



Translational Lighting Research

January 30, 2020

Bob Davis

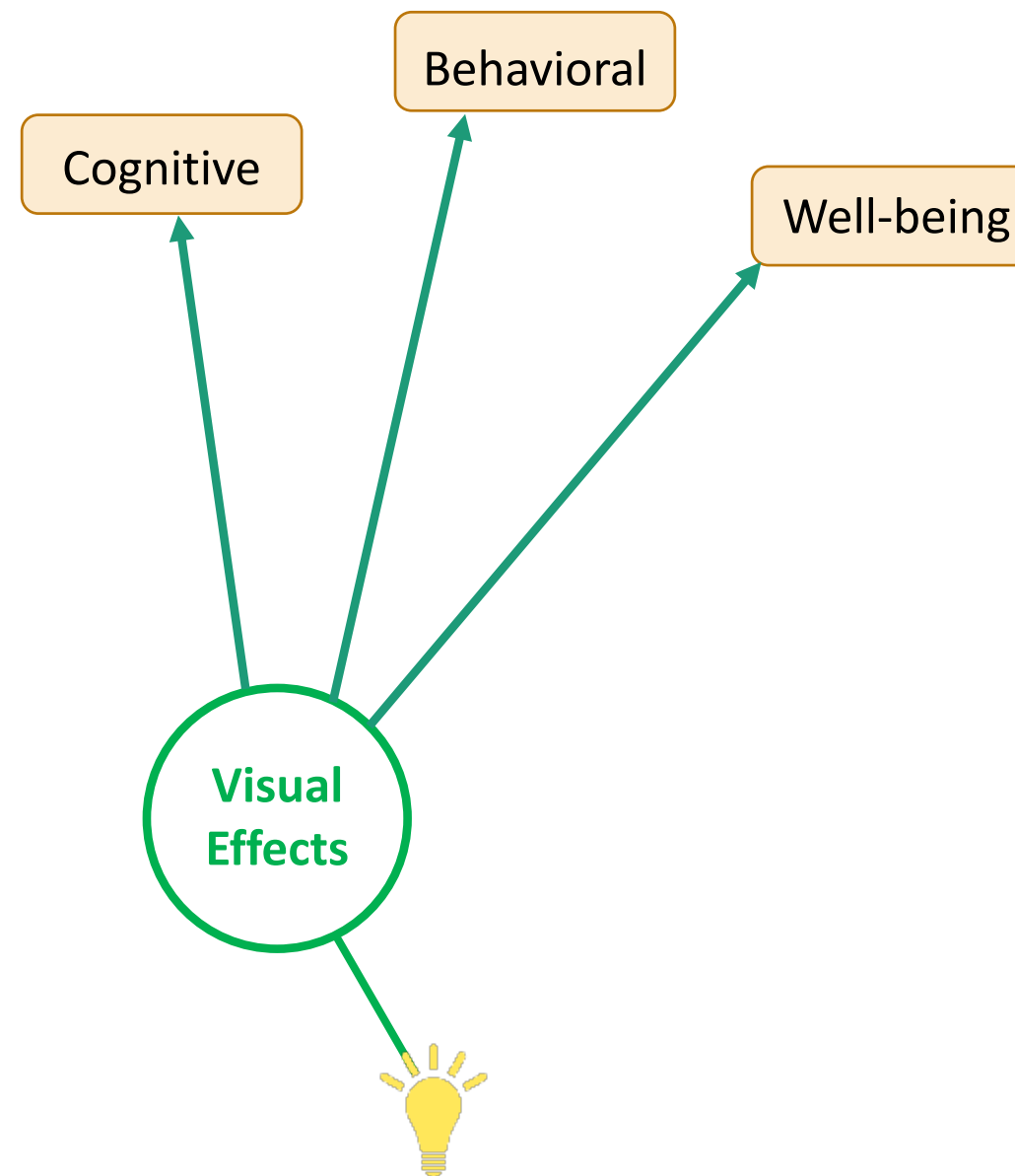


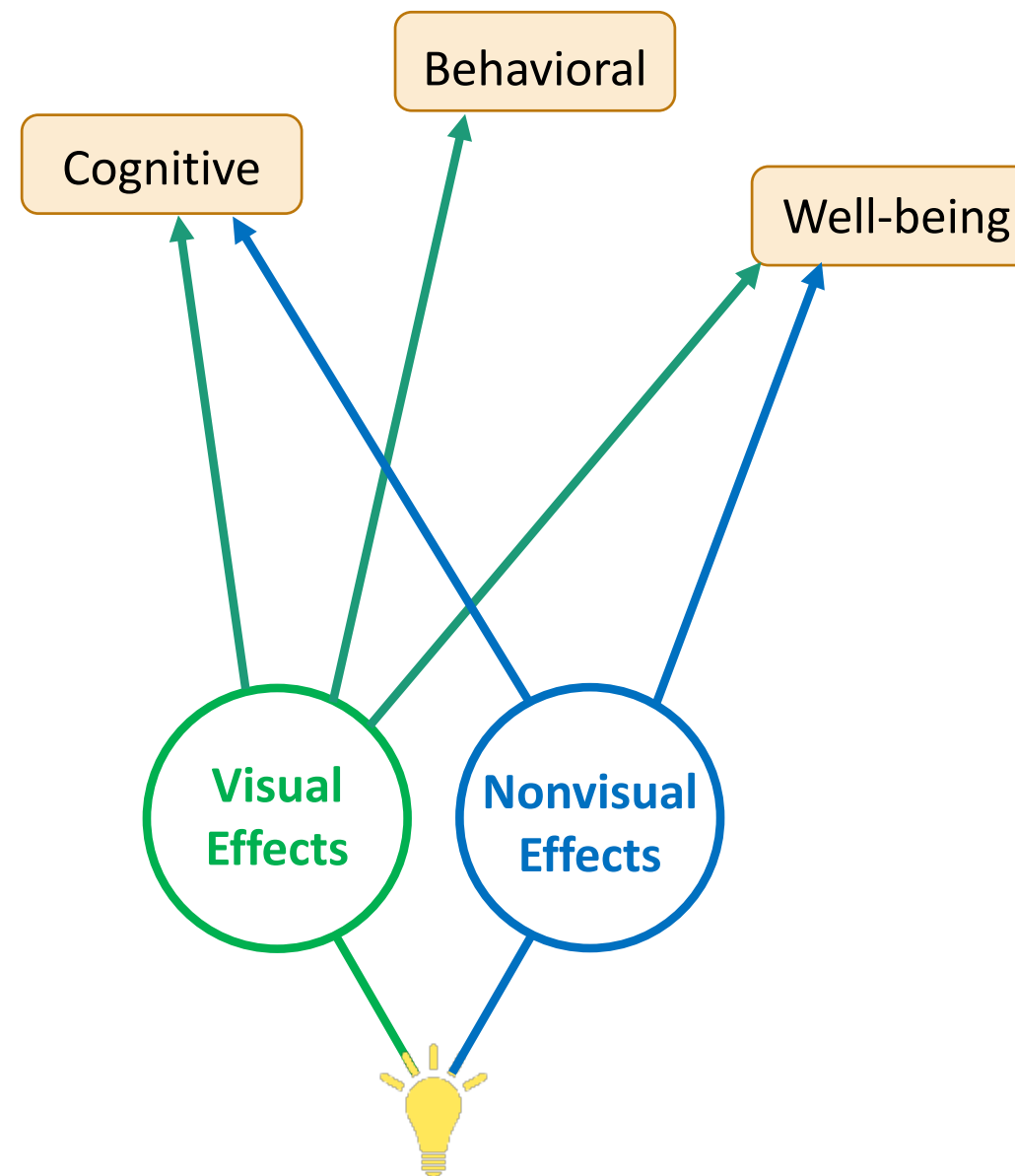
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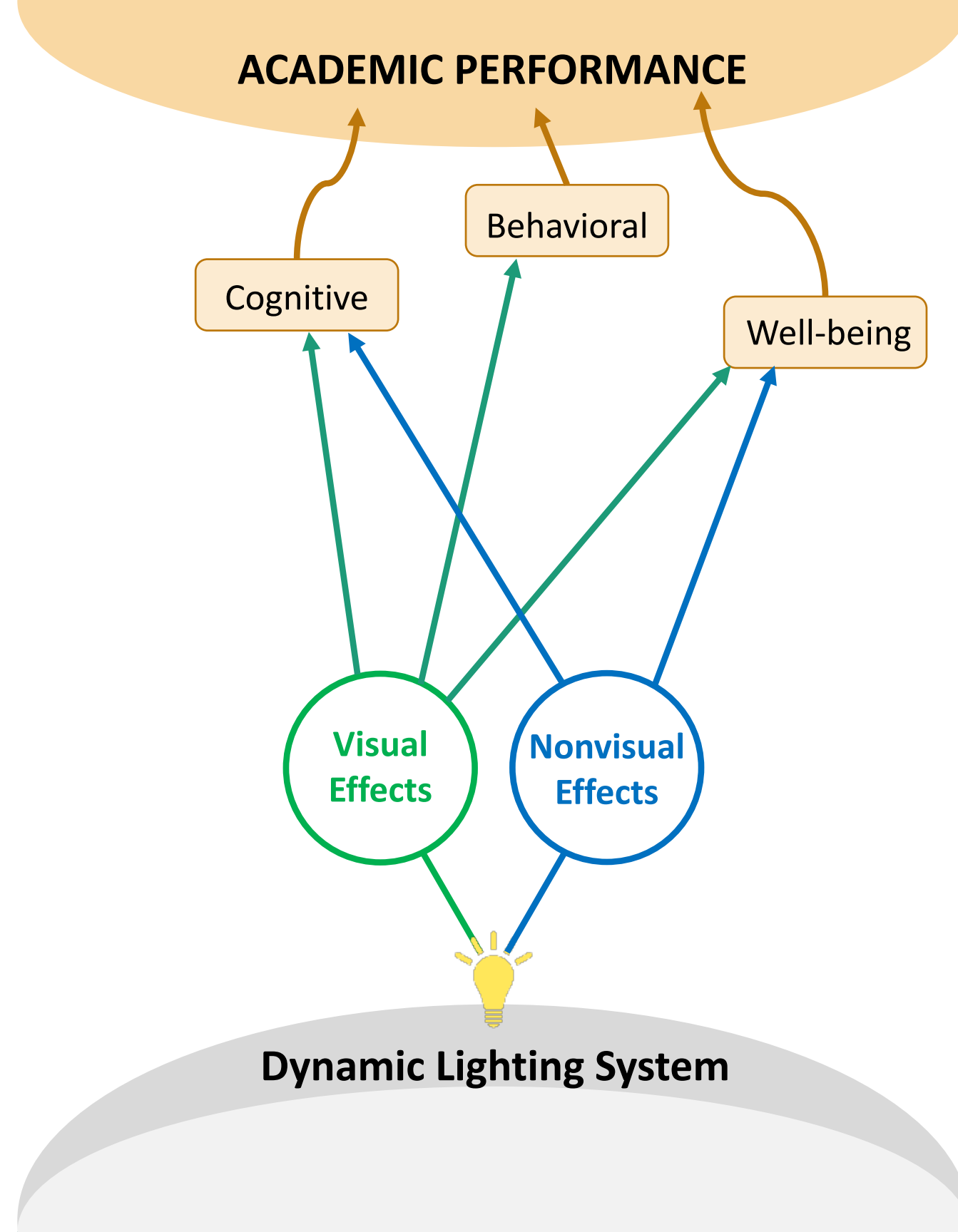
“Translational research involves moving knowledge and discovery gained from the basic sciences to its application in clinical and community settings. This concept