

Strategies for managing multidimensional time-related challenges for college students with learning and attention disorders



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Learning Objectives

1. At the conclusion of the session, participants will be able to describe the multidimensional aspects of time and identify potential linkages to interventions for transition age youth with L/AD in supporting their occupational performance.
2. At the conclusion of the session, participants will be able to identify strategies including cognitive, communication, self-evaluation, and daily strategies useful for students with L/AD in addressing difficulties associated with time-related challenges and reflect on how strategies may be implemented within the learner's practice.

Learning Disabilities (L/AD)

- Umbrella term – group of developmental disorders that affects the brain's ability to receive, process, store, and respond to information¹
 - Reading, math, writing disorders
 - Coordination disorder
 - Language, auditory processing disorders
 - Attention disorders

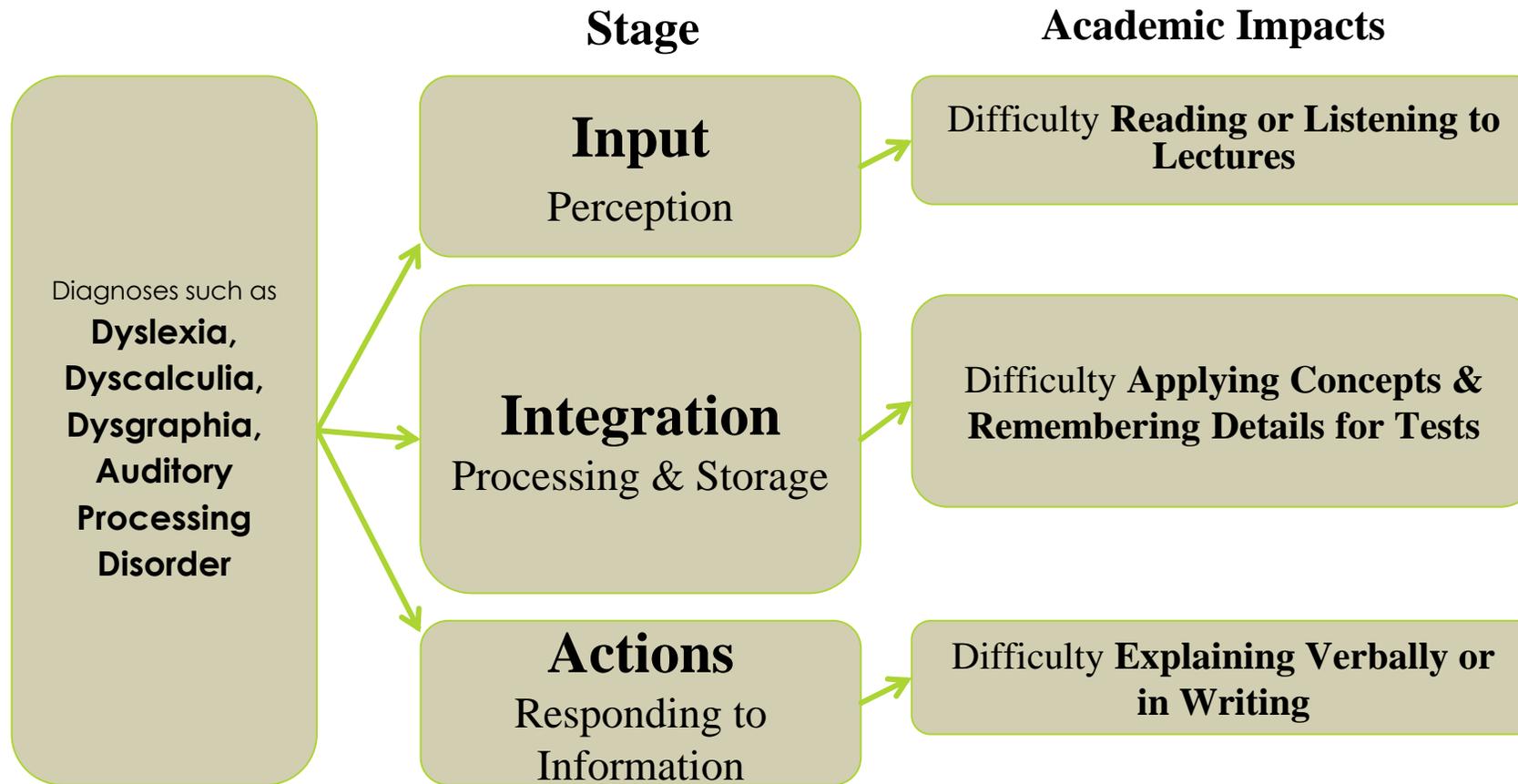
- Academic difficulties despite average or above average intelligence

