 20 minute upper limit to effective short-term memory processing and transfer. Technology, entertainment, and design (TED) talks do not exceed 18 minutes.
- Working memory capacity predicts performance on a wide variety of high-level cognitive measures, but individual differences are determined by variability in consistently deploying attentional control over what is stored in working memory.
- Low-capacity individuals have more difficulty ignoring distracting information than high-capacity individuals, because they are slower at disengaging attention from irrelevant information.
- Multitasking is multisequencing: more tasks must be performed in shorter sequences, or tasks compete for working memory, reducing effectiveness of working memory applied to each task.
A heavy information load negatively affects performance, whether measured regarding accuracy or speed. When information supply exceeds processing capacity, a person has difficulties identifying the relevant information, becomes highly selective, ignores a large amount of information, has difficulties in identifying details and the overall perspective, needs more time to reach a decision, and does not reach a decision of adequate accuracy.

Information anxiety describes stress caused by the inability to access, understand, or make use of, necessary information.

A coping strategy for overload is satisficing, taking just enough information to meet a need, rather than being overwhelmed, assuming just enough is good enough.
**Information for Decision-Making**

- **Exploratory decision-making** employs gathering of information from multiple sources and requires careful mental regulation.
- **Exploitative decision-making** may focus on exploiting a single source of information deemed to be high-yield, and employs unconscious habitual mental processing of information.
- Gathering or exploiting information represent opposing demands, balancing the desire to select what seems from experience the richest option (exploitative), against the desire to seek a less familiar option that might turn out to be more advantageous (exploratory).

- People under pressure resort to magical thinking.
Information transfer is <100% congruent from presentation to reception. Visual aids promote retention of information. When health care providers speak to patients, 40%–80% of medical information is forgotten immediately, almost half remembered is incorrect, and the more information presented, the lower the proportion correctly recalled.
Stress and Memory

- Stress causes dissociation, a lack of connection in a person's thoughts, memory and sense of identity, that disrupts functions of memory. Dissociation during a traumatic disrupts both memory storage and retrieval.
- Distress during memory encoding may affect memory fragmentation.
- Dissociation during a traumatic event may prevent encoding of threatening, aversive memories protective against “bad” memories.
- However, dissociative encoding with incomplete initial processing of the traumatic experience, either during or following a trauma, may lead to fragmentation of the trauma memory, linked to the development and persistence of post-traumatic stress disorder.
Civility

- Workplace civility includes behaviors that show respect toward another person, makes them feel valued, and contributes to mutual respect, effective communication and team collaboration.

- Incivility includes behaviors characteristically rude and discourteous, displaying a lack of regard for others. Incivility harms people and violates workplace norms for mutual respect.

- Civility is a value system to improve workplace health and safety.

- Verbal, non-verbal, and electronic (written) communication are part of those behaviors, involving information behavior.

Incivility, Stress and Cognition

- **Incivility is contagious** and causes persons to be rude when interacting with others. Even viewing an incident of incivility toward another person negatively affects the viewer. **Incivility increases stress**, impacting cognitive information processing.
- When teams experience rudeness there are catastrophic effects on team dynamics and performance, consuming resources that could have been focused on task achievement.
- Persons who are targets of rudeness are less likely to be helpful after experiencing rudeness. **Rudeness disrupts conscious cognition** with a “fight or flight” response over which we have no control. There is an informational challenge to process what is being received and how to respond. **Attention is diverted from the task at hand.**
Burnout

- Burnout and depression on the job diminish personal and professional satisfaction with careers.
- Burnout, at its core, is the impaired ability to experience positive emotions. It is a long-term stress reaction characterized by depersonalization, negative attitudes, emotional exhaustion, decreased personal achievement, and a lack of empathy.
- Stress diminishes health status and lifespan, not only for ourselves but also others around us. Mechanisms: ↑cortisol, ↓immunity, altered metabolism.
- In contrast, wellness promotes optimal levels of health and emotional and social functioning. A concerted effort to promote wellness and resiliency will reduce stress and better equip us to engage with others to provide high quality health care.
Resilience and Wellness

- Resilience is the capacity to respond to stress in a healthy way such that goals are achieved at minimal psychological and physical cost.
- Resilient individuals "bounce back" after challenges while also growing stronger. Resilience is a key to enhancing quality of care, quality of caring, and sustainability of the health care workforce.