is often summarized by the phrases "bench-to-bedside" and "bedside-to-community" research.” (Khoury et al, Genet Med, 2007)

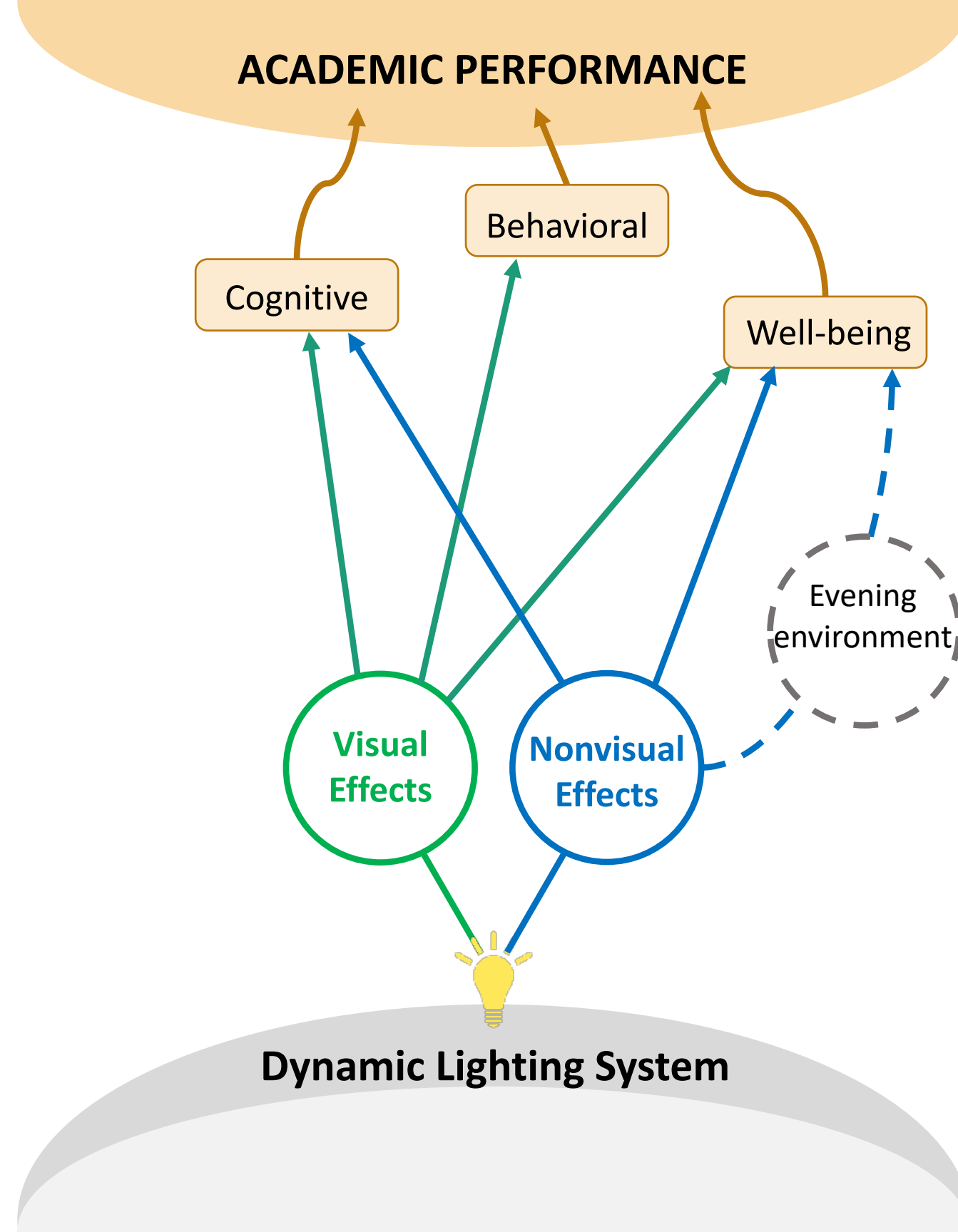
“Translational research is the process of applying laboratory research to human studies and enhancing the adoption of evidence-based practices in real-world settings to reach broad populations.” (Zoellner et al, J Acad Nutr Diet, 2015)