The Youth's Challenge

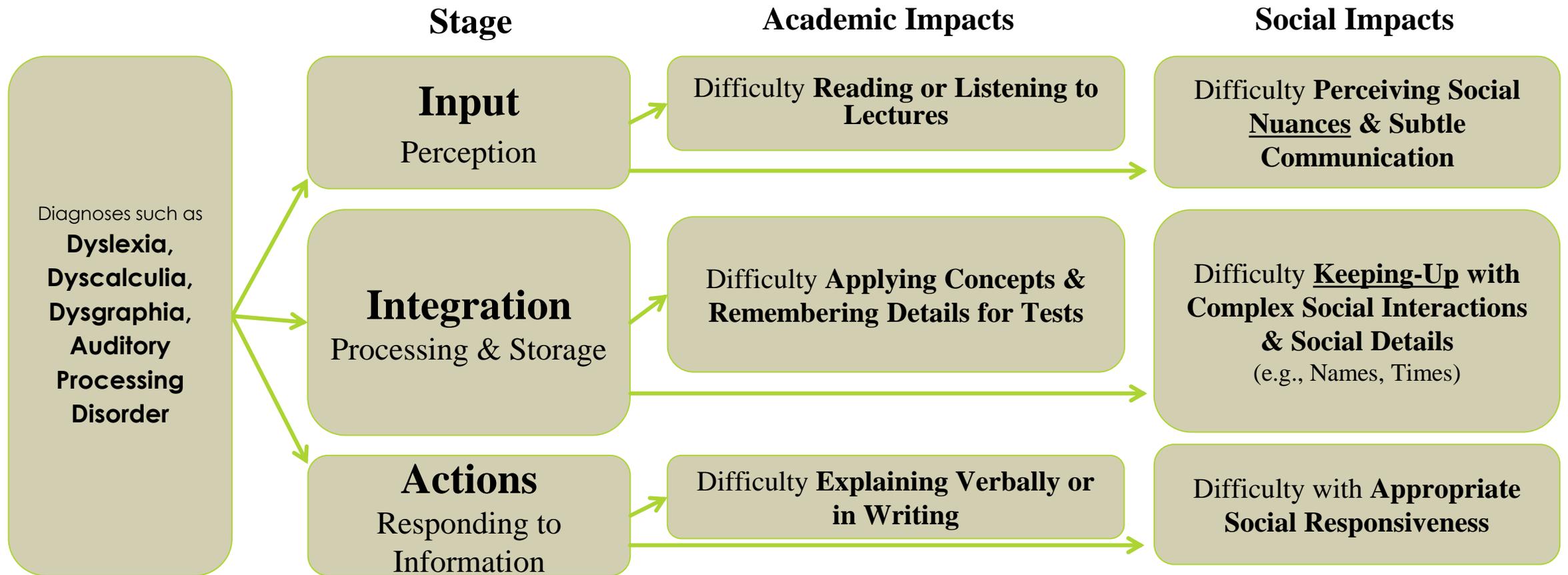
Older adolescents & young adults with developmental learning disorders must figure out the balance of how to:

1. Manage disability-related symptoms & challenges
2. Navigate new support systems and accommodations
3. Push beyond their disability-related difficulties to:
 - a. **Meet expectations** to achieve goals and work toward a meaningful career, and
 - b. Establish healthy **daily routines** and **interpersonal relationships**

L/AD Impacts of Information Processing Symptoms



L/AD Impacts of Information Processing Symptoms



Learning and Attention Disorders

SYMPTOMS

- Working memory
- **Flexible thinking**
- **Managing emotions**
- **Self-regulation**
- Organization and planning
- Difficulty with reading and writing
- Clumsiness
- **Temporal processing deficit**
- Difficulty staying focused
- **Impulsiveness**
- **Difficulty with social interactions**
- Decreased processing speed

Comparison of Executive Function Symptoms in LD/AD

LEARNING DISORDERS VARVARA ET AL 2014
[HTTPS://DOI.ORG/10.3389/FNHUM.2014.00120](https://doi.org/10.3389/fnhum.2014.00120)

Executive Attention

Working memory (WM) (maintaining relevant information)

Inhibition (of irrelevant information)

Auditory attention & verbal WM

- **Temporal coding**

Visual spatial attention and WM

Executive self-regulation: On-line awareness & mental flexibility (monitoring & problem solving in the moment)

ATTENTION DISORDERS BARKLEY 1997
[HTTP://DX.DOI.ORG/10.1037/0033-2909.121.1.65](http://dx.doi.org/10.1037/0033-2909.121.1.65)

