

HOW TO APPLY THE MULTIPHASE OPTIMIZATION STRATEGY (MOST) IN YOUR INTERVENTION DEVELOPMENT RESEARCH

Module 2
**The preparation phase: Laying the foundation for successful
optimization**

Lesson 5: Expressing moderation in a conceptual model



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**SCHOOL OF GLOBAL
PUBLIC HEALTH**

Intervention Optimization Initiative

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Intervention Optimization Initiative

In the previous lesson you learned how to:

- Select an appropriate level of granularity for intervention components

In this lesson you will learn how to:

- Express moderation in conceptual models

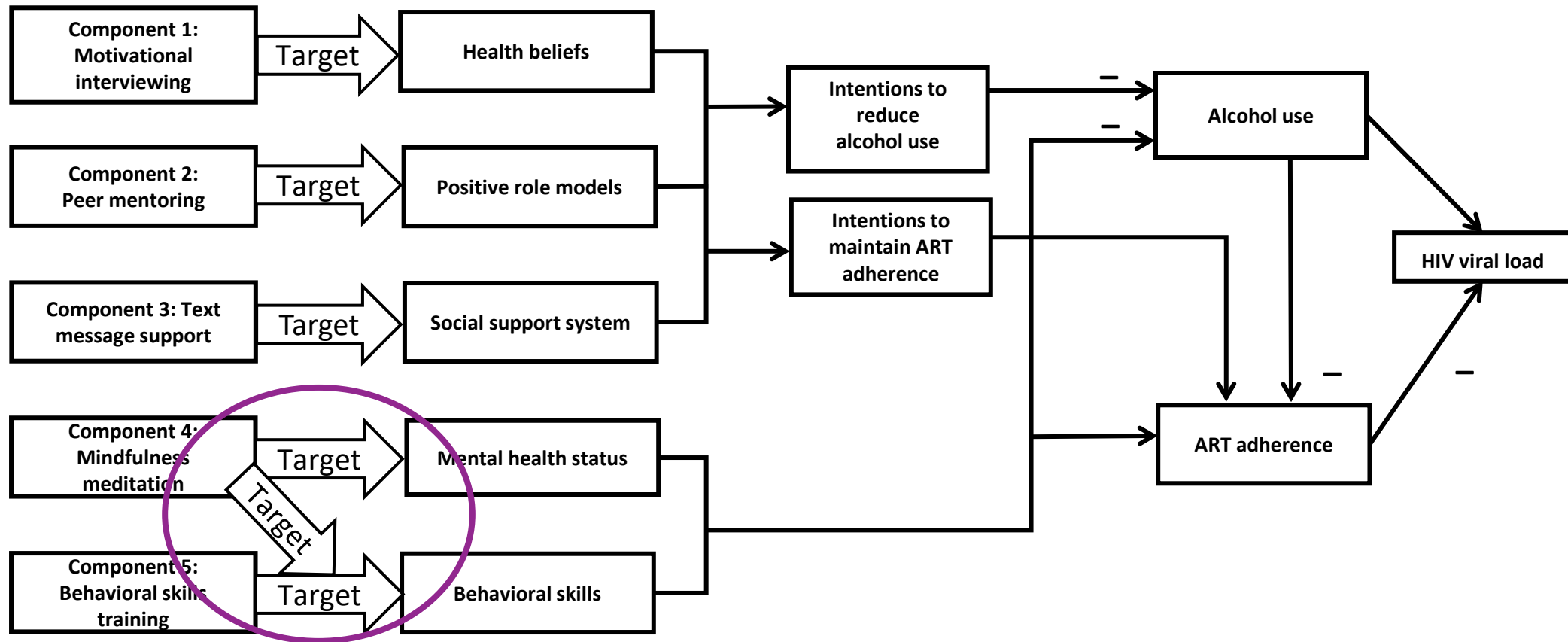
What is moderation?

- When the effect of one variable is different depending of the value/level of another
- Statistically, moderation is an interaction

Two varieties of moderation

- (a) Moderation involving only intervention components
- Example: The behavioral skills training component works better when combined with mindfulness meditation than when mindfulness meditation is not included.

