

# Understanding Consumer Self-Perceptions Regarding Mental Health Recovery:

## A Structural Equation Modeling Evaluation

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# What is Recovery in regards to Mental Health?

- Goes beyond typical medical model of symptom control to evaluate mental health status
  - May include recovery support factors such as housing, employment, education, level of service participation
  - Or other personal (self-perceived) recovery factors include Hope, Active Growth/Orientation, Social Networks, Safety, and Symptom Interference

(Anthony, 2000; Anthony, 2003).

# Mental Health Services at MHCD

- Moving towards a strengths-based recovery-oriented services system
- Considered a non-linear process with “ups and downs” over the treatment period of the consumer
- Outcomes have been designed to focus on recovery aspects, along with symptom management

# MHCD Recovery Measurements

- Recovery Marker Inventory (RMI)(6 items)
  - Measure of environmental recovery support factors as completed by the clinician
- **Recovery Measures by Consumer (RMC)(16 items)**
  - Measure of a consumer's self-perception of his/her own recovery
- Promoting Recovery in Organizations (PRO) (50+ items)
  - Measure of recovery focus of the organization as a whole

# MHCD's Components of Self-Perceived Mental Health Recovery

- Hope
  - Refers to having hope for the future and having hope currently
- Active Growth/Orientation
  - Level of participation in personal activities and hobbies
- Social Networks
  - Magnitude of recovery support provided by social network
- Safety
  - Perceived safety in consumer's environment
- Symptom Interference
  - Perception of magnitude of impact of symptoms on daily activity

## Sample of RMC Items

- All items, except moderator, have Likert-type responses (4) ranging from Strongly agree to Strongly disagree
- Mood Moderator: Asks how the consumer feels that day (7 responses)
- Hope:
  - I have hope for the future
- Active Growth / Orientation
  - I am reaching my goal

# Sample of RMC Items

- Social Networks
  - I have people in my life I can really count on.
- Safety
  - In most situations I feel totally safe
- Symptom Interference
  - My life is often disrupted by my symptoms