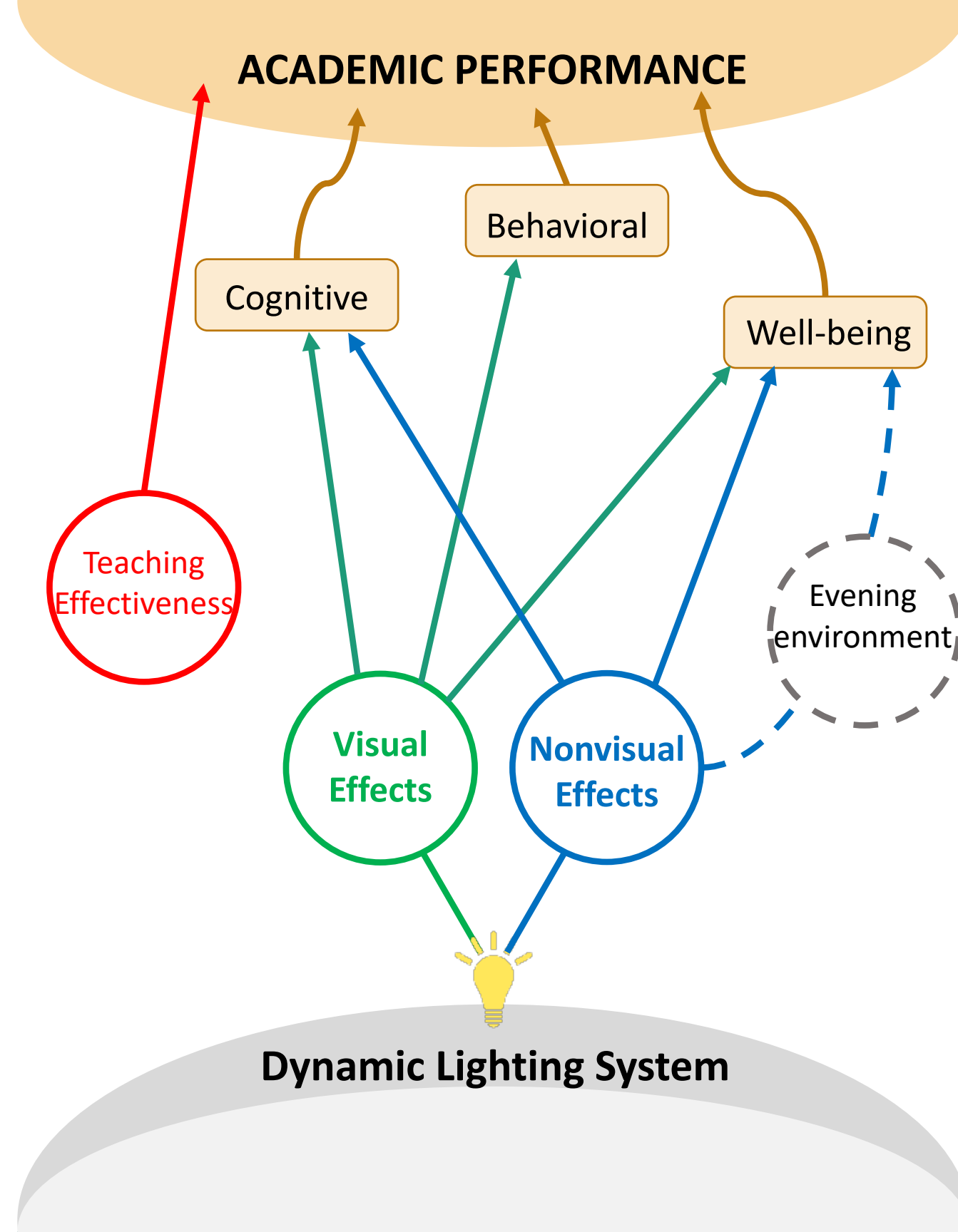
72 -- 560 -- 34 million

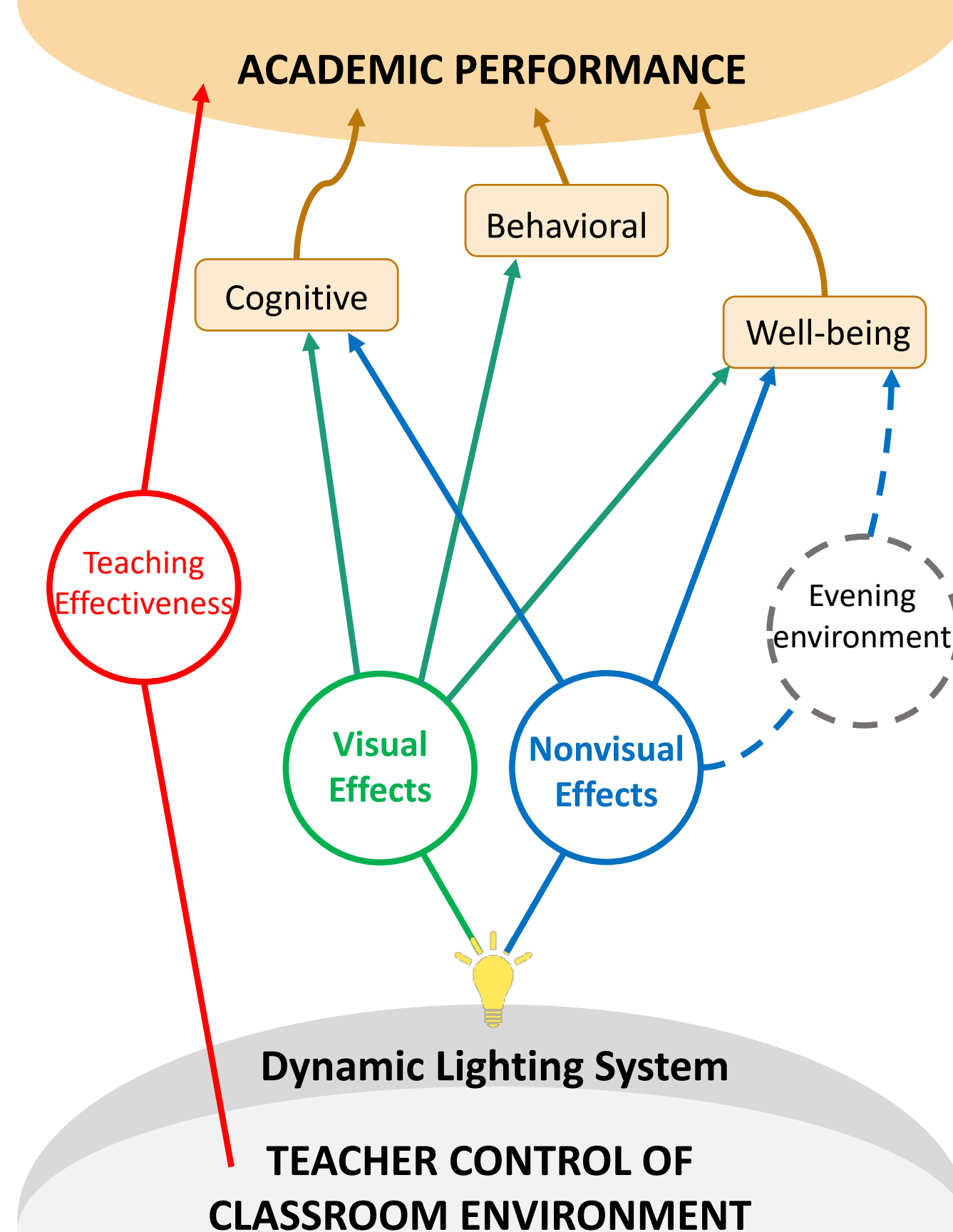












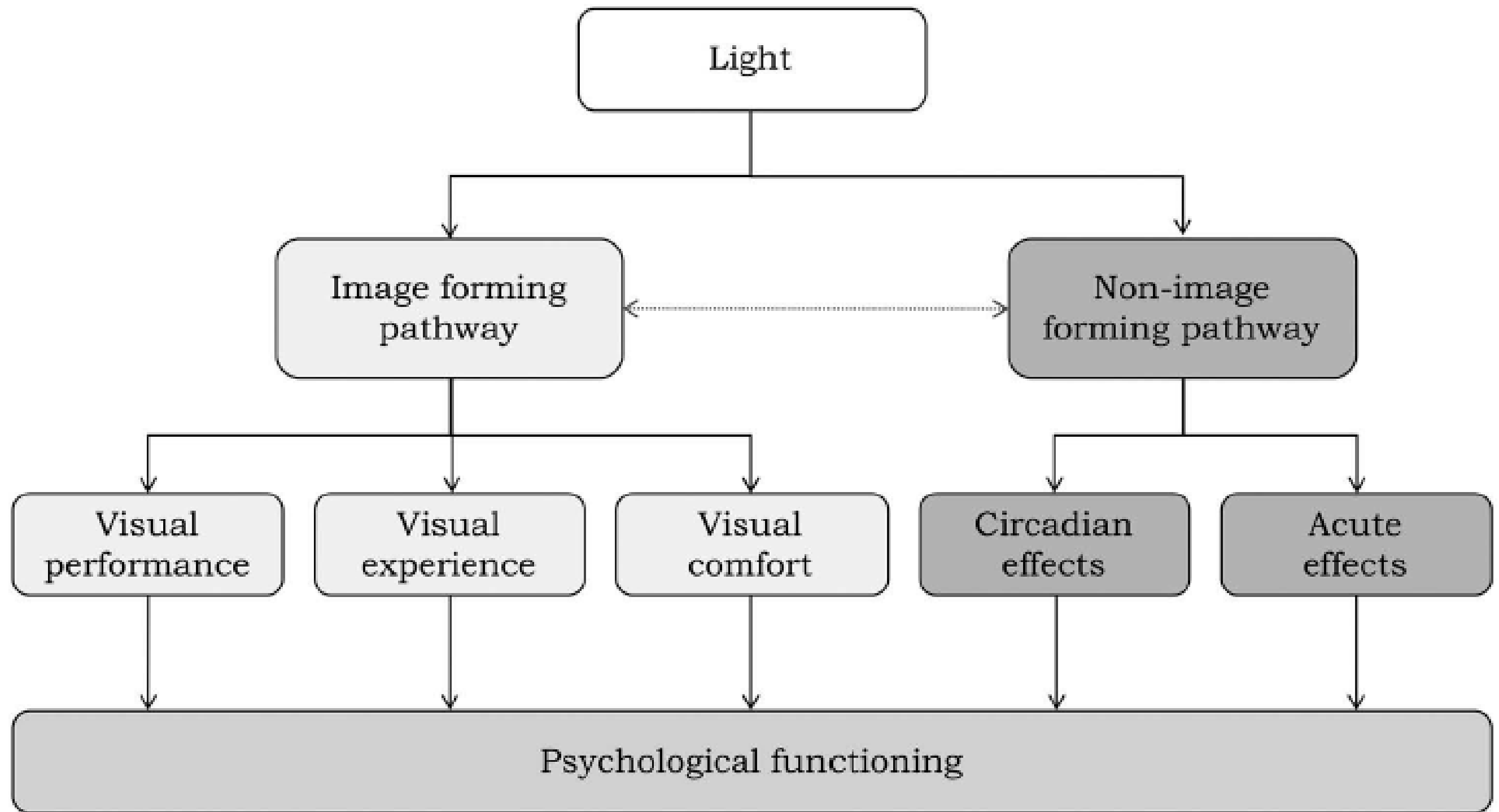


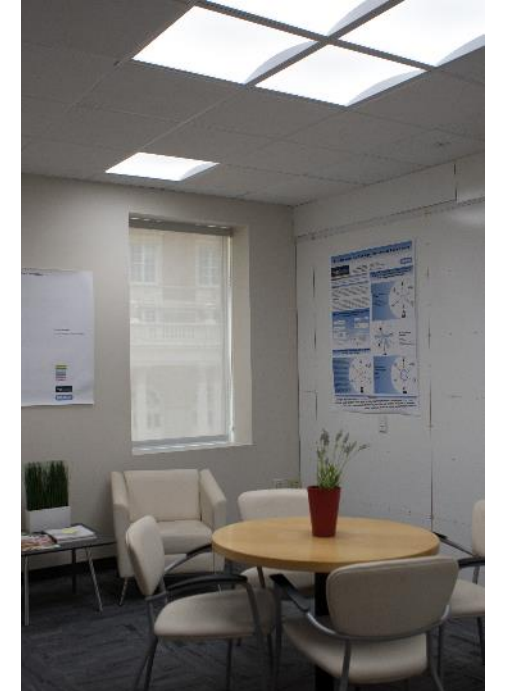
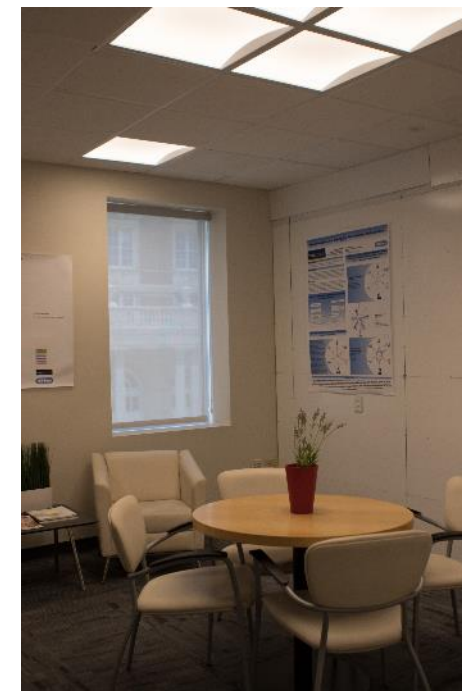
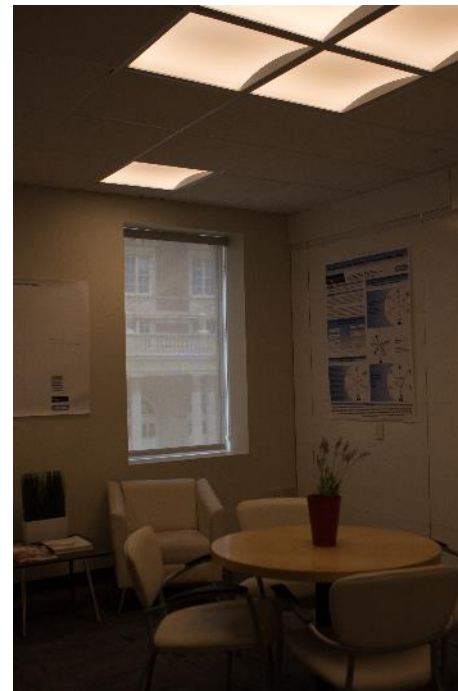
Fig. 1. Pathways of light relevant to psychological functioning. Adapted from de Kort and Veitch (2014).

Patient Room Mock-Up

SimTigrate Design Lab