Moderation involving only intervention components

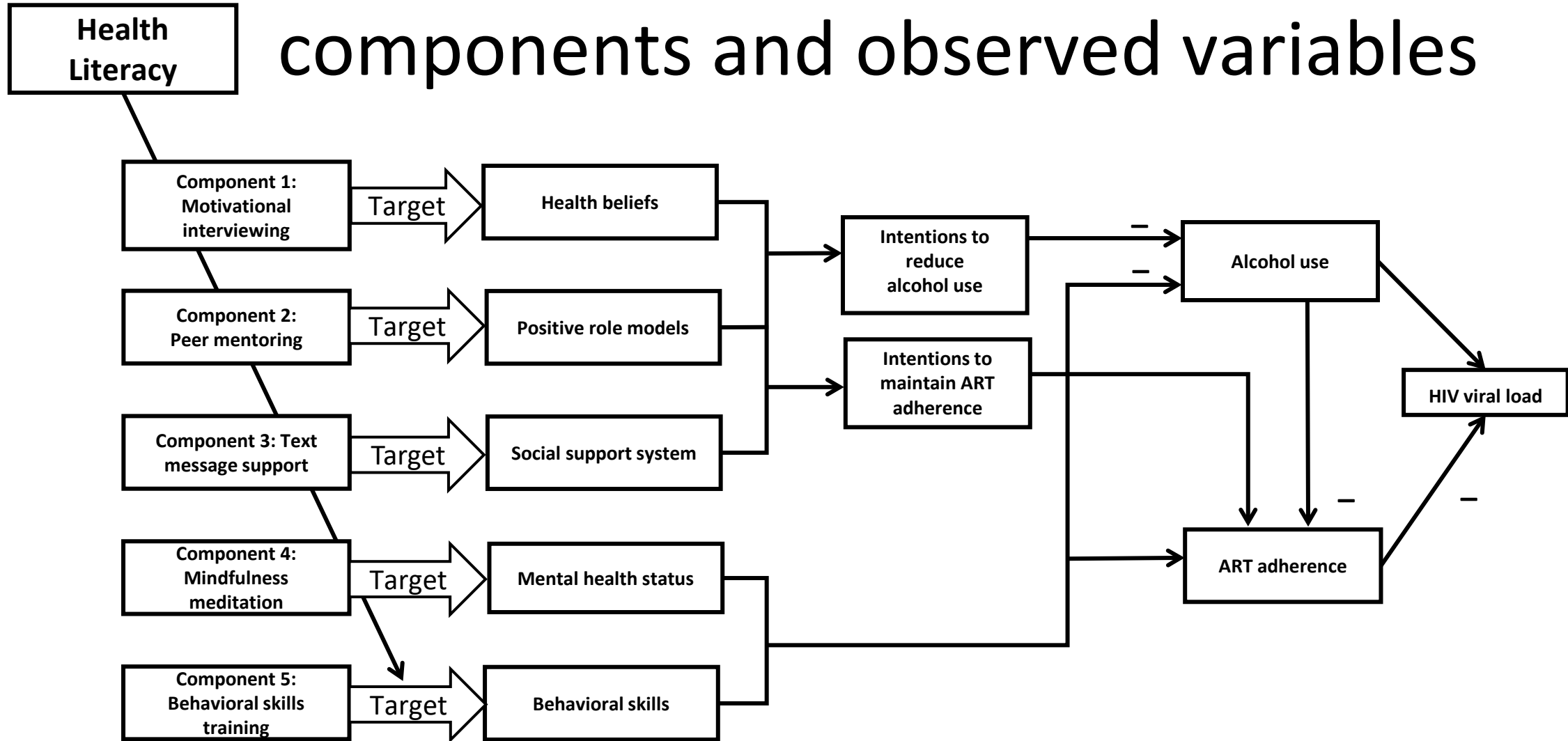


Adapted from Collins, L.M., Kugler, K.C., & Gwadz, M.V. (2016)