- **Wellness involves caring** for yourself, your colleagues, and your patients and clients.
- Wellness is an ongoing process of **self-awareness to make healthy choices** resulting in a successful, balanced lifestyle.
- We focus on the development and maintenance of a wellness orientation.
Mindfulness

- Mindfulness contributes to resilience. You truly have control over yourself. Mindfulness is a state in which one is highly aware of the present moment, acknowledging and accepting it, without distracting thoughts or emotional reactions.
- Mindfulness requires calm but it is not a relaxation technique. It does lower blood pressure and heart rate to promote health.
- Mindfulness is mental training to enhance awareness and ability to disengage from maladaptive patterns of mind, including information behavior, that predispose to stress responses.
- Mindfulness attempts to increase awareness of positive thoughts and emotions in responding to stress, thereby learning to cope with stress in healthier, more effective ways.
We will employ the active learning methodology of think-pair-share: groups of 2 to 4 participants huddle for 4 minutes of discussion that:

- Starts with a thought provoking issue,
- Allows a small group of participants time to discuss and develop their responses, and
- Gives participants the opportunity to share responses with the entire audience (and continue elsewhere).

Each of 4 periods of discussion will be followed by participants sharing with the entire group. The 90 second rule applies for audience sharing. This rule also provides more opportunities for more participation and enhances the diversity of responses.
Essential Conversation

- Issue #1: Dealing with information load and stress
  - Individual and workplace practices promoting stress reduction.
  - Information behavior and cognitive load.
  - Changes to the environment.
  - Personal approaches.
Essential Conversation

- Issue #2: Promoting positive interactions through civility

- Individual and workplace initiatives.
- Direct and indirect communication with others.
- Recognizing diversity, and its limits.
Issue #3: Developing personal resilience

- Knowledge, skills, attitudes.
- Approaches to cognitive load.
- Metacognition.
- How do you attempt to achieve balance?
Essential Conversation

- Issue #4: Promoting wellness in the workplace.
  - Individual and institutional initiatives.
  - Mindfulness practices for everyday use.
  - Caring for yourself.

“The thing about trains... it doesn't matter where they're going. What matters is deciding to get on.”  Chris van Allsburg
Questions

• Additional thoughts and issues.

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• Please complete the online session evaluation
Supplemental Resources

- The following slides incorporate additional materials relevant to promotion of wellness and resilience while combating incivility and burnout.
- Included are aspects of behavioral science and studies involving strategies and interventions to improve wellness, with references.
- These resources provide further information for study, and can aid in developing institutional initiatives to address issues related to information behavior and wellness.
Behavioral Science

- We may use psychological defense mechanisms unconsciously, without thinking, when dealing with others:
  - Denial – very common, but unproductive
  - Repression – bottle it up inside...until it explodes
  - Projection – ascribe to others your thoughts and feelings; put the blame on others
  - Intellectualization: respond with technical jargon
  - Displacement – pick on someone else; common in health care workers
  - Sublimation (good one) – exercise, hobby, service
Behavioral Science

- Learned helplessness: if the same negative results or poor outcomes occur despite your best efforts, then you give up trying.
- The #1 reason people leave an organization: they do not feel appreciated.
- Reinforcing behavior is mainly through two methods:
  - Fixed interval schedules of reinforcement
  - Variable interval schedules of reinforcement
Fixed Interval Reinforcement

- Occurs when desired behaviors are reinforced after set periods of time. The simplest example of a fixed interval schedule is a weekly paycheck.
- A fixed interval schedule of reinforcement does not appear to be a particularly strong way to elicit desired behavior, and behavior learned in this way may be subject to rapid extinction.
- One organizational example of this schedule is a sales commission based on number of units sold. Like the fixed interval schedule, this fixed ratio schedule may not produce consistent, long-lasting, behavioral change.
Variable Interval Reinforcement