- Task difficulty
- Comfort
- Naturalness
- Appropriateness



Betti Ruth Robinson Taylor Neonatal Intensive Care Unit



- Programmed system functioning
- Use of controls
- Staff evaluations



Boulder Community Health Behavioral Health Unit

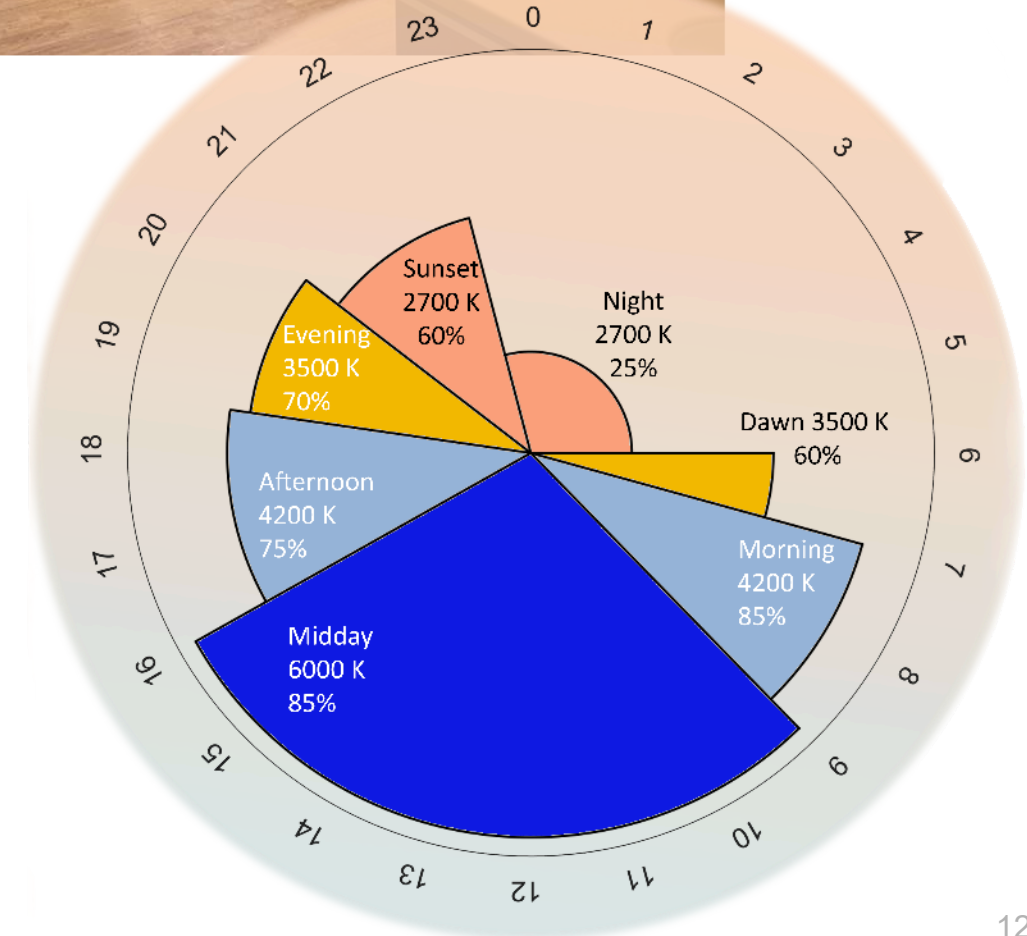


BOULDER
ASSOCIATES

ARCHITECTS



- Staff evaluations
- Length of stay
- Amount of sleep
- Emotional state
- Mental state
- Behaviors