Two varieties of moderation

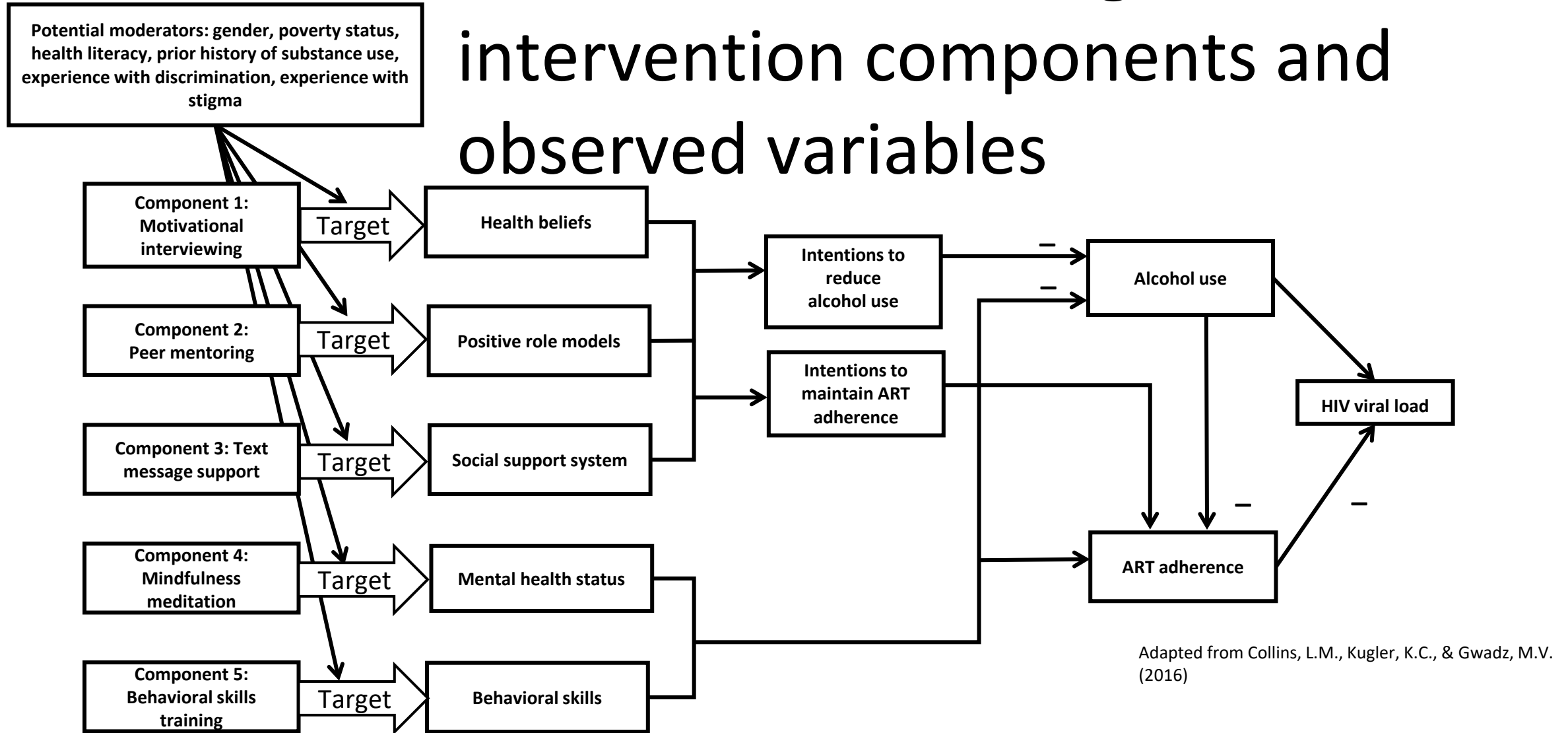
- (b) Moderation involving both intervention components and observed variables
- Example: The behavioral skills training component works better in people who have high levels of health literacy than in people who have low levels of health literacy.

Moderation involving both intervention components and observed variables



Adapted from Collins, L.M., Kugler, K.C., & Gwadz, M.V. (2016)

Moderation involving both intervention components and observed variables



Let's draw a distinction between the conceptual model and the figure that represents it

- The conceptual model expresses the “engine” behind the intervention
- A figure of a conceptual model is intended to represent the key parts of this “engine” at a glance

Let's draw a distinction between the conceptual model and the figure that represents it

- A figure does not detail every aspect of a conceptual model
 - It should reflect anticipated interactions involving components
 - Otherwise, be sparing with depicting moderators in the figure!

Let's draw a distinction between the conceptual model and the figure that represents it

- Remember: in a document, you will include a narrative description that can explain the entire model

Let's draw a distinction between the conceptual model and the figure that represents it

- You may want to include the figure and a description of the conceptual model (a) in grant proposals and (b) in your first published article on a particular optimization trial

In this lesson you learned how to:

- Express moderation in conceptual models

In the next lesson you will learn how to:

- Define the term pilot study
- Distinguish pilot studies from optimization trials

References cited

- Collins, L.M. (2018). Optimization of Behavioral, Biobehavioral, and Biomedical Interventions: The Multiphase Optimization Strategy (MOST). New York: Springer.
- Collins, L.M., Kugler, K.C., & Gwadz, M.V. (2016). Optimization of multicomponent behavioral and biobehavioral interventions for the prevention and treatment of HIV/AIDS. *AIDS and Behavior*, 20, 197-214.