# Importance in Mental Health Treatment

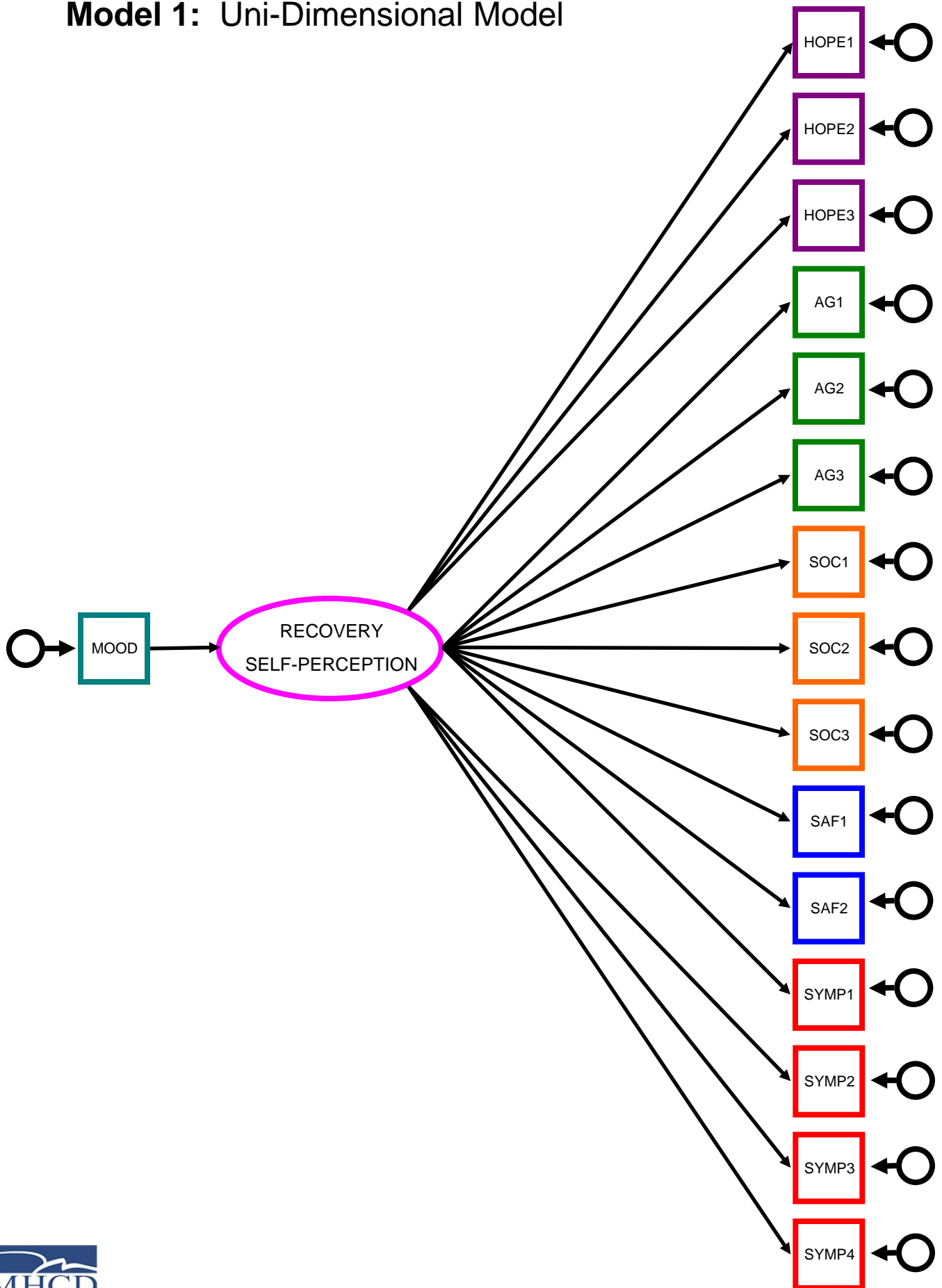
- Gain a better understanding of the consumers' self-perceptions of recovery, i.e. what is important to them?
- Understanding which components are related most to the Self-Perception of Recovery can provide a basis for establishing more effective mental health treatment programs
- Help clinicians understand the relationships between the components so more effective adjustments to mental health treatment can be made.