Attention

Working memory

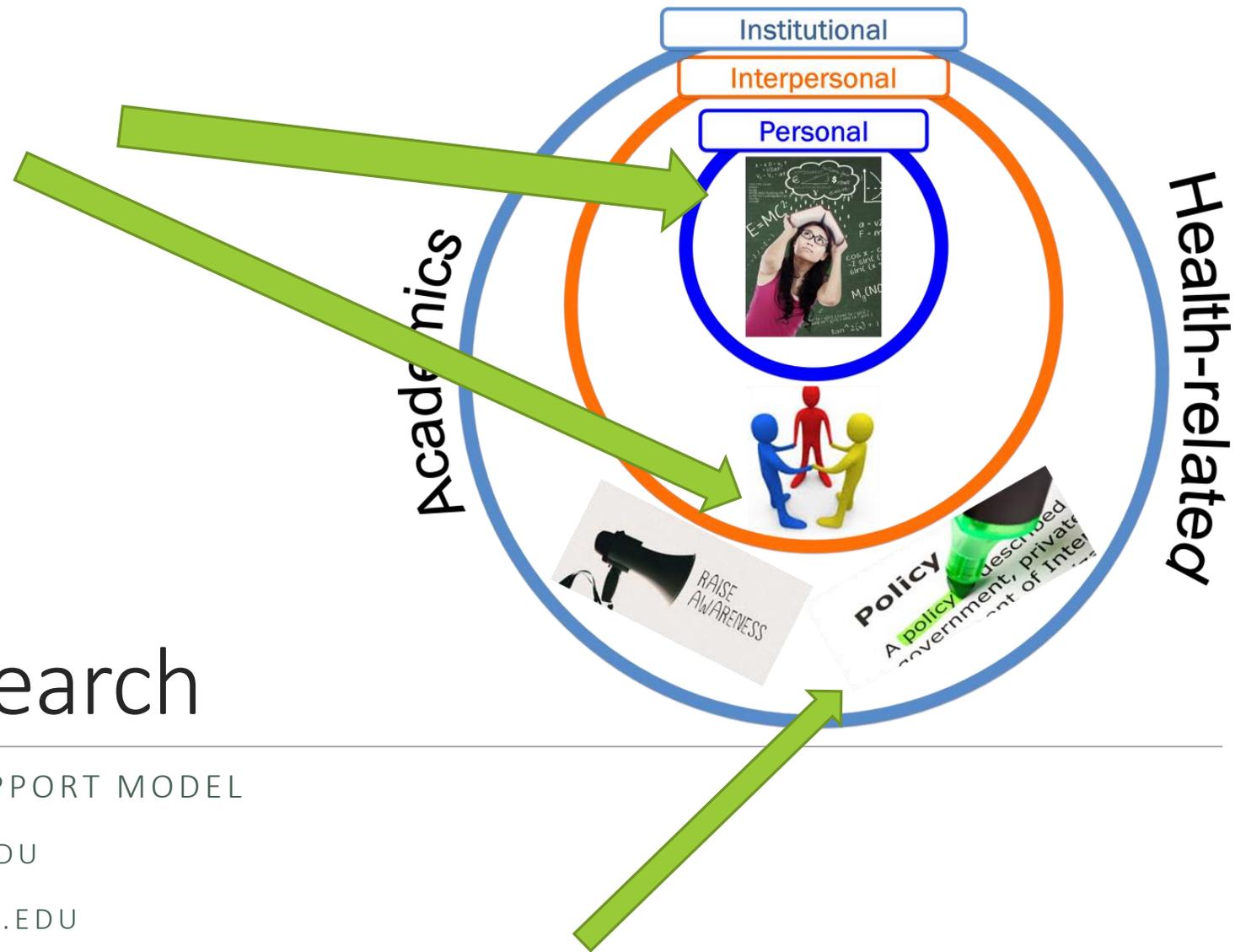
Inhibitory control

Time perception

Self-regulation of:

- Affect
- Motivation
- Arousal

Mental flexibility



From our Research

CS3LD COMPREHENSIVE SUPPORT MODEL

WWW.KREIDERLAB.PHHP.UFL.EDU

WWW.STEMSCHOLAR.PHHP.UFL.EDU

Roles as College Students with L/AD

"We're [students w/LD] actually the ones that can complete the task. Just at a certain twist. But we still are able to find that missing piece." U29

"Now I'm more comfortable talking about it, it's not an excuse for anything, but more just like this is a part of me, **this is who I am, deal with it.**" U1

I find it difficult to make time for my friends while achieving my academic goals, and I feel that my friendships suffer as a result." U41

- College student
- A friend
- A significant other

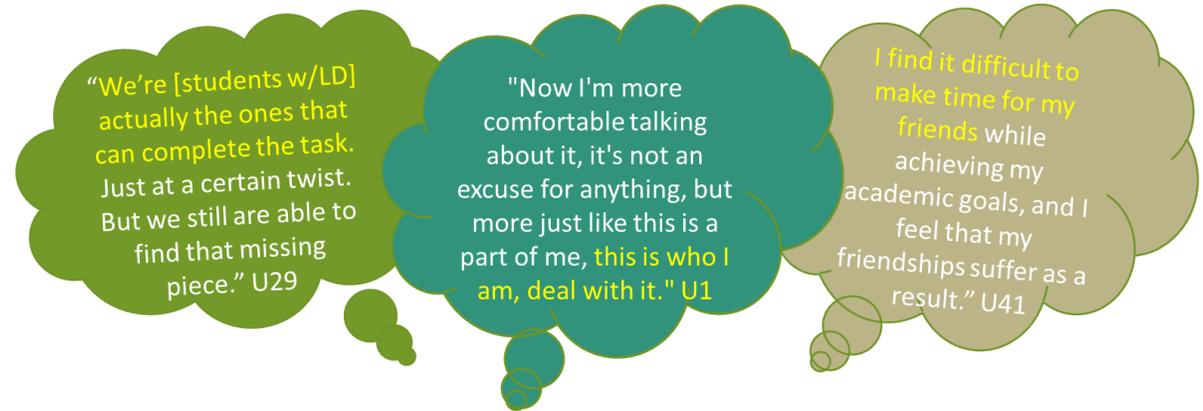
- A roommate
- College student with L/AD
- An individual with L/AD

What other roles?

INSTRUCTIONS: text your response

- Text JIANNEAPOSTO913 to 22333 once to join
- THEN text your response
- Word Cloud

Roles as College Students with L/AD



- College student
- A friend

- A significant other
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- An individual with L/AD

Why is Time an Obstacle?

How do we as OT's address time related challenges in our interventions and assessments?

How do you do it? Turn to your neighbor

College students with learning and attention disorders (L/AD) experience time related to time

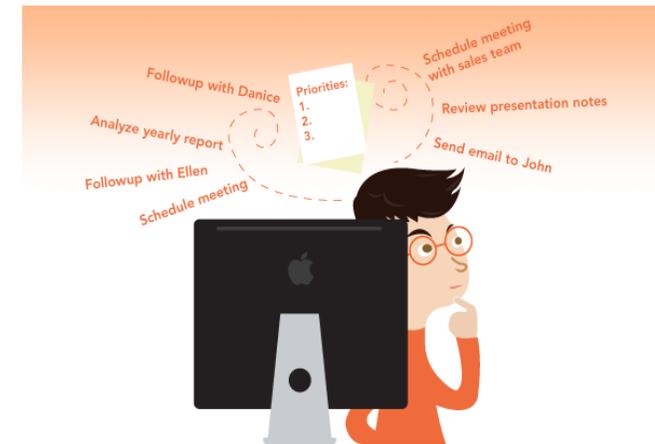
- Managing time and their invisible disability