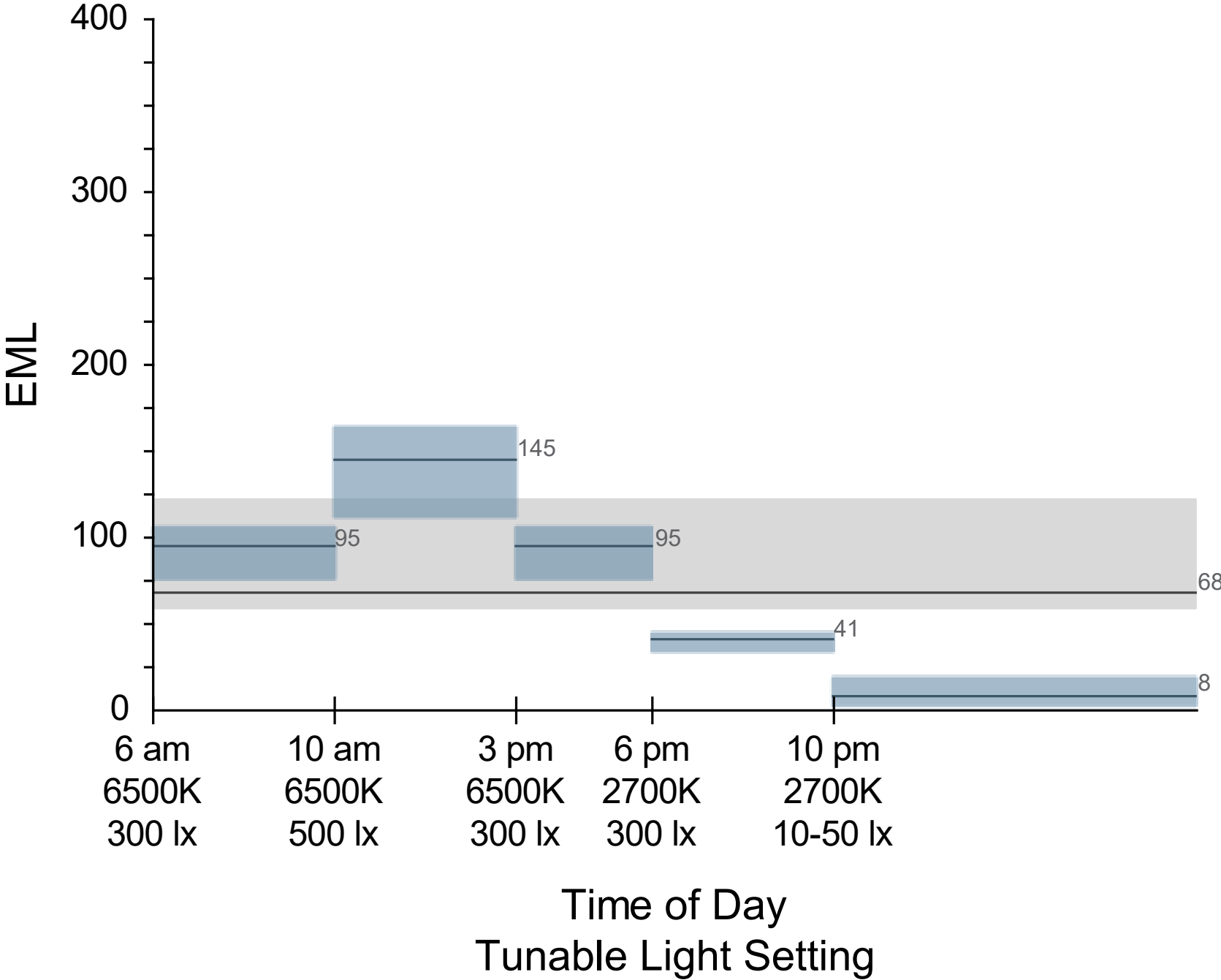
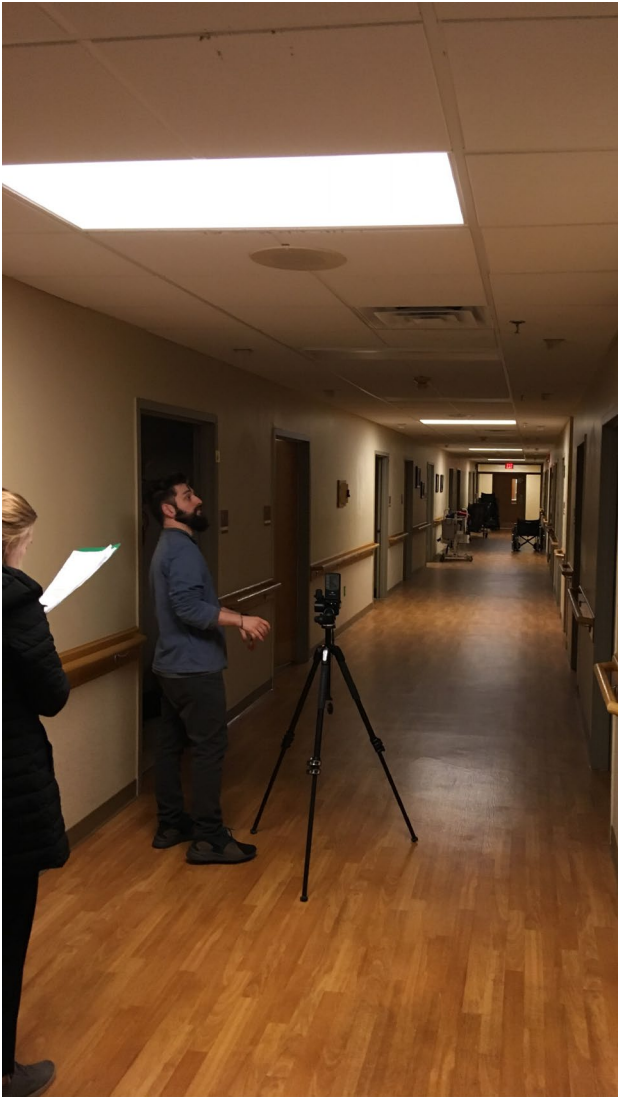
7:00 AM – 2:00 PM