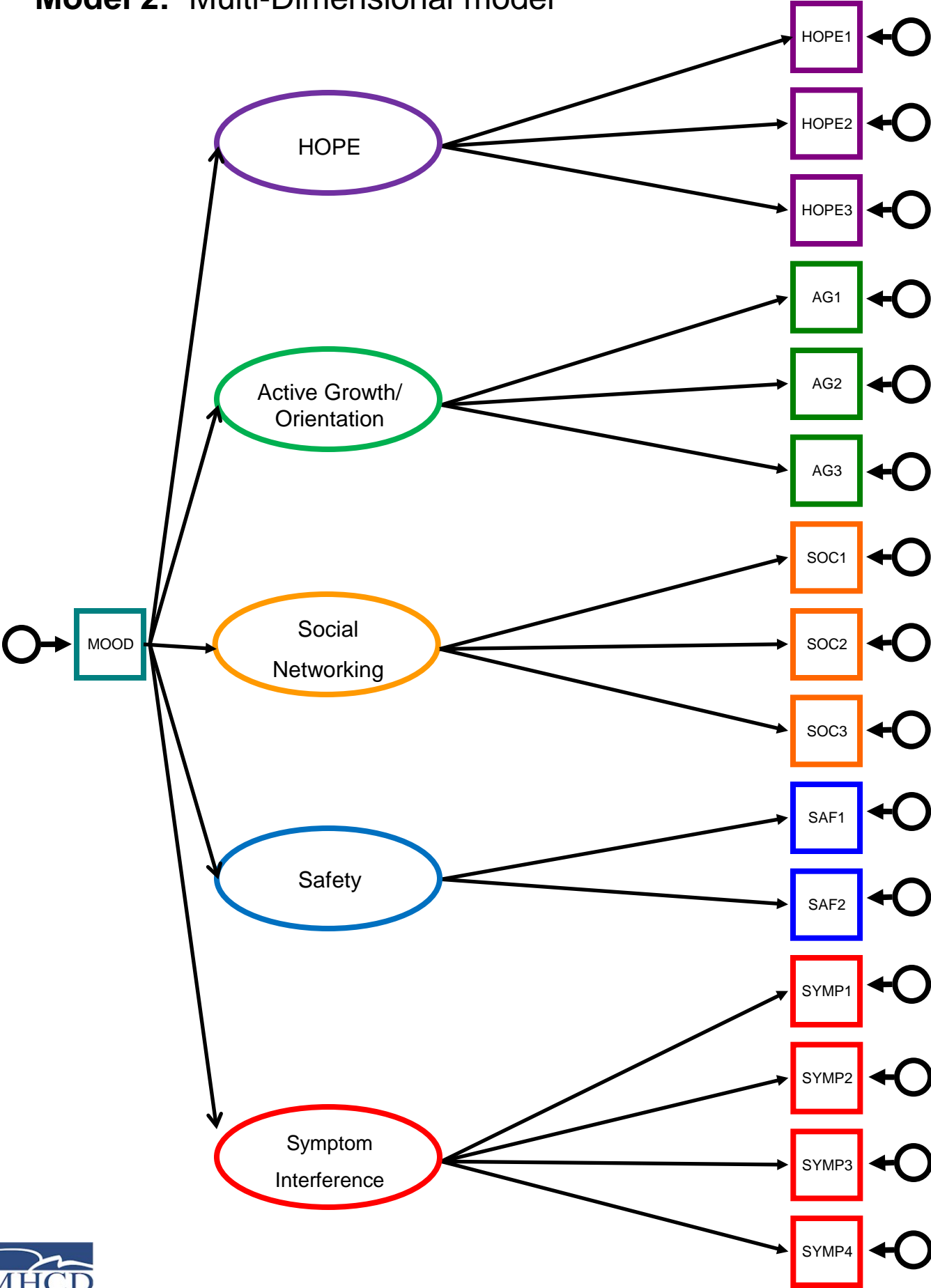
# Methods

- 585 outpatient consumers completed a CRM survey on intake
  - 309 were randomly selected as the calibration group, with 276 as the validation group
- Models were evaluated within SEM framework using LISREL 8.8 (Jöreskog & Sörbom, 2007)

