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Ready to change? Using the Transtheoretical Model of Behavior Change in Program Evaluations

A Conservation Psychology webinar



Ready to change?
Using the
Transtheoretical
Model of
Behavior Change
in Program
Evaluations

- Overview & Introductions
- Presentation
- Q&A



Moderator: **Dr. Kayla Cranston**, Faculty and Director of Conservation Psychology Strategy and Integration at Antioch University New England



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Presenter: Nichole Nageotte, PhD



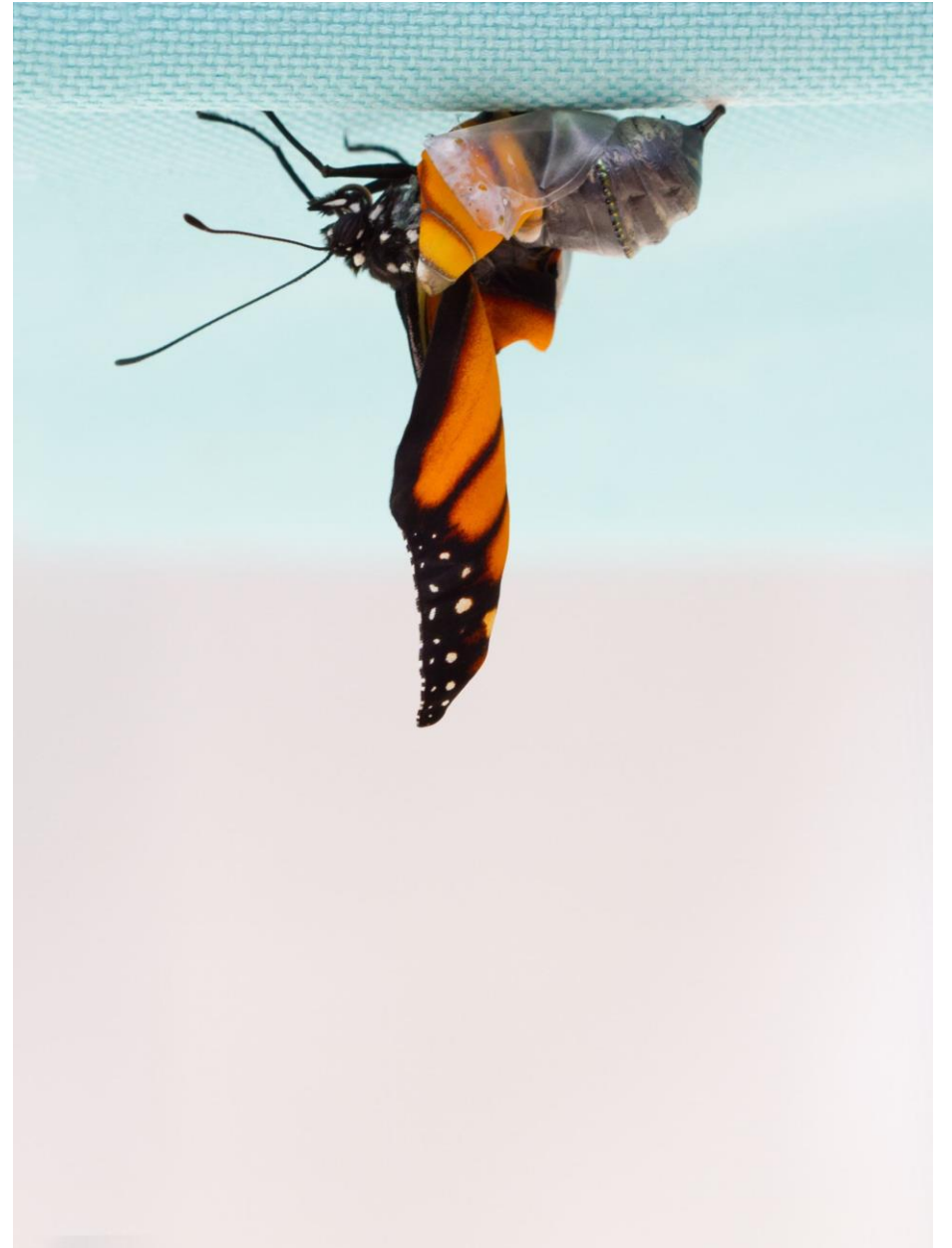
Nichole Nageotte, PhD is the Conservation Education Researcher at Cleveland Metroparks Zoo. Over the past 12 years, she has held various jobs in both animal care and environmental education. She has a passion for cultivating interest in science and connections to wildlife and conservation. She received her PhD in Curriculum and Instruction from Indiana University where she focused her studies on informal science and environmental education.