Cognitive processing difficulties can interfere with occupational performance

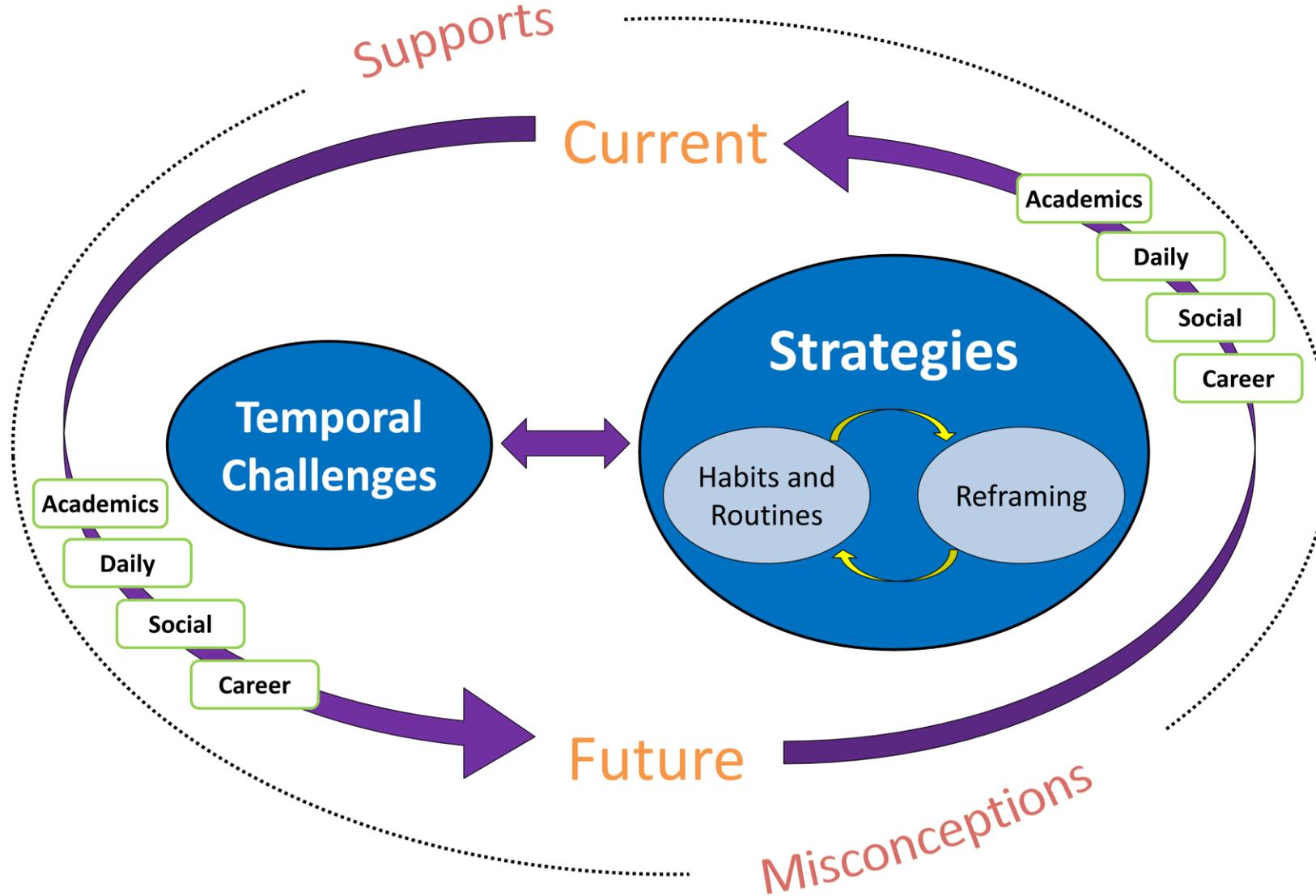
- Temporal understanding
- Processing speed
- Working memory

These difficulties can impact effective management of time with regard to

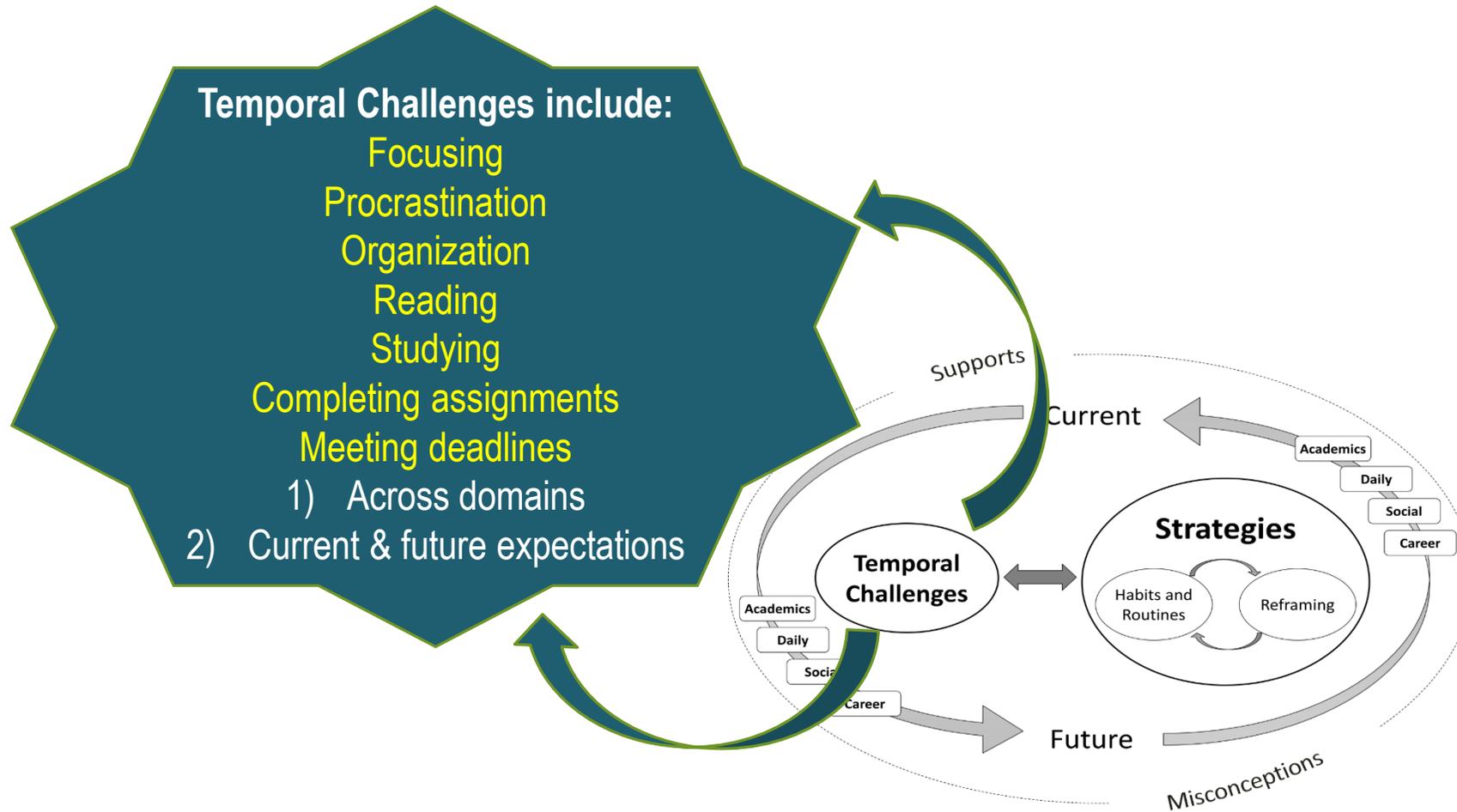
- Daily routines
- Social roles
- Academics
- Career planning