- Reinforce desired behaviors after varying periods of time. Examples: special recognition for successful performance, promotions to higher-level positions.
- Variable ratio schedules produce desired behavioral change that is consistent and very resistant to extinction.
- The reinforcement schedule applies the reinforcer after a number of desired behaviors have occurred, with the number changing randomly. Example: slot machine, a different and unknown number of desired behaviors (i.e., feeding a quarter into the machine) is required before the reward (i.e., a payout) is realized.
- Organizational examples are bonuses or special awards applied after varying numbers of desired behaviors occur.
- Praise and kindness are positive reinforcers that cost nothing.
Variable Interval Reinforcement

- Seen on live television, spontaneously, between two commentators:
  - Todd: “...I like the fourth entry in the next race. You know what else I like?”
  - Simon: “What?”
  - Todd: “I like you.”
  - Simon: “Thanks. It’s great working with you.”

- Random acts of kindness are positive reinforcers for those watching, too.
- Doing a kindness produces the single most reliable momentary increase in well-being of any exercise that has been tested.
How / What Others Think

- Shift what you do to focus not on what others think but on how they think
  - 95% of our mental processing takes place unconsciously
  - 5% of decisions are based upon conscious, rational thought.

- Unconscious cues include:
  - Sights (body language, expressions, signs, symbols)
  - Sounds
  - Smells

- Think and look at everything from the situation by identifying the emotions others want to feel as a result of an experience, and then design and manage the cues embedded in an experience to elicit these emotions.
Responding to Social Cues

- We do not all respond to verbal and non-verbal cues similarly.
- Persons acculturated into an administrative environment may not respond the same as persons familiar with an inpatient clinical setting or with an outpatient care setting.
- What seems non-threatening to us may be interpreted differently by others.
- Worst case scenario: street gang members respond to cues far differently from what is considered the social norm. They perceive many threats and react unpredictably.
- Interprofessional education is now an accreditation requirement for medical schools. Understanding what others do on the health care team is a key part of training.
When people find themselves in stressful situations, they may adopt either of two poor communication styles:

- **Sullen silence**: terse responses, monosyllabic muttering.
- **Verbal belligerence**: strong, forceful speech with accusations, demands, and threats.

In both forms, the speaker’s body language denotes anger and resentment.
Negative Communication Habits

- Work on avoiding the following:
  - Mumbling
  - Speaking brusquely
  - Avoiding eye contact
  - Interrupting others as they speak
  - Rushing explanations
  - Forgetting common courtesies
  - Showing boredom
  - Treating others impersonally
Effective Service

- Come to work on time.
- Be polite to each other.
- Respond to others quickly.
- Provide clear guidelines of what we expect of each other.
- Define roles and responsibilities.
- Be professional toward each other.
- Remember to say, “Thank you”
Human subjects research studies require strict adherence to ethical principles, including:
  - Respect for persons
    - Information provided that can be comprehended
    - Voluntary consent
    - Privacy of personal information
  - Beneficence: do no harm / maximize benefits
  - Justice: equitable selection and access
  - These elements are required by an institutional review board (IRB) for a scientific research project; we ought to do as well with routine medical care.
Empathy

- Empathy is the ability to share or understand the feelings of another person.
- When we use reflective statements (“I’m aware how frustrated you are”), the people with whom we interact are more likely to perceive support.
- Empathy promotes satisfaction with the service offered.

Frustration and Anger

- Try to deal with anger. Emotion tends to heighten vengeful behavior.
- Emotion is particularly heightened when pregnancy, childbirth, and children are involved.
- Vengeance and anger build over time – usually a series of events. Communication could have stopped this.
- Rude behavior by anyone in the health care system multiplies the problem:
  - Problem (Rude Behavior)

- Show empathy; easy to say, hard to do.
Don’t get angry in front of anyone, patient or colleagues. You are not the aggrieved party in the eyes of the patient. You get to walk away from any problem, but the patient does not.

Talk to the patient directly.

You may uncover issues that need to be addressed (if one person is affected, there will be others).

Say, “I’m sorry.”

Don’t make excuses. If you are in a hole, stop digging.

Remember that patient trust in you (as a representative of the system) has been lost. Loss of trust is devastating.