2:00 PM – 6:00 PM

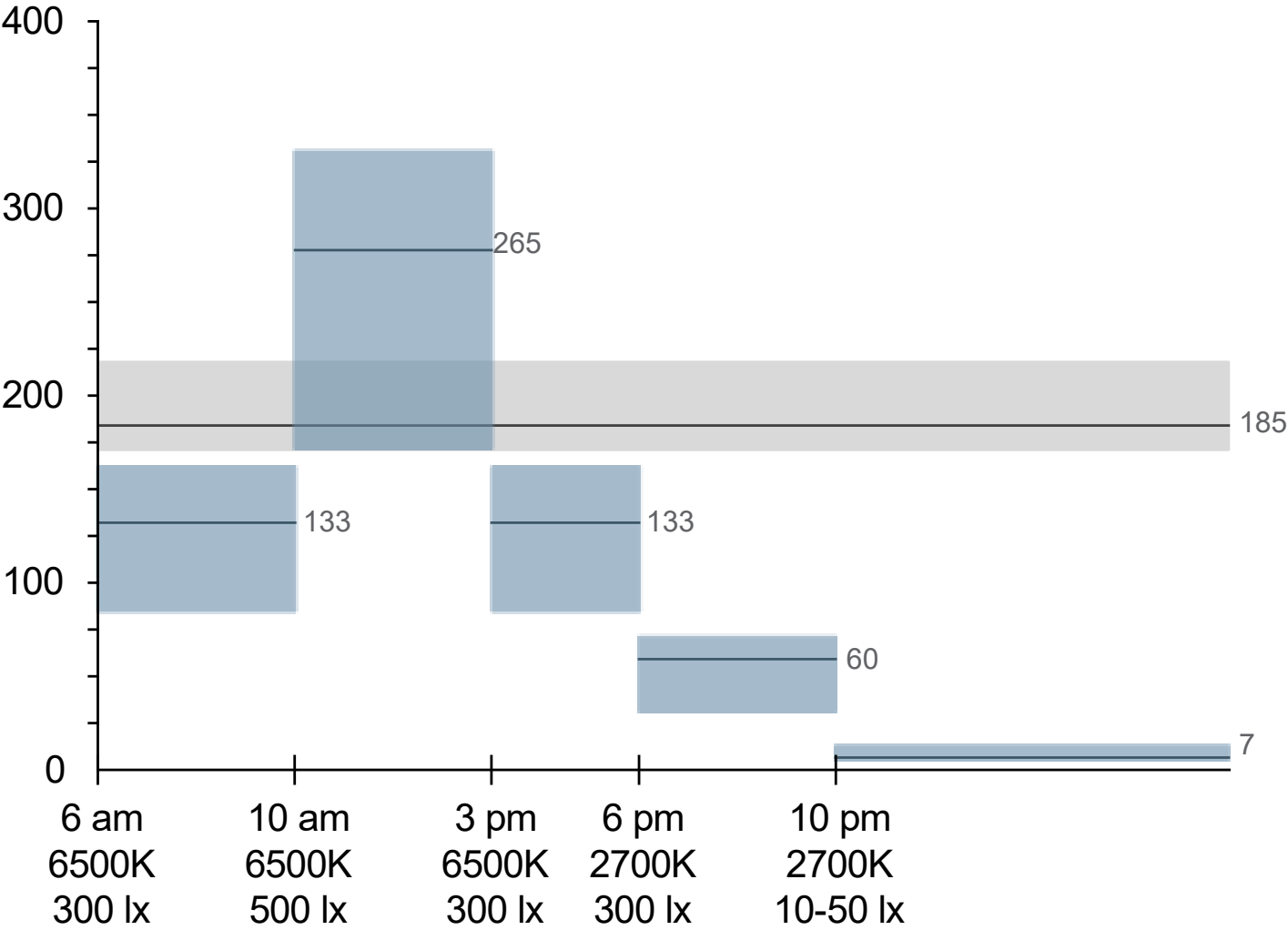
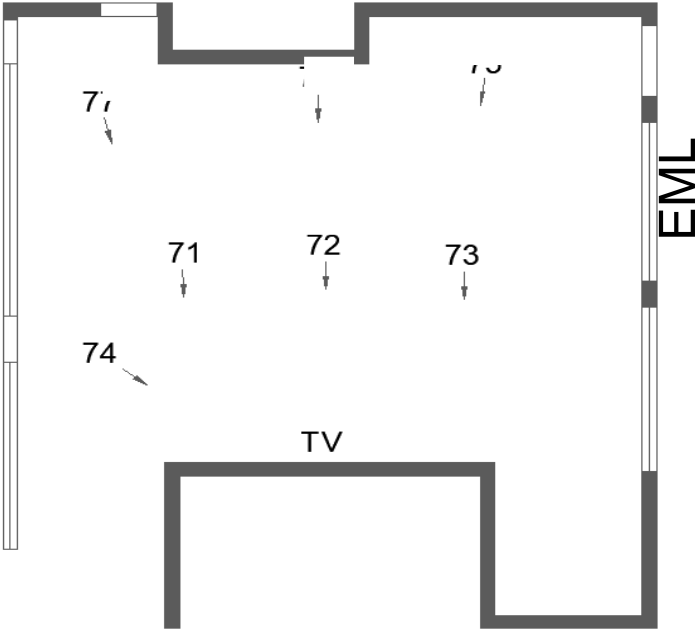
6:00 PM – 7:00 AM