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Nichole Nageotte, PhD

Conservation Education Researcher

Cleveland Metroparks Zoo



What is the Transtheoretical Model of Behavior Change (TTM)?

- Explains how people change behavior (Prochaska et al., 1992)
- Developed from multiple change theories
- Developed in context of health behavior therapy (smoking cessation, alcohol abuse, etc.)
- Four components:
 - Stages of Change
 - Self-efficacy
 - Decisional balance
 - Processes of Change

Stages of Change



Pre-
contemplation



Contemplation



Preparation



Action



Maintenance



Relapse

- Willingness and readiness to make a change
(Prochaska & DiClemente, 1982; Prochaska et al., 1992)
- Spiral, not linear
(Prochaska et al., 1992)

Self-efficacy

Perceived
competence
and ability to do
something
(Bandura, 1977)

Generally low
in pre-
contemplation

Increases as
stage of change
progresses

Generally high in
maintenance

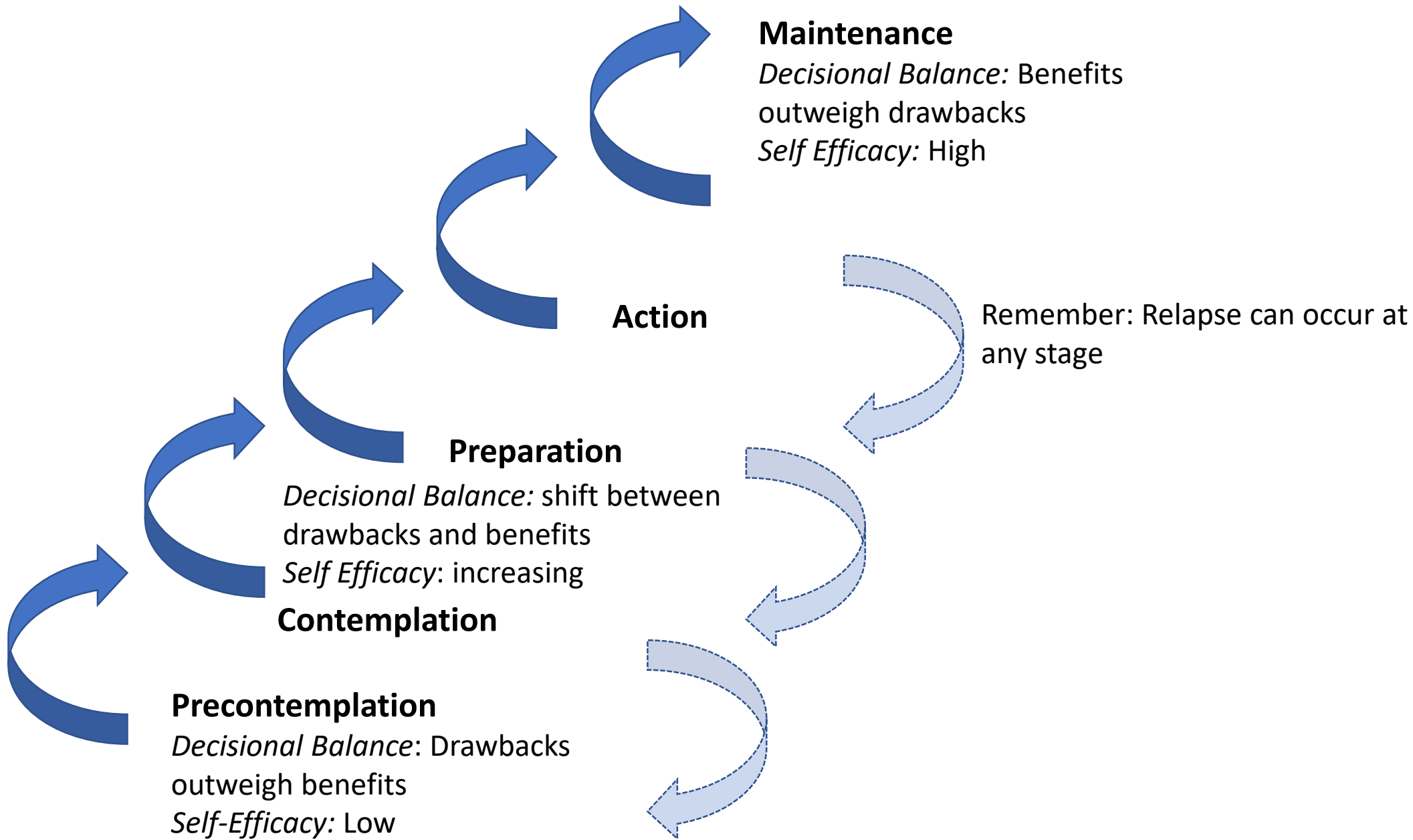
Decisional Balance

Individual considers
benefits and
drawbacks of target
behavior (Prochaska
et al., 1994)

