Psychological Avenue

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Objectives

At the end of this workshop, participants will be able to:

1. Define psychological factors that lead to learning in the clinical environment

2. Reflect upon how the clinical learning environment (CLE) can optimize the psychological nature of learning

3. Contribute to the advancement of our collective understanding
Outline

Welcome & Introductions  15 minutes
Introducing the Psychological Avenue  20 minutes
Case Discussion  25 minutes
Large Group Reflection  25 minutes
Closing Thoughts  5 minutes
What is the “Psychological Avenue”?

Psychological – of, affecting, or arising in the mind; related to the mental and emotional state of a person
What is the “Psychological Avenue”?

• Conditions, contexts and factors of a psychological nature (i.e., related to the mental or emotional state of a person) that influence learning in the clinical environment

• Relate to the learner (i.e., student, resident) as well as the environment in which they are learning

• Influence, and are influenced by, other “avenues” which collectively comprise the clinical learning environment (CLE)
What conditions, contexts and factors influence learning?
Social Cognitive Theory

• Emphasizes not only on the importance of cognition in learning but also the influence of the environment in which we learn and function

• Learning is social in nature; we learn from and in interaction with others and with our environment

• Learning is the result of a continuous, dynamic, reciprocal interaction among three sets of determinants: personal, behavioral and environmental (situational).
What conditions, contexts and factors influence resident learning?
Factors that Influence Learning (Learner)

Intrinsic / Personal
• History and prior experiences
• Values and attitudes
• Level of training / expertise
• Current emotional state
• Priorities and goals (short and long-term)

Abilities and capabilities
• Ability to learn vicariously through observing others
• Self-reflection to identify gaps
• Ability to close gaps in learning
• Self-efficacy
Factors that Influence Learning (Activities)

Learning Activity
• Complexity of task
• Familiarity with task
• Belongingness and emotional comfort

Cognitive Load

http://theelearningcoach.com/learning/what-is-cognitive-load/

Courtesy: Lisa Nash @lisanashdo
Factors that Influence Learning (Environment)

**Supervisor and Others**
- Communication
- Confidence in self & learner
- Coaching skills
- Self-efficacy

**Setting**
- Time pressures
- Work to be accomplished
- Space in which the learning occurs

**Partnerships & Collaboration**
- Communities of Practice
Communities of Practice

• Persistent, sustaining network of individuals who share and develop an overlapping knowledge base, goals and set of beliefs

• Develop partnerships and a common practice; knowledge transfer

• Moves learner from periphery of community to an integral member

• Relevance to learner and perceived value are critical

Kaufmann & Mann, 2014
Barab, 2002
Summary Slide

• Complex interplay between learner, learning activity and learning environment

• Psychological Safety - learner belief that the environment is safe, mentally and emotionally, for learning
Psychological Safety Requires

**Learner & Activity Characteristics**
- Confidence & Trust
- Self-reflection
- Meta-cognition
- Self-efficacy
- Satisfaction with learning
- Complexity of task aligned with learner ability

**Environment Characteristics**
- Tolerance of risk, failure, inefficiency
- Supportive culture that promotes exploration
- Faculty with skills in teaching and feedback
- Strong community

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Turner, 2018
Absence of Psychological Safety (i.e., Danger)

Learner & Activity Characteristics
• Fear of judgment, reprisal or humiliation
• Fear of marginalization or lack of belonging to the team
• Feeling incompetent or unworthy
• Fear of making mistakes → avoidance of risk
• Avoidance → shame & withdrawal

Characteristics of Environment
• Intolerance of risk or failure
• Ambiguity & Uncertainty
• Constant evaluation (judgment)
• Lack of partnerships, shared understanding and common goals

Bynum, 2016
What predicts Psychological Safety?

- Learner ability to bring up problems without fear of reprisal
- Patient
  - Older
  - Multiple illnesses
  - Social supports
  - No mental illness
- Resident
  - Male gender
  - Psychiatry
- Facility
  - Less complex
- Supervisor
  - Approchability

Torralba, 2016
What comprises the Learning Environment?

