

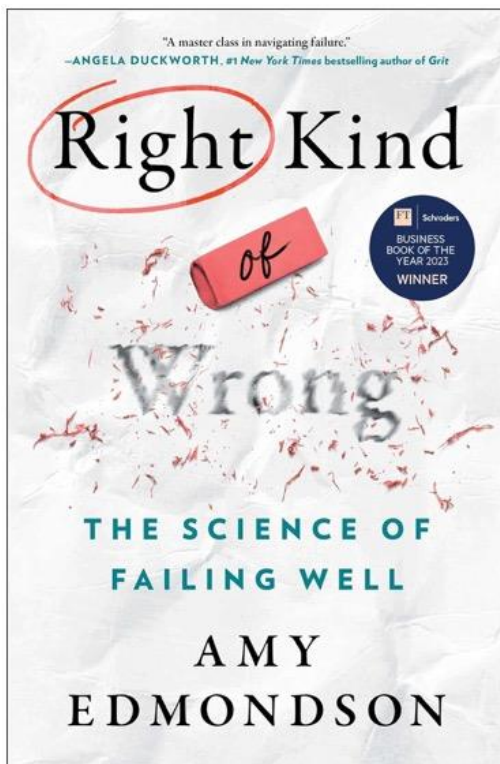
dear residents

Failing Well

March 17, 2024

Dear Residents,

Last week I wrote about the **freedom to fail** and how this is contingent on the presence of **psychological safety**. Failure is a complicated concept and much depends on context. Silicon valley's mantra "fail fast, fail often" might be apropos for high risk-high reward startups, but would be a disaster in our health care environment where we prize a risk-averse patient safety culture. **The psychology of failure is complex**. As children we quickly learn to point fingers at others, and as adults we are embarrassed by failure. We are quick to gloss over or cover up failures. Our culture prizes success and abhors failure. We even use terms like "loser" wrapped in shame and exclusion. No wonder then, as Amy Edmonson writes in her book, [Right Kind of Wrong](#), "this pernicious combination of human psychology, socialization, and institutional rewards makes mastering the science of failing well far more challenging than it needs to be."



I've been on the **rheumatology consult service** for the last few weeks and have reflected on the likelihoods for failure – some have been simple "basic" failures – forgetting to order something or stop something. Others have been "complex" failures – like failing to reconcile potentially conflicting historical information with current information. While the former is a simple error the latter is a set up for failure. It turns out that there is a **spectrum**

of reasons for failure from deviance to exploratory testing. When we willfully fail to follow a well-defined process – the failure can be deemed **blameworthy**, while failed hypothesis testing in the lab is **praiseworthy**. The latter is an **intelligent failure** and necessary for the process of ultimately solving the problem at hand.

A Spectrum of Reasons for Failure

BLAMEWORTHY

DEVIANCE

An individual chooses to violate a prescribed process or practice.

INATTENTION

An individual inadvertently deviates from specifications.

LACK OF ABILITY

An individual doesn't have the skills, conditions, or training to execute a job.

PROCESS INADEQUACY

A competent individual adheres to a prescribed but faulty or incomplete process.

TASK CHALLENGE

An individual faces a task too difficult to be executed reliably every time.

PROCESS COMPLEXITY

A process composed of many elements breaks down when it encounters novel interactions.

UNCERTAINTY

A lack of clarity about future events causes people to take seemingly reasonable actions that produce undesired results.

HYPOTHESIS TESTING

An experiment conducted to prove that an idea or a design will succeed fails.

PRAISEWORTHY

EXPLORATORY TESTING

An experiment conducted to expand knowledge and investigate a possibility leads to an undesired result.

Rheumatology consultation falls in the category of process complexity. Even defining a connective tissue disease accurately involves process complexity – is the positive ANA meaningful? is the rash rosacea or is it a true malar rash? Does the joint have subtle swelling or is it normal? Is the fever from inflammation or from infection? And there is therapeutic choice uncertainty – will the mycophenolate work? Should I try IVIG? None of this is unique to rheumatology and similar process complexities and uncertainties arise in many clinical situations. We turn to guidelines, expert opinion, and assistance from consultants. In the end, we must embrace “I don’t know” and the “I really have no clue.” A culture that prizes admitting uncertainty is a necessary ingredient to learning from the failures to assess, diagnose and manage our patients to the best of our abilities. Once you (and others) embrace uncertainty you will redouble your efforts to search for more clues, consult others, and feel safe doing so. Once you identify process inadequacies, you will work to refine them.

There is a relationship between the standards we set for ourselves and psychological safety as show below:

	Low Standards	High Standards
High Psychological Safety	 Enjoying the Status Quo	 Failing Well
Low Psychological Safety	 Checking Out	 Avoiding Risks or Covering Up Failure

I receive a number of **safety reports** from both CUH and Parkland. It’s very rare for the cause to be deviance, sometimes it is simple inattention (wrong pharmacy selected), often it is process inadequacy, process complexity or uncertainty. We know that failures will occur when we have unavoidable complexity. A pilot has the choice to not fly when the weather is bad – in the practice of medicine, we don’t always have that choice. When one of these types of failures occur, it is important to follow the principles of the [just culture framework](#). Too often patient safety reporting systems [report people rather than problems](#). A Gotcha! culture erodes trust and lowers psychological safety – as a consequence we will avoid risks and cover up failure. We end up using one of **three maladaptive strategies** – “I’ll just try harder next time” or “it didn’t work, I’ll just try something else” or even worse, “I was right, but someone or something else messed up.”

As residents in training (and beyond), you will pass through the **5 stages of progressive skill acquisition** (Dreyfus Model) – at each point you may experience particular types of failure:

Dreyfus Stage	Failure Mode
Novice – follows rules	Inattention
Competence – uses guidelines	Process Complexity

Proficiency – uses maxims	Uncertainty
Expertise – uses intuition	Hypothesis testing
Mastery - transcendence	Exploratory testing

The freedom to fail – is not the freedom to excuse deviance or inattention – true freedom to fail occurs when you have done your homework, have been thoughtful about your actions, but there is uncertainty or unavoidable process complexity. Learning from all failures is essential – it's how both our personal and our collective knowledge and skills advance and how healthcare becomes safer. The freedom to fail is contingent on a culture where there are the necessary frameworks to embrace intelligent failure – this is a crucial component of a [learning health system](#). You are here to learn, to teach others and to avoid basic failures while enjoying the freedom to fail intelligently. Let's avoid blame and shame and replace it with curiosity and vulnerability.

Warm regards,

Dino Kazi