Make amends: no charge, verbal or written apology.
Dealing with Anger

- Help the angry person express anger constructively:
  - Recognize anger and its cause; remain calm and demonstrate respect; focus your responses on needs
  - Maintain adequate personal space (if in person)
  - Do not take anger personally
- The person venting frustration is not ready to listen until this phase passes. This person wants to be heard. Then, when ready:
  - Ask to be specific concerning the cause
  - Present your point of view, but provide an apology, at least generic
  - Avoid breakdown of communication, but leave if you feel physically threatened
Behavioral Science: Reactions

- **Transference** refers to redirection of feelings from another person (patient or co-worker) to you. You remind that person of someone else (like a parent or boss), who evokes strong feelings. The feelings can be perceived as good or bad.
  - Can occur in negative forms such as rage, hatred, mistrust, parentification, and extreme dependence. Positive forms: admiration, respect, trust.

- **Countertransference** is redirection of your feelings towards another person, who reminds you of someone else, who evokes strong positive or negative feelings.
  - Both happen on an unconscious level.
  - Strategy: step back and analyze; may need to get someone else to deal with the patient or colleague.
Response to Incivility

- Take care of yourself; recognize what is happening and seek to surround yourself with supportive persons.
- Reduce your exposure; steer clear if possible.
- Engage in mindfulness; refocus.

Reducing Incivility

- Examine your behavior and how you contribute to civility/incivility.
- Take a temperature check in your workplace to see how people treat one another.
- Don’t listen to or tolerate rumors and gossip.
- Encourage others not to jump to conclusions about the intent or motives of colleagues, patients, or families.
- Stop the blame game and encourage a solutions orientation to problems.
- Encourage acts of kindness.
- Go out of your way to say thank you, and promote this behavior.
- Look for common ground in dealing with conflict.
- Encourage the practice of forgiveness.
- Make it safe for staff to ask questions and discuss problems.
The term lateral violence evolved from oppression theory and refers to behaviors described as bullying that members of the oppressed group manifest toward each other as a result of being members of a powerless group.

Nurses in particular are vulnerable to incivility and must be equipped to effectively address uncivil behaviors as they occur. The simple act of speaking up is often an effective intervention.

Through the use of cognitive rehearsal, nurses can learn pre-rehearsed phrases designed to confront and stop bullying behaviors. The rehearsed and learned retort is matched in some fashion to the offense that has occurred.

Combating Incivility: Cognitive Rehearsal

- Using nonverbal behaviors or innuendo (e.g., eye-rolling, making faces, deep sighing).
  - Response: "I sense/see from your facial expression that there may be something you wish to say to me. It is OK to speak to me directly."
- Name-calling, verbal affronts, demeaning comments, putdowns, sarcastic remarks.
  - Response: "I learn best from individuals who address me with respect and who value me as a member of the team. Is there a way we can structure this type of interaction?"
- Using silent treatment or withholding important information.
  - Response: "It is my understanding that there was/is more information available regarding this situation. Please share any other important information since patient care depends on a full report."
- Using anger, humiliation, and intimidation.
  - Response: "When the words that I hear make me fearful or shamed, I need to seek a respectful professional explanation. What was your intent?"
Combating Incivility: Cognitive Rehearsal

- Spreading rumors, gossiping, failing to support, sabotaging a coworker, or sharing information you were asked to keep private.
  - Response: "I don't feel right talking about him/her/situation when I wasn't there and don't know the facts. Perhaps the information was taken out of context. I suggest you check it out with him/her.
- Making fun of another nurse's appearance, demeanor, or personality trait. Response: "She/he is a valuable member of the team and deserves our support. How can we be more inclusive and work more efficiently as a team?"
- Failing to support or encouraging others to turn against a coworker.
  - Response: "I am not feeling like a valued coworker. Can we approach this differently? What helped you to fit in here?"
- Taking credit for others' work, ideas, or contributions.
  - Response: "I didn't expect your nonsupport. Behaving this way is unprofessional and makes me feel disrespected. How can we work together and support one another?"
- Distracting and disrupting others during meetings.
  - Response: "Can I speak with you about your sense of urgency in our meetings? It distracts me and interrupts my thoughts."
Civility Recovery

- A 12-step managerial civility recovery model.