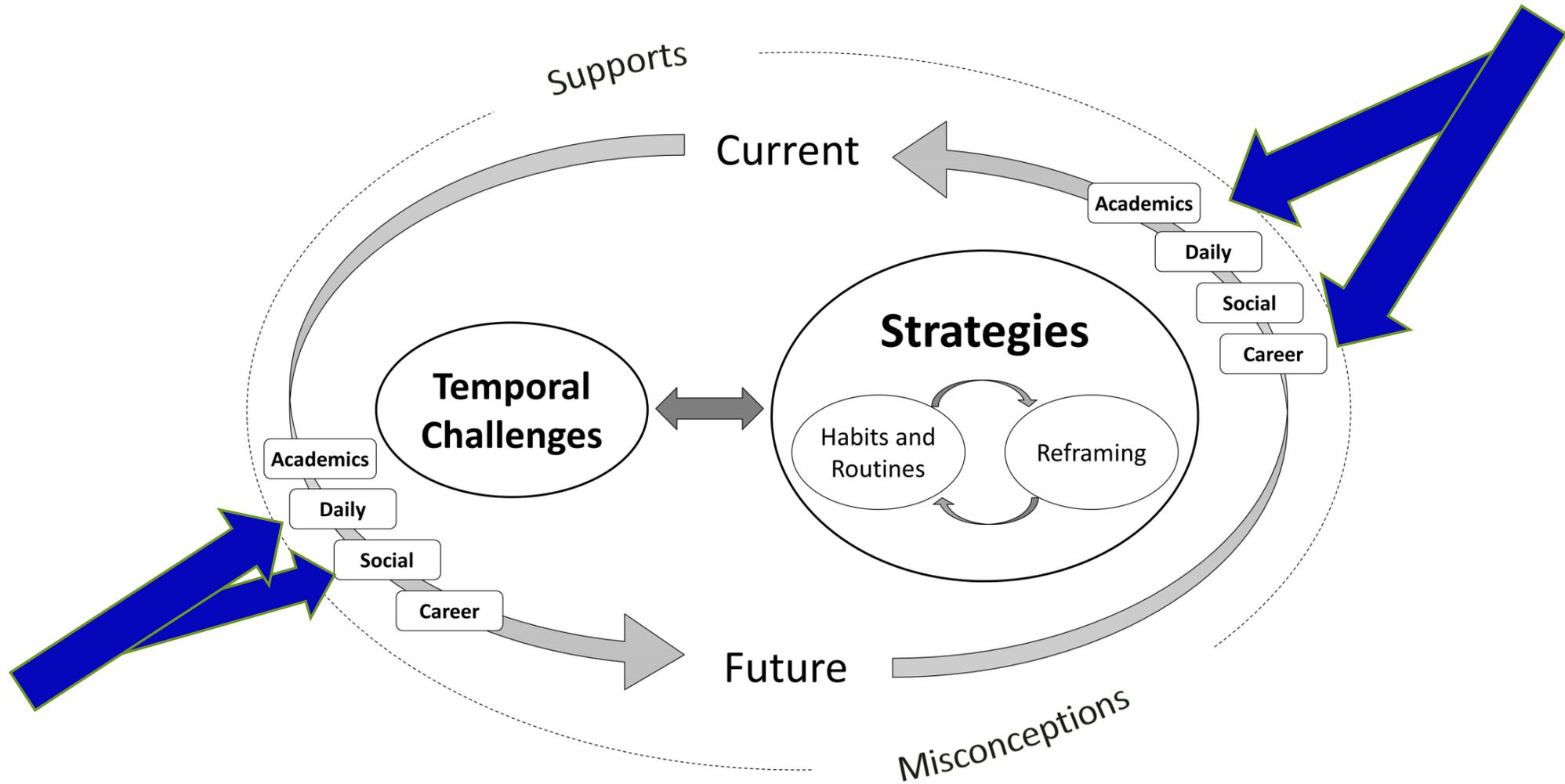
Model of Temporal Experiences



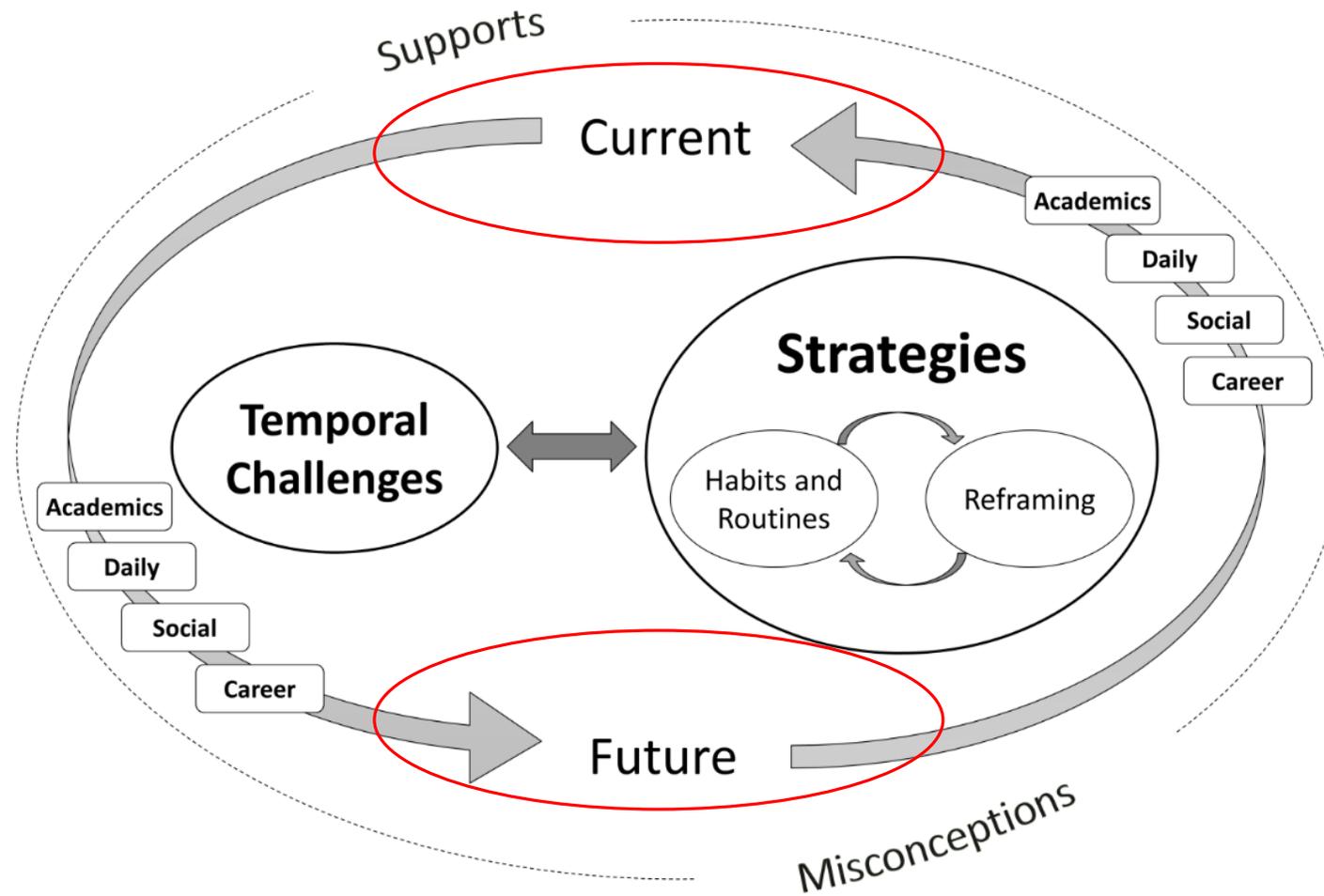
Model of Temporal Experiences



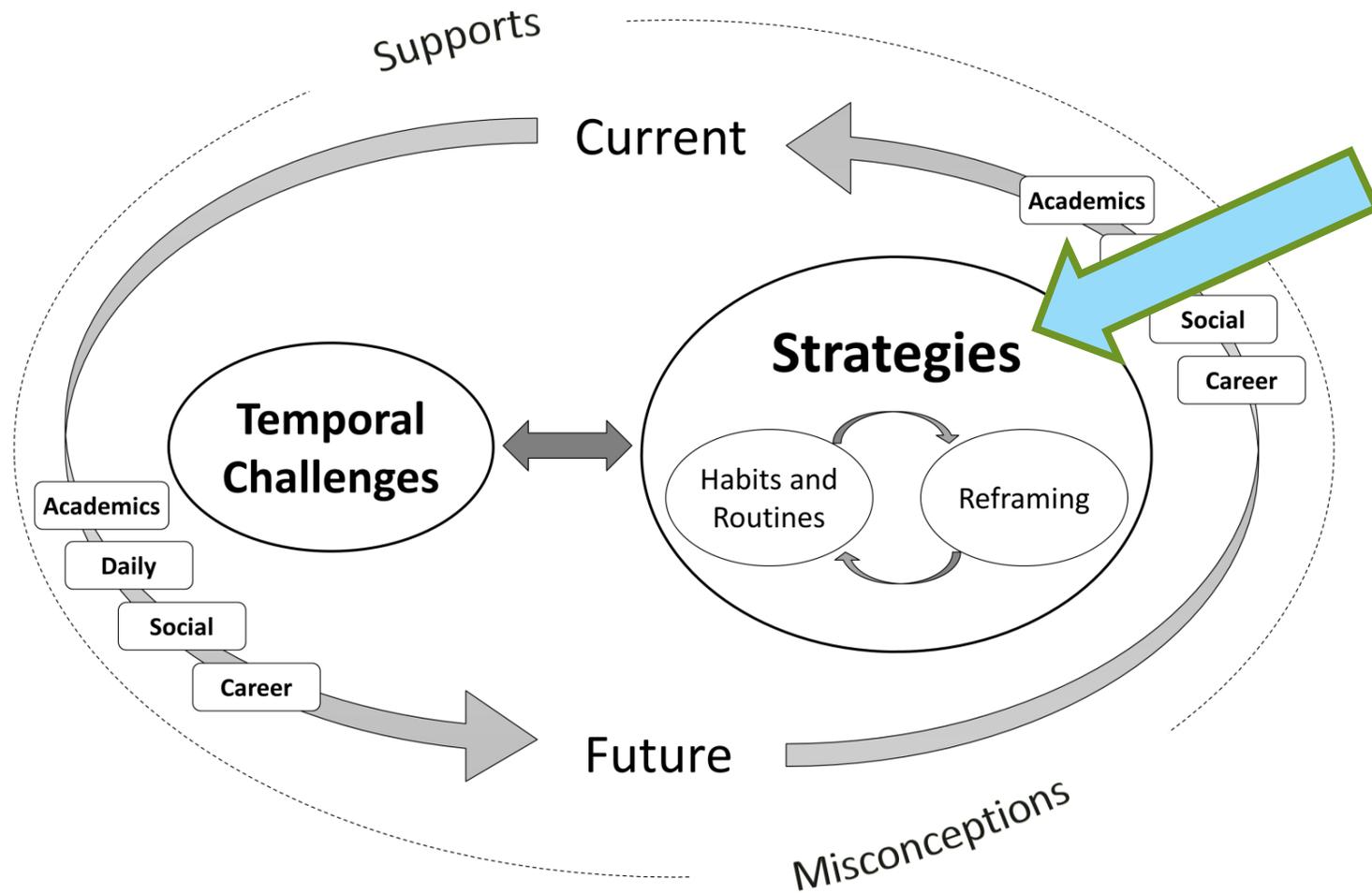
Model of Temporal Experiences



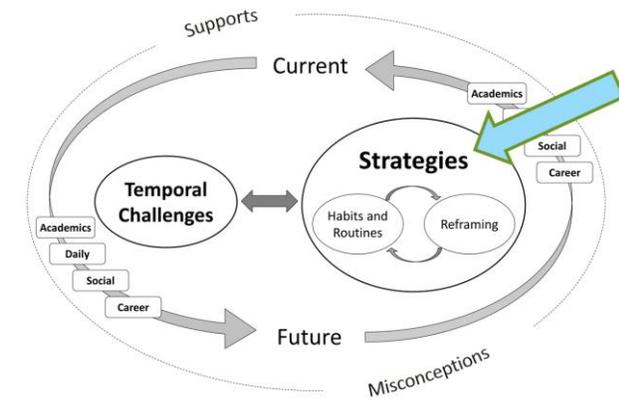