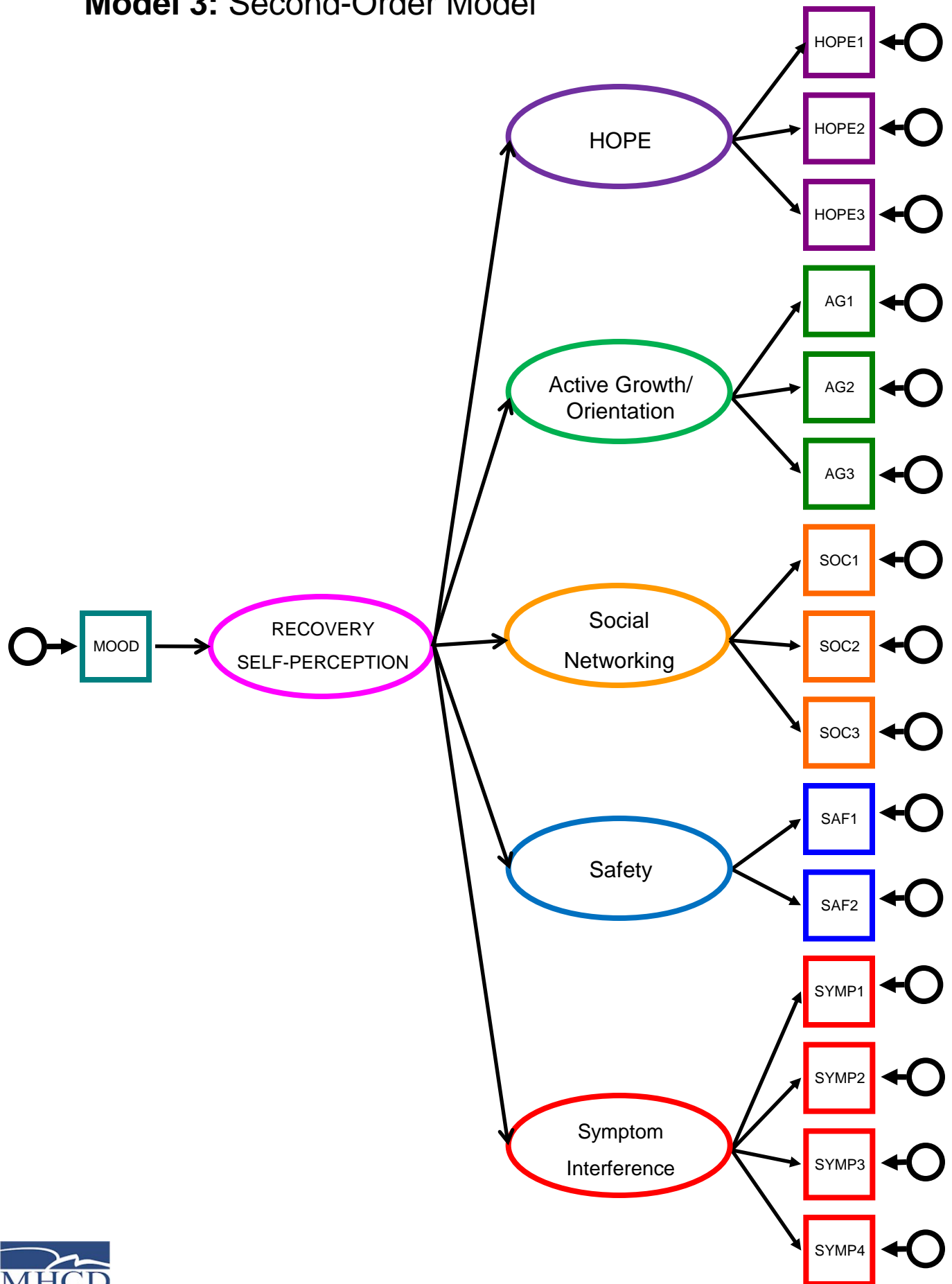
## Model 1: Uni-Dimensional Model



# Model 2: Multi-Dimensional model



## Model 3: Second-Order Model

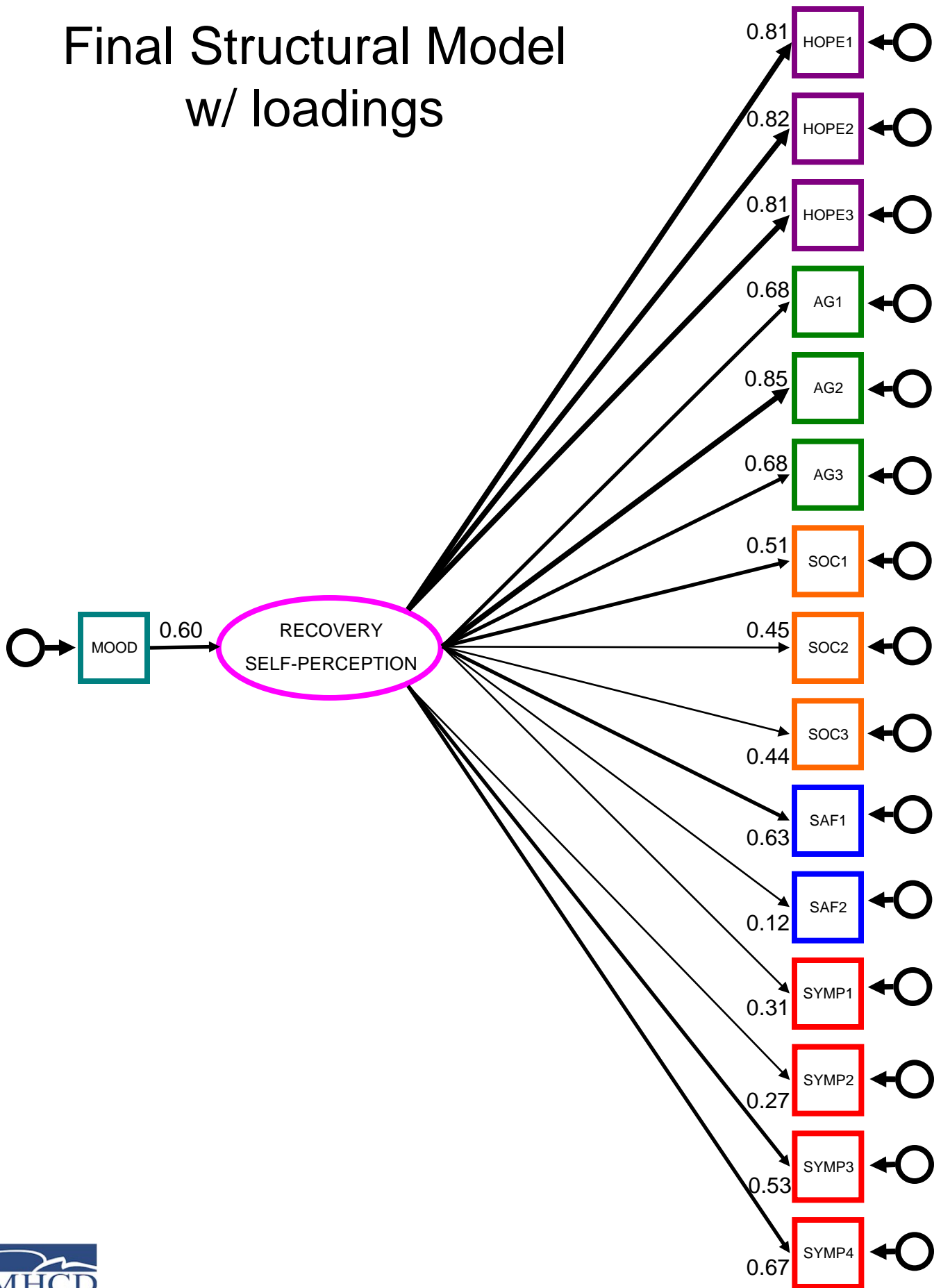


# Calibration Results

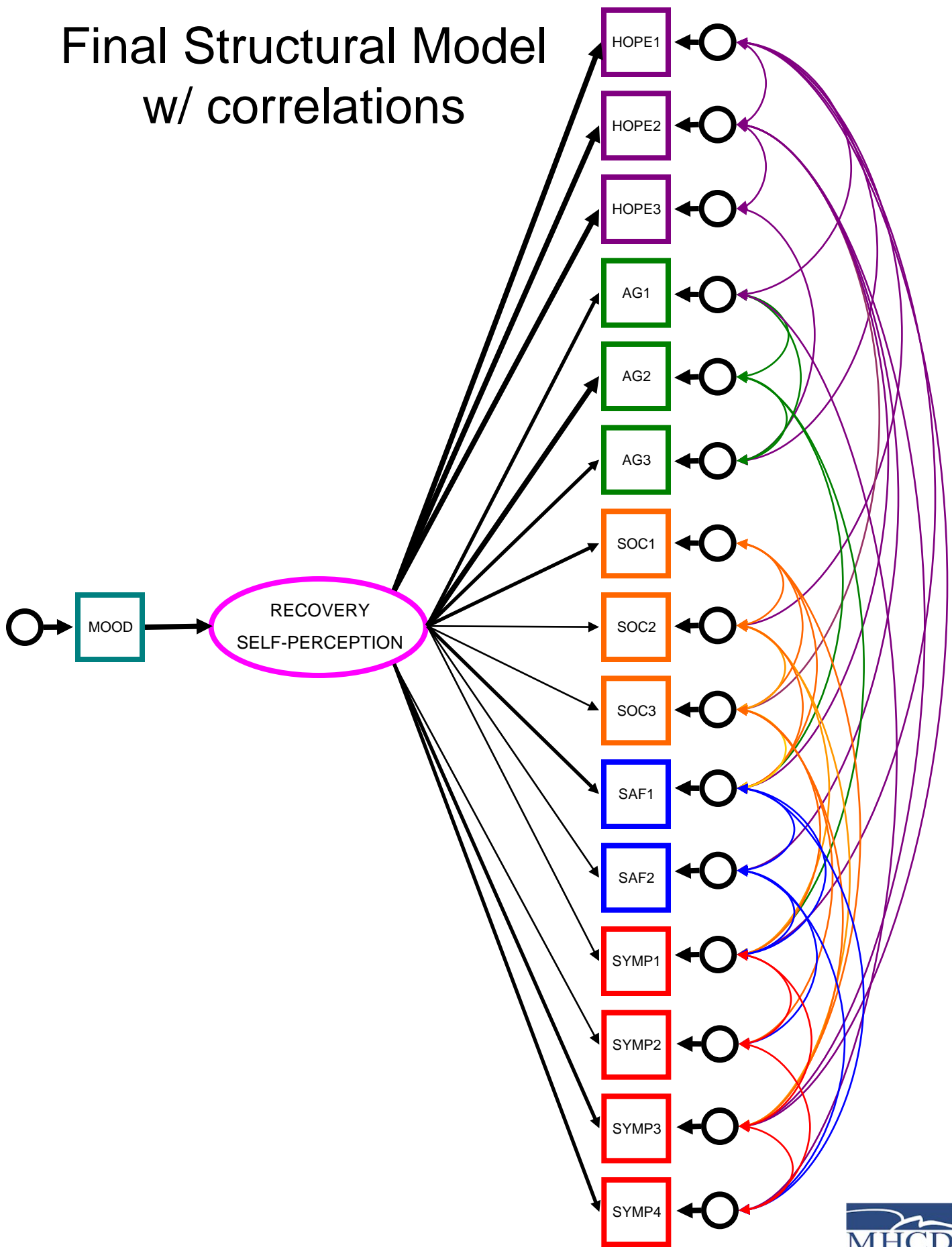
	Modification							
	Initial Model				2nd Model			
<i>Model</i>	<i>RMSEA</i>	<i>NFI</i>	<i>CFI</i>	<i>NNFI</i>	<i>RMSEA</i>	<i>NFI</i>	<i>CFI</i>	<i>NNFI</i>
<b>Uni-Dimensional</b>	0.140	0.870	0.890	0.870	0.067	0.950	0.970	0.960
<b>Multi-Dimensional</b>	0.160	0.860	0.880	0.850	0.092	0.940	0.950	0.940
<b>Second-Order</b>	0.150	0.890	0.900	0.890	NC	NC	NC	NC

Note: All RMSEA had a 90% CI that was above 0.05

# Final Structural Model w/ loadings



# Final Structural Model w/ correlations



# Results

## Final Uni-Dimensional Model

$\chi^2$ (DF) [p-value]	<i>RMSEA</i>	<i>NFI</i>	<i>CFI</i>	<i>NNFI</i>
64(68) [0.43]	(0.0, 0.03)	0.99	1.00	1.00

## Validation - Final Uni-Dimensional Model

$\chi^2$ (DF) [p-value]	<i>RMSEA</i>	<i>NFI</i>	<i>CFI</i>	<i>NNFI</i>
159(135) [0.35]	(0.04, 0.07)	0.95	0.96	0.96



# Conclusions

- CRM appears to be a uni-dimensional scale
- Self-Perception of Recovery appears to influence components of Hope and Active Growth the Most
- Two distinct sets of correlated components appear, 1) Hope and Active Growth, 2) Social Networks, Safety, and Symptom Interference

## Implications for Therapy

- Appears more focus should be placed on therapies that increase hope and participation in personal activities and hobbies.
- Understanding that changes in symptom management, safety, or social networks may affect the other two components.

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