- https://www.thefreelibrary.com/A+12-step+managerial+civility+recovery+model.-a0200784496
12-Step Civility Recovery

- STEP 1: Recognize that human resources are the most important and most valuable organizational assets and that managerial actions and behaviors should communicate and reinforce the organizational affirmation of this premise. In other words, managers should lead by example.

- STEP 2: Recognize that all employees should be treated with dignity and respect. Management's duty to make decisions is not abrogated in any way, but the method of communicating and interacting with employees should be tempered by the knowledge that all people are valuable.

- STEP 3: Managers should study acceptable and expected behavioral and cognitive models.
12-Step Civility Recovery

- STEP 4: Each manager should make a searching and fearless behavioral and cognitive inventory of his or her own thoughts and actions.
- STEP 5: Each manager should discover the exact nature of his or her behaviors that need correcting. It is advised that this discovery be shared with another person, who can act as an accountability partner for behavioral change.
- STEP 6: Each manager should be committed to improving his or her civil behavior.
- STEP 7: Each manager should practice and model acceptable and expected behaviors and cognitive processes.
- STEP 8: Managers should make a list of employees they have mistreated in the past.
12-Step Civility Recovery

- **STEP 9:** Managers should make amends with employees they have personally mistreated in the past.
- **STEP 10:** Managers should continue to take personal inventory and when wrong, be prompt to admit it.
- **STEP 11:** Managers should have an accountability partner or confidant to offer an objective critique of their progress. Feedback from employees may be solicited to the extent that feedback is anonymous or voluntary.
- **STEP 12:** Managers should lead by example, practicing these principles at work and in all their affairs. Management should also demand that employees treat one another in accord with civil behavior.
Burnout is a complex problem. The driver dimensions can be divided into seven areas:

- Workload
- Efficiency
- Flexibility and control over work
- Work-life integration
- Meaning in work
- Alignment of values between healthcare professionals and the organizations for which they work
- Community and collegiality

Am I Burned Out?

- You try to be everything to everyone
- You get to the end of a hard day at work, and feel like you have not made a meaningful difference
- You feel like the work you are doing is not recognized
- You identify so strongly with work that you lack a reasonable balance between work and your personal life
- Your job varies between monotony and chaos
- You feel you have little or no control over your work
- You work in healthcare.

https://www.mnhospitals.org/Portals/0/Documents/education/7165_GS06.pdf
Circumstantial Burnout

- A reaction to environmental challenges or crises; it involves self-limited circumstances and environmental triggers.
- Recovery involves:
  - Resolving workplace challenges;
  - Nurturing personal lives; and
  - Taking time off

Existential Burnout

- A loss of meaning in medicine and an uncertain professional role.
- Recovery involves:
  - Recognizing burnout and feeling validated;
  - Connecting with patients and colleagues;
  - Finding meaning in medicine; and
  - Redefining a professional identity and role.

At Duke University a simple program called “Three Good Things” to reduce burnout studied medical residents with high stress work. Each person was advised to write down, just before going to bed, three good things that happened that day and label them with one of the 10 positive emotions: joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, awe, and love. They can be minor things such as watching a funny television show or spending time with friends.

A year after the intervention ended, 48% of residents practicing this program remained resilient, suggesting the intervention has a lasting effect on risk for burnout.

Combating Burnout

- A follow-up to the “Three Good Things” intervention was studied for health care workers.
- Analysis of the participants’ Three Good Things responses led to the identification of three main themes:
  - (1) having a good day at work;
  - (2) having supportive relationships; and
  - (3) making meaningful use of self-determined time

Key Components to Wellness

- Maintain physical health with adequate rest, healthy diet, and regular exercise whenever possible.
- Develop self-confidence.
- Manage a work life balance, leaving work behind (evenings, weekends, vacations).
- Being present in the moment.
- Recognize and accept humanity in oneself and in others.
- Promote a sense of accomplishment, satisfaction, and belonging.