- Number of falls
- Sleep medications
- Sleep time & quality
- Agitation behaviors

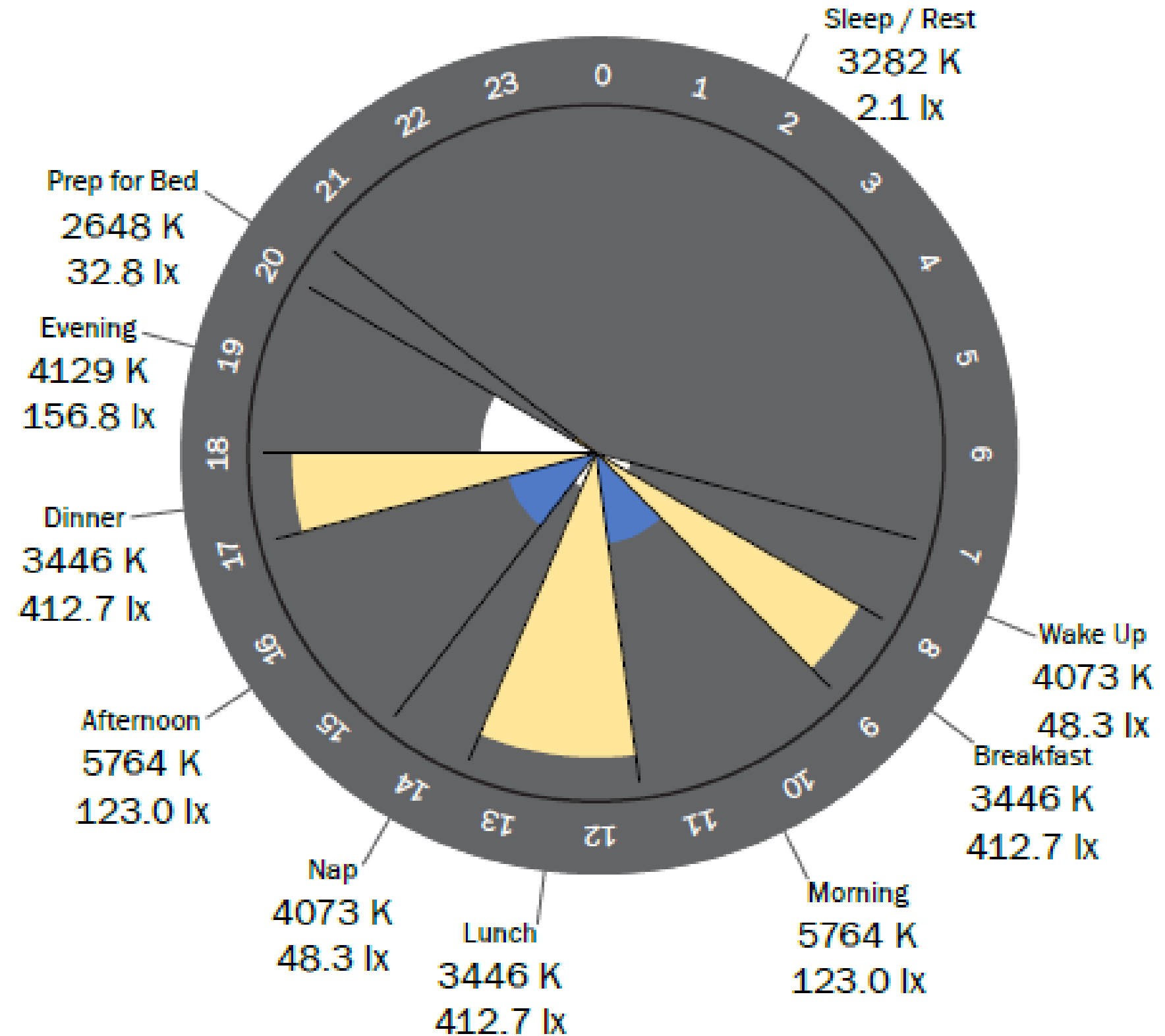
HALLWAY
Hall B (Study) & Hall A (Control)



