



# CASE STUDY

## YALE NEONATOLOGY BOOTCAMP

Significantly improving the  
ability of incoming NICU fellows  
to perform under pressure.



**MISSION CRITICAL  
TEAM INSTITUTE**

## CHALLENGE

Resuscitating a newborn child can be incredibly challenging. Neonatal intensive care (NICU) doctors lead multidisciplinary teams through a wide array of operations to solve complex and rapidly changing problems. Often, the stakes can be life or death.

During their three-year fellowship training, neonatologists study the art and science of caring for newborn babies, but, especially at the beginning of their training, handling the weight of delivering that knowledge under pressure is incredibly challenging.

To improve performance of their new fellows right from the beginning, NICU training programs have banded together to operate “bootcamps” that teach basic procedures, build their social networks, and give incoming fellows a firm foundation to start from.

But, in MCTI’s operations, we found that **only half of incoming neonatal fellows felt ready to handle the pressure of being a NICU fellow**. Even more concerning, we found that **nearly 25% actually felt actively “unready to handle the pressure**. So, how could training programs better prepare their incoming fellows to handle the pressure of what they’re about to face?

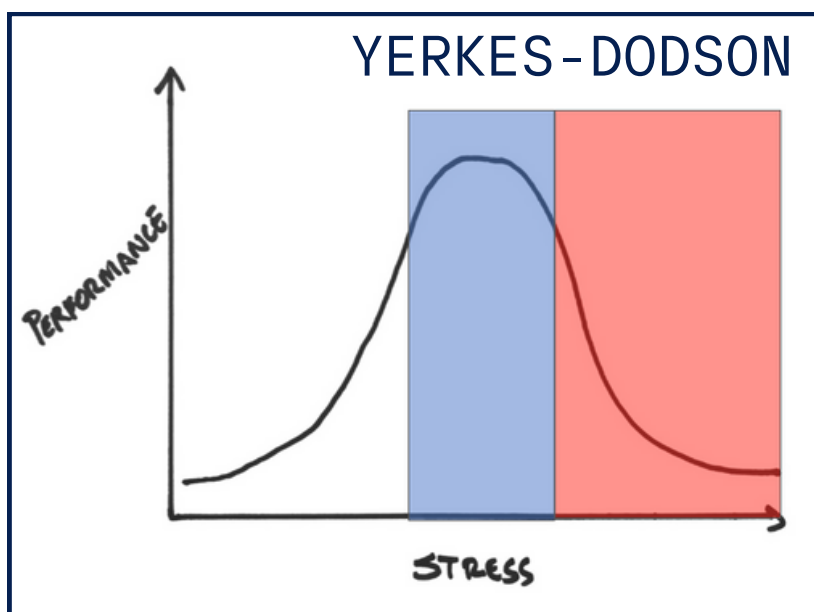
## APPROACH

Working with the NICU teams at the *Yale School of Medicine* and *Children’s Hospital of Philadelphia* who run the Northeast Regional NICU Bootcamp, MCTI’s Mission Critical Medicine Team built a **lightweight virtual workshop for 40+ incoming NICU fellows**.

During the workshop, participants looked at a key model of human performance under pressure the Yerkes Dodson Curve, and mapped it to their personal experience operating in critical moments, learning to recognize where they are on the performance curve.

In individual and shared exercises, they identified specific tools they could deploy to help recover their optimal performance.

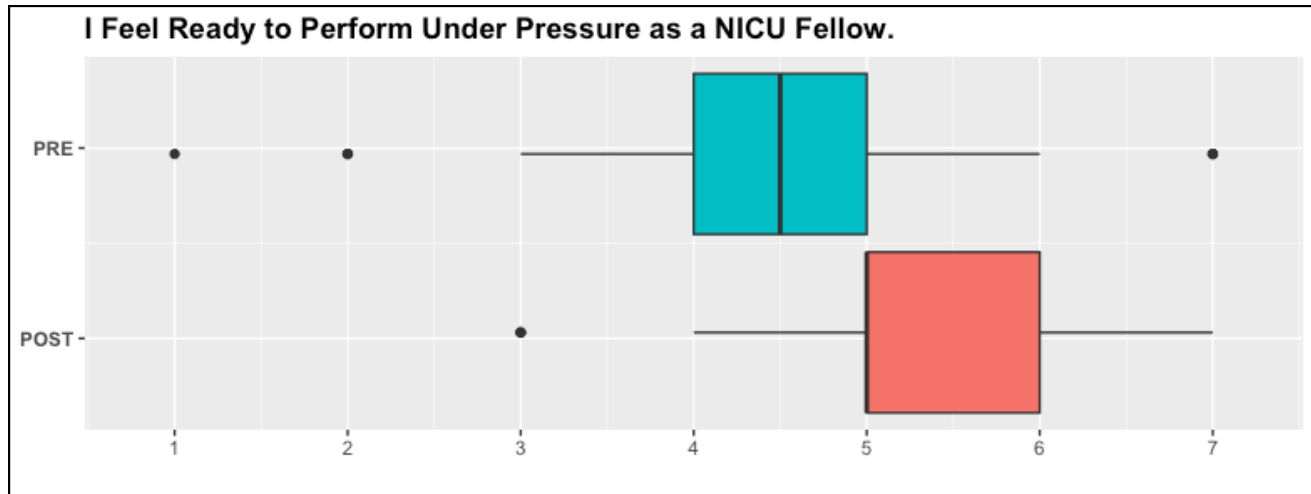
**100% of participants felt the workshop was an important part of their bootcamp training.**