Model of Temporal Experiences



Model of Temporal Experiences



Reframing Diagnostically-related Differences



Why reframe?

- *Understand self*
- *Recognize strengths*
- *Advocate to others*

Change of perspective

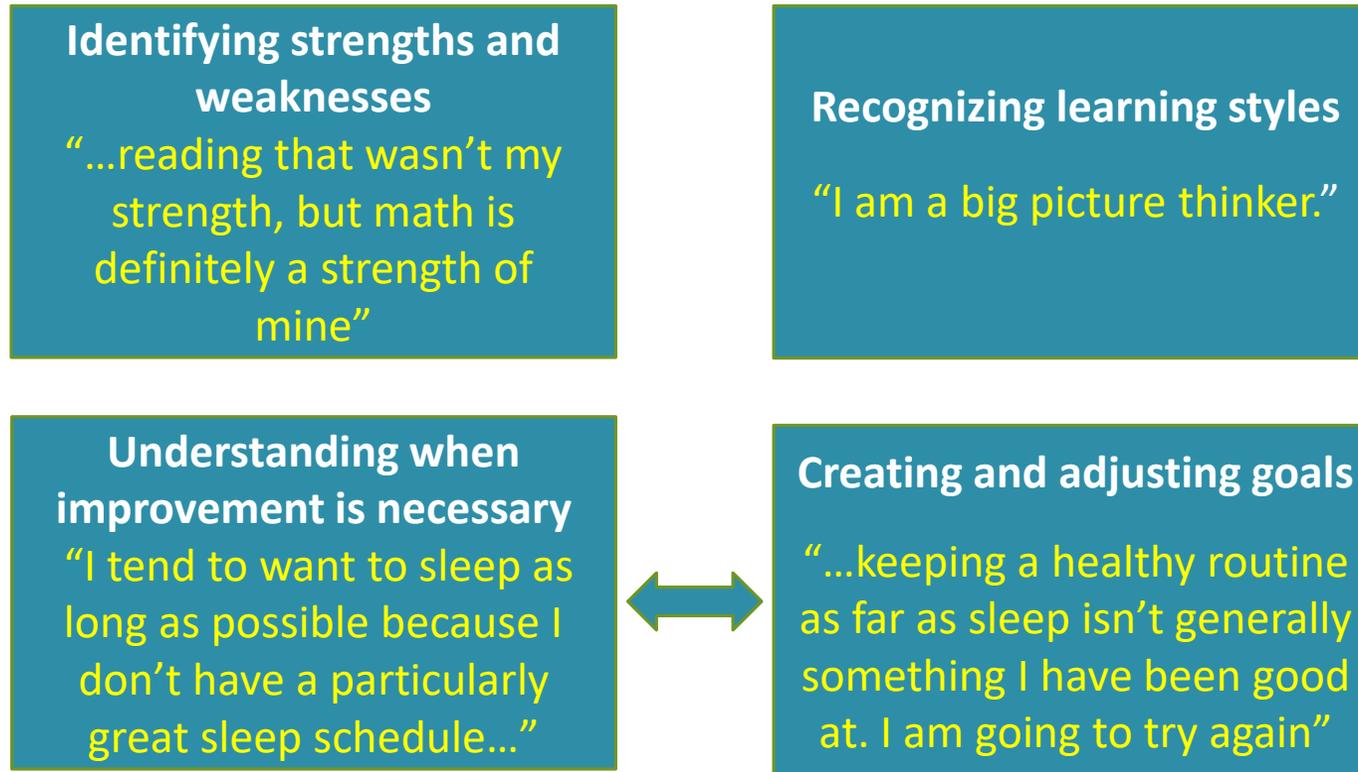
For Self

Insight & Acceptance
 "...we're eventually going to be able to solve it. It just takes -- going through different possibilities of what it can be..." -U6
 "Having patience and understanding the fact that I have an LD can help me more towards my academic goals." -U44