Key Components to Wellness

- For depression and suicidality:
  - The number-one thing that you can do is share your mental health struggles with your colleagues.
  - The other thing that you can do is be a warm line for your colleagues. Being a warm line is a step down, like the difference between emergency room and urgent care. It's just being there as a warm, compassionate, loving person for your colleagues so that they know they can call you if they have minor struggles and that you're available to listen to them.

Wellness: The Way Forward

- Get administrative support for wellness interventions. What aspects of wellness are goals for your organization?
- Track progress and adjust your interventions.
- Nutrition (e.g., healthful food options and scheduled time to eat)
- Exercise / Fitness opportunities
- Emotional health
- Preventive care (e.g., access to a primary care provider)
- Career health (e.g., financial planning, opportunities for career changes)
- Mindset and behavior adaptability
Qualities of Meaningful Work

- Self-transcendent: Individuals experience work as meaningful when it matters to others more than just to themselves.
- Poignant: People may find their work full of meaning at moments associated with mixed, uncomfortable or even painful thoughts and feelings, not just a sense of unalloyed joy and happiness.
- Episodic: A sense of meaningfulness arises in an episodic rather than a sustained way.
- Reflective: In retrospect and on reflection people may see their completed work and make connections between their achievements and a wider sense of life meaning.
- Personal. Meaningful work is often understood by people not just in the context of their work, but also in the wider context of their personal life experiences.
Meaninglessness: What to Avoid

- Take your employees for granted
- Treat people unfairly
- Give people pointless work to do
- Over-ride people’s better judgement
- Put people at risk of physical or emotional harm
- Disconnect people from supportive relationships
- Disconnect people from their values

https://sloanreview.mit.edu/article/what-makes-work-meaningful-or-meaningless/
Resilience: Interventions

- Defined strategies to achieve increased resilience are well established.
- The Mindfulness-Based Stress Reduction (MBSR) program is often delivered over 8 weeks.
- Training programs such as the Stress Management and Resiliency Training (SMART) program have produced improvements in stress, anxiety, resilience, happiness, mindfulness and burnout in health care staff after only 8 of 24 weeks.

Mindfulness Practices

- Mindfulness-based stress reduction (MBSR) training consisted of eight weekly sessions. Participants practiced mindfulness exercises, received psychoeducation about stress, and were instructed to practice daily at home for approximately 45 min. They learned to focus their attention on the present moment and observe their own thoughts, feelings, and bodily sensations in a kind and nonjudgmental way rather than identifying with them (meta-awareness). Participants were encouraged to become aware of their own automatic behavioral patterns and to consider replacing them with more conscious and helpful behavior.

- Participants indicated that MBSR training increased their awareness and self-reflection at work, and they were more accepting toward themselves and toward their limitations. There were more resilient and better at setting priorities and limits. They improved their self-care and work-life balance. The training made them more aware of how they communicated. They asked for help more often and seemed to be more open toward feedback. Lastly, they indicated an increased sense of compassion for others.

Resilience: Interventions

- Review of studies shows interventions to be of benefit, as participation creates self-awareness and greater understanding.
- More successful interventions with greater improvements in resilience involved more training sessions of more duration:
  - 8 to 12 sessions
  - Total intervention of 9 to 24 hours
- Optional follow-up sessions tend not to sustain results.
- Future needs: more clearly defining resilience and measuring long-term outcomes.

Mindfulness Practices

- Sitting meditation, involving awareness of body sensations, thoughts, and emotions while continually returning the focus of attention to the breath;
- Body scan, a progressive movement of attention through the body from toes to head, observing any sensations in the different regions of the body;
- Hatha yoga, which consists of stretches and postures designed to enhance greater awareness of and to balance and strengthen the musculoskeletal system;
- 3-minute breathing space, a “mini-meditation” that focuses on the breath, the body, and what is happening in the present moment.

Eating one Raisin: A First Taste of Mindfulness

- **Holding**
  First, take a raisin and hold it in the palm of your hand or between your finger and thumb. Focusing on it, imagine that you’ve just dropped in from Mars and have never seen an object like this before in your life.

- **Seeing**
  Take time to really see it; gaze at the raisin with care and full attention. Let your eyes explore every part of it, examining the highlights where the light shines, the darker hollows, the folds and ridges, and any asymmetries or unique features.