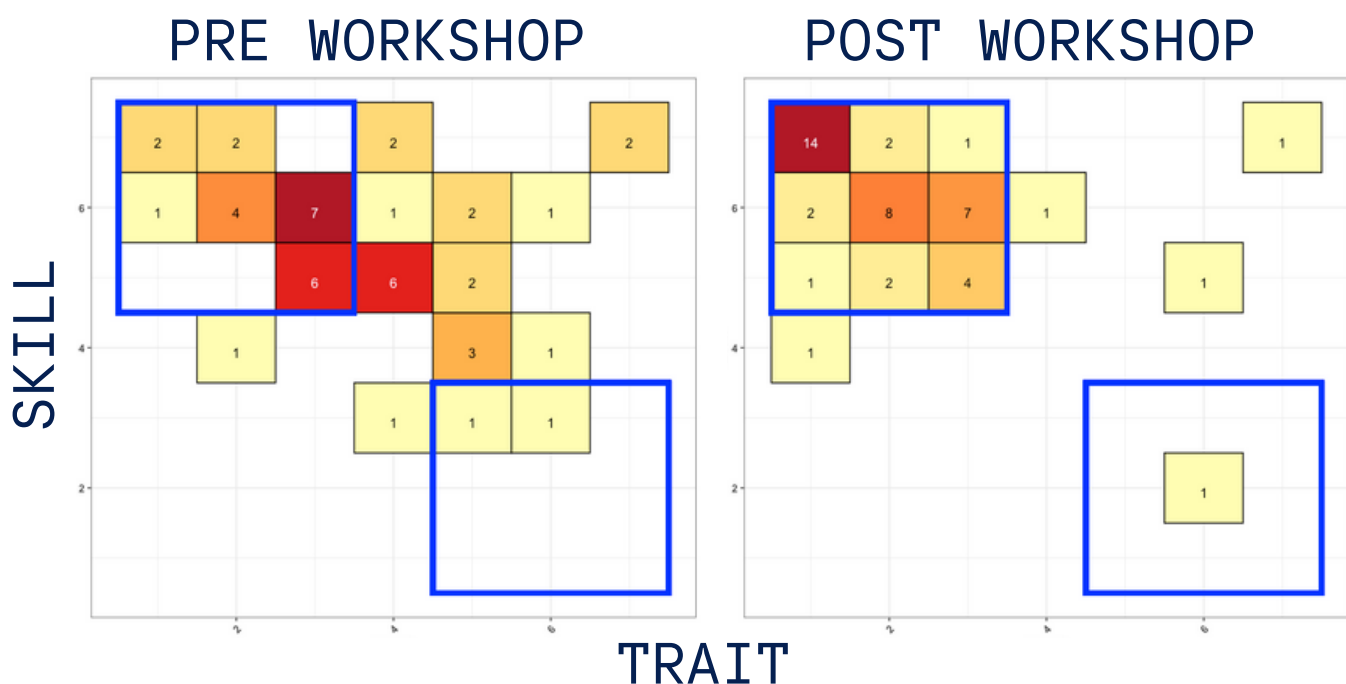
# IMPACT

MCTI Training substantially increased the incoming NICU fellows' readiness to perform under pressure, helped fellows identify specific mental skills to use in a crisis, and changed their beliefs about performance toward a growth mindset.

After the Mission Critical Medicine workshop, 91% of participants reported the workshop improved their ability to perform under pressure, and **the percent of NICU fellows who felt ready to perform under pressure jumped from 50% to 85%**. Additionally, 94% felt they had identified specific tools they could actually use in high pressure moments to improve performance.



After the workshop, participants were significantly more likely to report a "growth mindset" attitude toward performance under pressure, with nearly **90% now seeing the ability to perform under pressure as a skill they could learn and grow at**, an almost **2x increase** over pre-workshop rates.



## ABOUT MCTI

[WWW.MISSIONCTI.COM](http://WWW.MISSIONCTI.COM)

The Mission Critical Team Institute is an applied research organization focused on the success, survivability, and sustainability of mission critical teams. Lead by CEO Preston Cline, EdD, MCTI was founded in 2016 at the Wharton School at the University of Pennsylvania at the request of specific teams within the U.S. Joint Special Operations Command and the Federal Bureau of Investigation to help better understand how to transition their most elite operators into their most exceptional instructors.

MCTI works in partnership with select groups within Military Special Operations (FVEY), Tactical Law Enforcement, Urban and Wilderness Fire, Emergency and Trauma Medicine, and NASA.

Mission Critical Teams are small (4-12 agents) integrated groups of indigenously trained and educated experts that leverage tools and technology to resolve complex adaptive problems in immersive but constrained (5 minutes or less) temporal environments where the consequence of failure can be catastrophic.

## MISSION CRITICAL MEDICINE

The division of Mission Critical Medicine (MCM) works to improve the success, survivability, and sustainability both of medical teams operating in mission critical environments and of mission critical teams operating in medical capacities.

Lead by MCTI's Chief Medical Officer, Dan Dworkis MD PhD, the MCM division works with teams across the MCTI universe with a particular focus on medical aspects of complex problem sets and rapidly changing, life-or-death crises.

MCM provides custom built training, facilitates collaborative inquiry, and partners with elite groups on research and thought leadership.

**Want to bring MCM to your organization?**  
**Reach out to [Dan@MissionCTI.com](mailto:Dan@MissionCTI.com).**



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