- **Community** – teacher, other learners, team members → Socio-cultural Avenue
- **Activities** – learning opportunities, cognitive load → Educational Avenue
- **Spaces** – classroom, tools, technology → Architectural & Digital Avenue
- **Connectedness** – see self in others → Inclusivity Avenue
How can the Learning Environment optimize the psychological nature of learning?

(i.e., learning related to an emotional or mental state)
Culture of Learning

Clusters that represent potential facilitators and barriers to learning in healthcare (psychological avenue):

1. Organizations and conditions of work
2. Workplace culture
3. Trainer (senior doctor) skill and support
4. Interaction and feedback in clinical teams
5. Motivation and morale
6. Resident support

Kilty, 2017
Examples from the literature

1. Organizations & Conditions of Work
   • Enhanced supervision to tolerate risk
   • De-emphasize efficiency
   • Reduce busyness

2. Workplace Culture
   • Explicitly value learning
   • Promote “Just Culture”
   • No tolerance for shaming

Torralba, 2016
Stroud, 2015
Bynum, 2016
Turner, 2018
Examples from the literature

3. Senior doctor skill & support
   • Recognition of intrapersonal distress
   • Time for faculty to supervise and provide feedback
   • Faculty development

4. Interaction & feedback in clinical teams
   • Shared community mindset (e.g., patient safety)
   • Team structures that support community

Bynum, 2016
Flott, 2016
Examples from the literature

5. Motivation and morale
   • Support learner and faculty development of coping mechanisms (psychological resilience) based upon experiences

6. Resident support
   • Recognition of intrapersonal distress
   • Emphasize and work towards wellbeing

Ng, 2018
Torralba, 2016
Bynum, 2016
Cases for Discussion
Case #1 – Burnout Bill

• Bill is a PGY2 resident in Internal Medicine who is working his fourth busy clinical month in a row. Due to his recurring home call schedule, Bill frequently violates duty hours. He acknowledges that he should not be doing this but in the same breath mentions, “who is going to take care of the sick patients?” while signifying frustration with the time it takes to do his administrative paperwork when the day is over.

• Bill admits that he no longer enjoys being a physician and reflects that he frequently doubts his own abilities. He’s openly concerned about how he has treated a few patients recently but can’t reflect upon this with his colleagues or faculty without it turning into a whining session.
Case #2 – Late Lucy

• Lucy is a PGY3 resident in general surgery who is mostly through her over-booked post-op surgery clinic when she gets an urgent page from the ICU nurse. A patient who is POD 1 from a bowel resection is hypotensive and has a fever. In helping to manage this patient, Lucy falls further behind in clinic.

• Dr. Strong, her attending physician, has his own patients to see and is openly frustrated with Lucy for being late because he has an upcoming OR case that must start on-time or else he lose his incentive pay for timeliness in starting cases on-time.

• Lucy is feeling overwhelmed with the situation and she is unsure how to prioritize her next steps.
Case #3 – Conflicted Carol

• Carol is a high-functioning PGY4 resident in Anesthesiology who is caring for an elderly patient who is undergoing arthroplasty after a suffered a hip fracture from a fall. Her attending physician is assisting a fellow with a complicated transplant in an OR down the hall.

• Things are going well until the patient begins hemorrhaging and unexpectedly drops her blood pressure. Carol responds with fluids, blood products and pressors but the patient’s condition deteriorates.

• Carol is conflicted on what to do. Even though she is uncomfortable and concerned for the patients safety, she knows that a PGY4 should be able to manage this case and that her attending physician is already very busy.
Questions & Conversation

• What psychological factors are impacting learning for this resident in this clinical environment?

• What effect does this clinical environment have on the psychological nature of learning?

• What could be done to optimize the learning environment for this resident? How can the learning environment optimize the psychological nature of learning?