- **Touching**
  Turn the raisin over between your fingers, exploring its texture, maybe with your eyes closed if that enhances your sense of touch.

- **Smelling**
  Holding the raisin beneath your nose, with each inhalation drink in any smell, aroma, or fragrance that may arise, noticing as you do this anything interesting that may be happening in your mouth or stomach.
Eating one Raisin: A First Taste of Mindfulness

- **Placing**
  Now slowly bring the raisin up to your lips, noticing how your hand and arm know exactly how and where to position it. Gently place the object in the mouth, without chewing, noticing how it gets into the mouth in the first place. Spend a few moments exploring the sensations of having it in your mouth, exploring it with your tongue.

- **Tasting**
  When you are ready, prepare to chew the raisin, noticing how and where it needs to be for chewing. Then, very consciously, take one or two bites and notice what happens in the aftermath, experiencing any waves of taste that emanate from it as you continue chewing. Without swallowing yet, notice the bare sensations of taste and texture in the mouth and how these may change over time, moment by moment, as well as any changes in the object itself.

- **Swallowing**
  When you feel ready to swallow the raisin, see if you can first detect the intention to swallow as it comes up, so that even this is experienced consciously before you actually swallow the raisin.

- **Following**
  Finally, see if you can feel what is left of the raisin moving down into your stomach, and sense how the body as a whole is feeling after completing this exercise in mindful eating.

In a study participants answered e-mails by looking up information (like customer service) while interrupted by chat messages. They were free to choose when to switch to the chat message.

When the switching behavior and the time they needed to complete the primary mail task was analyzed, it was found that, when faced with a delay in the e-mail task, they switched more often to the chat task at high-workload points, which made them slower and made them forget the information in the e-mail task half of the time, which slowed them down even more.

CONCLUSION: When many cognitive resources are available, the probability of switching from one task to another is high. This does not necessarily lead to optimal switching behavior.

Hum Factors. 2014 Jun;56(4):728-36
In the Eye of the Beholder

- We decided to see whether we could reduce some of the unintended burden imposed by our EHR and launched a program called “Getting Rid of Stupid Stuff.” Starting in October 2017, we asked all employees to look at their daily documentation experience and nominate anything in the EHR that they thought was poorly designed, unnecessary, or just plain stupid. The first thought we shared as we kicked off this effort was, “Stupid is in the eye of the beholder. Everything that we might now call stupid was thought to be a good idea at some point.”

Reflection on Resilience

Minnesota Fats (played by Jackie Gleason) has been shooting high-stakes pool against Fast Eddie (Paul Newman) all through the night and into the morning. He's been beaten and everyone in the pool hall knows it. The only reason Fast Eddie hasn't collected the victory and the stakes is the fact that when you play against a legend like Fats, “The game isn’t over until Fats says it’s over.”

That’s fine by Eddie. He came here to prove something. He wants the money but just as strongly, he wants the concession that he’s the better player. Fats is slumped in the chair, disheveled, sweaty, exhausted. The cue rests against his open hand. He excuses himself. He sends a kid out to buy a bottle of top-drawer booze. He goes into the washroom and washes his face and hands carefully, and then he powders both. He combs his hair. He changes into a fresh shirt. He puts his jacket back on and fixes his boutonnière. He emerges a new man. “Fast Eddie,” he says, adjusting his cuffs and smiling, “Let’s play some pool.” From that point on, the ending is inevitable.

When I’m having a bad workday I think of this scene and reflect upon its lessons:

It’s not over until you say it’s over. In most situations, you didn’t lose because you got beat. You lost because you accepted the loss while there was still time left, and you should have focused on the ways you could still win. And maybe you actually can’t win…but at minimum, you can do a better job of losing.

Sometimes the stink of failure is a physical thing. Wash it off. Move to a different workspace. Your brain restarts and reboots.

The whiskey works. Yes. Pour yourself a drink. Have a cookie. And don’t just gobble it down. Nibble, sip, savor.

Then I sit back down, rub my hands together, and say “Fast Eddie…let’s play some pool.” Because nothing counts if you don’t keep trying.

Adapted from: http://ihnatto.com/2011/04/18/fast-eddie-lets-play-some-pool/