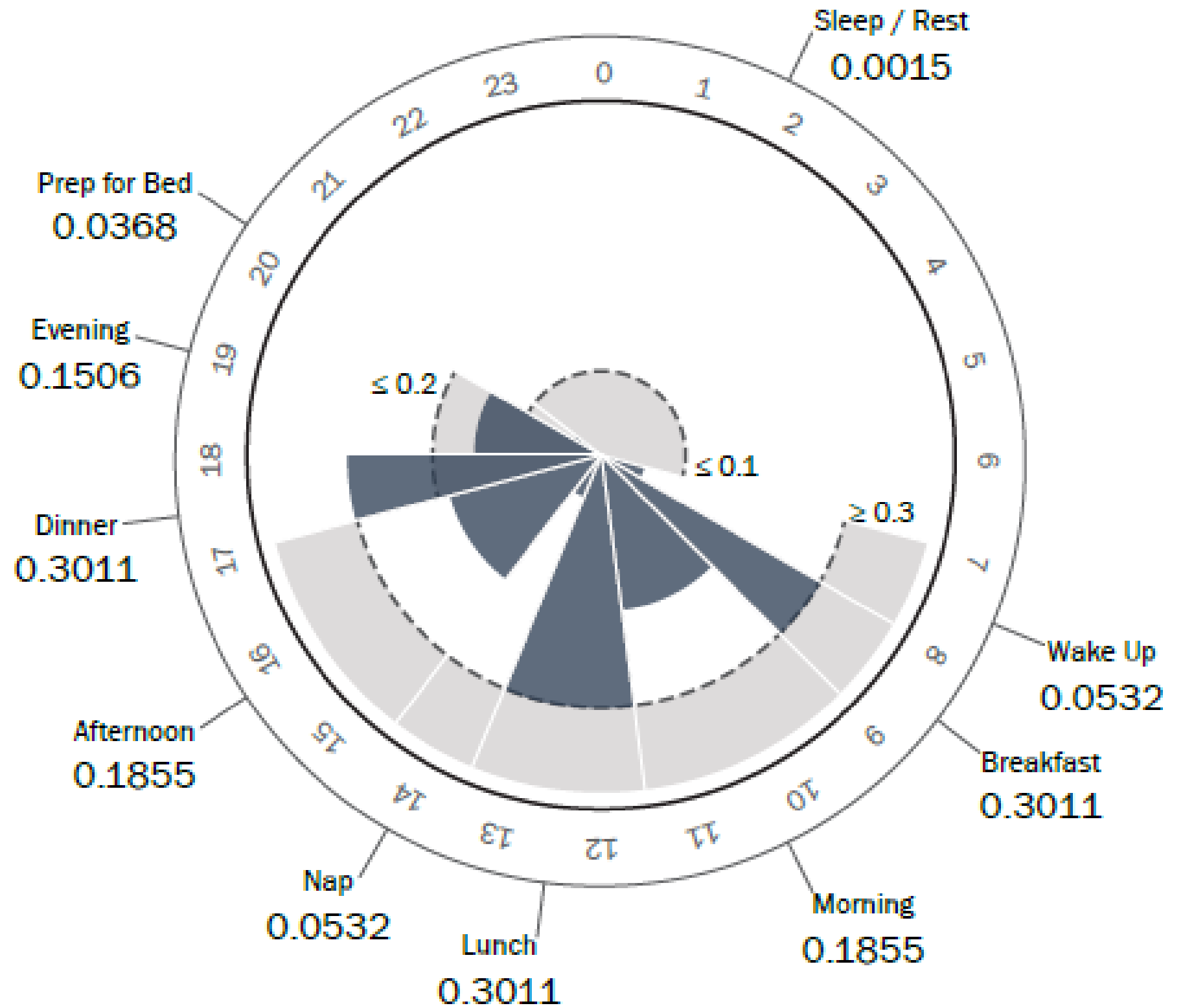
ACTIVITY ROOM



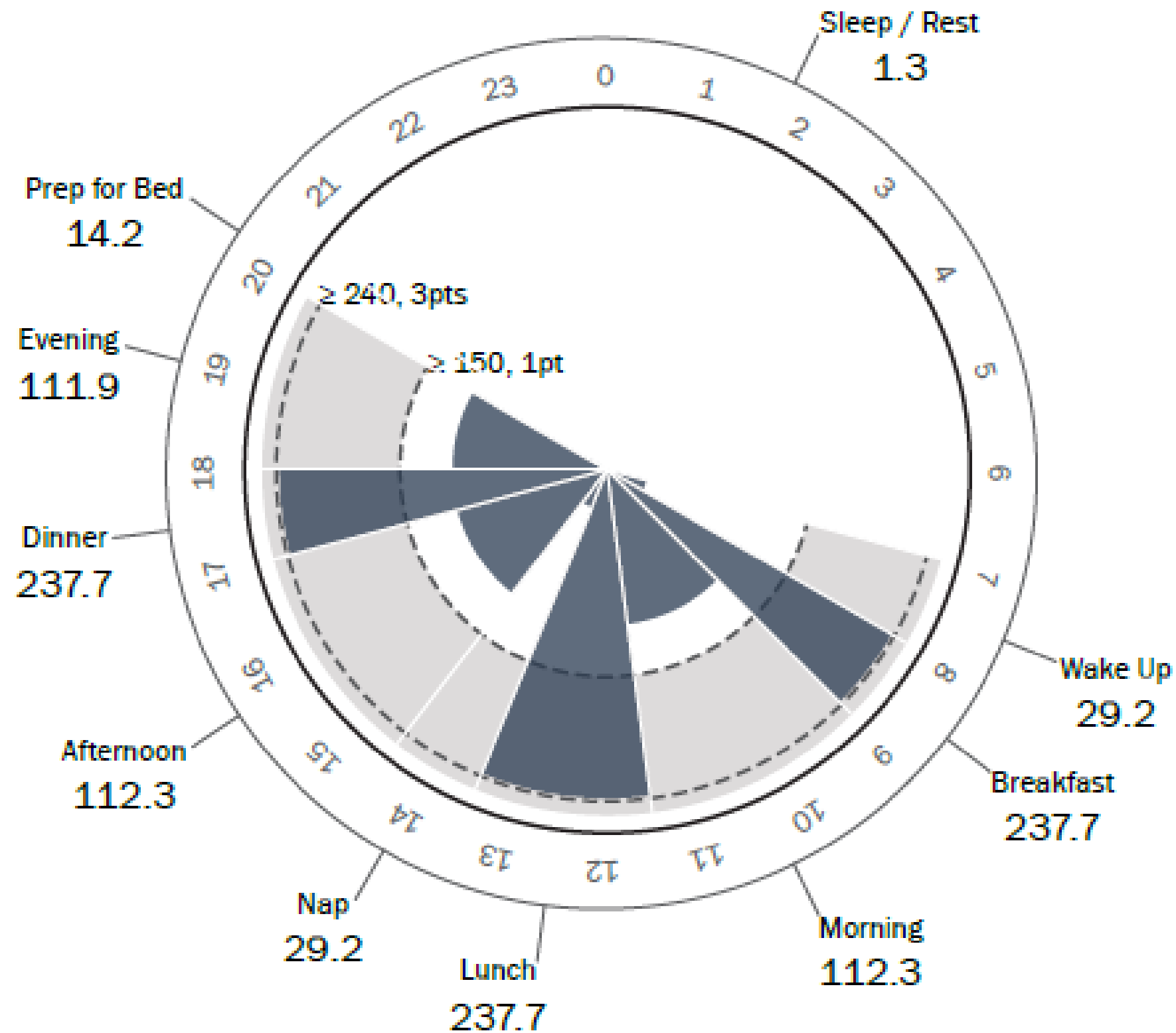
Measured Light Settings



CS



EML





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