Precontemplation:
drawbacks
outweigh benefits

Shift between
benefits and
drawbacks in
contemplation
and preparation

Action and
Maintenance:
Benefits
outweigh
drawbacks



Processes of Change

Consciousness raising

Self reevaluation

Self liberation

Counter conditioning

Stimulus control

Reinforcement management

Helping relationships

Dramatic relief

Environmental reevaluation

Social liberation

- Actions to initiate or assist in a behavior change
(Prochaska & DiClemente, 1982; Prochaska et al., 1992)
- Different processes are more effective for individuals in different stages of change

For more info about processes of change, check out Dr. Abrash Walton's webinar from Jan 2019: "Facilitating Pro-Environmental Behavior: How to Put the Transtheoretical Model of Behavior Change into Action"

Front end evaluations and TTM



What behaviors should be included in program objectives?



Is your goal to maintain common behaviors?



What barriers or motivations do people have?



Do people feel they are capable of taking action?

Formative evaluations and TTM

- What adjustments should be made based on stages of change of visitors to improve outcomes?
- Periodically taking the pulse of the audience will help with determining what types of adjustments might be needed



Summative evaluations and TTM

- Did your program/exhibit meet the behavioral objectives?
- Stages of change can be used in before and after surveys, including several months later, if possible



Example from Cleveland Metroparks Zoo

How do people in different stages of conservation behavior interpret Zoo messages?

- In which stage can Zoo visitors be placed for conservation behaviors?
- Are stages different for different groups of people?
- What barriers prevent people from exhibiting conservation behaviors?
- What encourages people to exhibit behaviors?



Quantitative Methods

- Survey with multiple items for each stage of change (example: Shaw et al., 2011)
 - Each item asks a slightly different element or wording to match a stage of change
 - Response options are level of agreement with each statement
 - One target behavior for the entire survey
- Survey with one item to determine stage of change
 - Each response action aligns to a different stage of change
 - Can have multiple behaviors on the same survey

Example survey item:

Share your support of a Cleveland Metroparks Zoo conservation initiative through social media

- I have never thought about doing this
- I am not interested in doing this
- I am slightly interested in doing this
- I am thinking about doing this
- I am planning on doing this in the next 6 months
- I do this sometimes
- I do this frequently
- I used to do this but do not anymore
- Not applicable

Survey Question from a different evaluation

Tell friends or family to never buy rhino horn or other products made from endangered wildlife

- a) I am not interested in doing this
- b) I am thinking about doing this
- c) I am planning on doing this in the next 6 months
- d) I have done this 1-4 times in the past year
- e) I have done this 5 or more times in the past year
- f) Not applicable

Qualitative methods

- Open ended survey questions or interviews
- Less common in TTM literature
- Supplement stage of change survey item
- Useful to explore commonalities and differences between people in different stages

CMZ example: mixed methods

11 target behaviors

Survey: 1 item for each behavior

Semi-structured interview: explain and explore differences between groups and stages of change

Findings from CMZ

- Primary stages of participants: precontemplation, contemplation, and action/maintenance
- Stages of change related to what was remembered from the Zoo visit.
- Action/maintenance stages more likely to remember conservation messages, and more specific conservation messages
- Some behaviors were mostly precontemplation; some behaviors had a higher percentage of participants in action or maintenance

Stage of change and decisional balance

Barriers

- Precontemplators: Time was top barrier. Described more barriers overall in interviews
- Contemplators and actors: Being unaware of the conservation behavior

Motivations

- Precontemplators and contemplators: Easy was top motivator
- Actors: Getting a reminder from the Zoo was top motivator. More actors described internal and emotional motivators such as caring. Described more motivations overall

Important to remember

- Stage of change shows you a snapshot in time at that moment
- People can fall back to earlier stages; not linear
- Only captures the behaviors you specifically ask about
- Self-report measures potential for bias

Where do we go from here?



- We still have lots to learn!
- Has anyone else used the TTM? I'd love to hear from you!

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We are here for you!

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