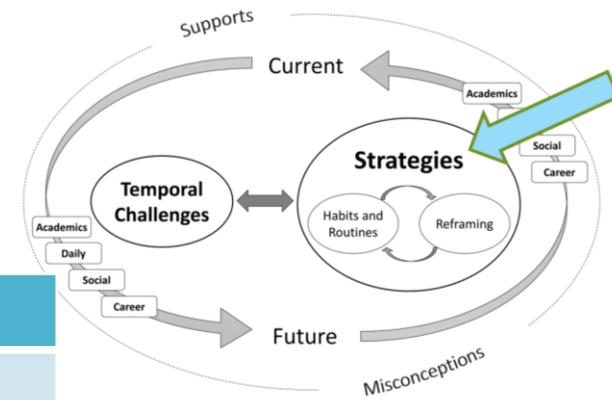
For Others

Instructors & Peers
 "...Some of the accommodations that I also talk to my professors about is just like, "Hey, can you just leave it on the board for a little bit longer, some of the material?" ... I mean that's not... myself... but other students I know who also complain about the same issue." -U12

Self-Evaluation: How they reframe



Habits & Routines used by Undergrads



Habits/Routines	Specific strategies
Establishing planning systems	<ol style="list-style-type: none"> 1. Creating and operationalizing a planning system <ul style="list-style-type: none"> • daily, weekly, monthly, semester, and yearly (courses) 2. Planning the day
Creating and using reminder systems	<ol style="list-style-type: none"> 1. Checklists <ul style="list-style-type: none"> • Written & mental • Importance of finding “just right” cue >> too many words on list, overly detailed, too many steps/items 2. Reminder systems > apps; others (roommates/friends) 3. High-frequency checking of course website
Using prioritization strategies	<ol style="list-style-type: none"> 1. Strategies for balancing academic and social demands <ul style="list-style-type: none"> • Balancing via double dipping • Using awareness of L/AD symptoms to determine an action plan <ul style="list-style-type: none"> • Example: good at math-get it done quickly/first, need a break-hang out with friends 2. Hierarchy of prioritizations – continually check, refine, and tailor based on daily contexts and evolving career goals

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“I have a general life calendar that is all encompassing both personal and things I need to do.”

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“ I tend to think things through in the morning or the day and make like a list on my iPhone notes, it’s not the most organized method but I organize my thoughts and determine what I need to accomplish during the day...”

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“If I am scheduled to do something with someone and I have to cancel because I have something due the next day and I hadn’t bothered to do it until then.”

Strategies & Expectations

Toglia's Definition of Strategies

Game plan for
achieving a
purpose

Strategy: the behaviors and thoughts that a person uses in an attempt to *enhance information processing, efficiency or performance*, and in turn, achieve success in the activity

Strategy use = application of “how to” knowledge

Cognitive strategies: a class of strategies, they are put into place to help learn, memorize, and problem solve; a guide that supports the learner in developing internal procedures that enable him/her to perform.

- This includes:
 - learner's strategy use
 - his or her metacognition
 - self-regulation (which represents ways in which a learner changes his or her approach to a problem) as he or she tries to perform the activity.

Strategy Training

What should strategy intervention entail?

Toglia et al. 2012

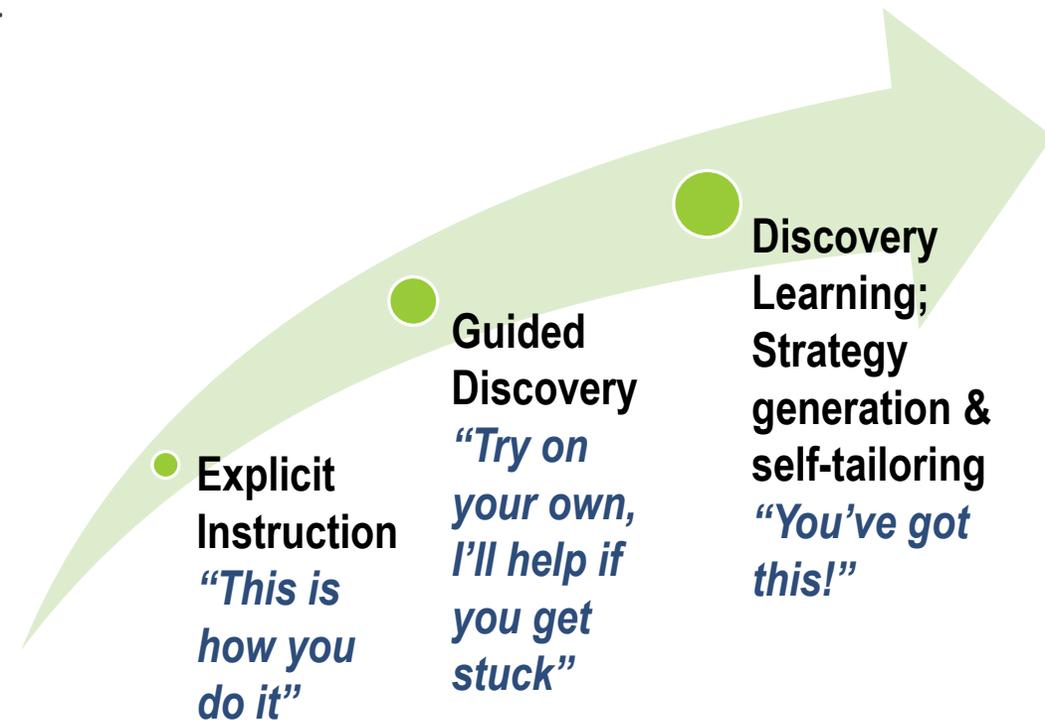
Must go beyond showing & having the person do the strategy. They must help the person ____ the strategies

1. Discover
2. Understand
3. Anticipate
4. Recognize the need for

They must help the person know when the strategy needs to be ____ within the context of an activity

1. Used
2. Modified
3. Adjusted

Continuum of Support in Strategy Use



Strategy Training (top down)

What does independent strategy use entail?

(Table 4 from Toglia et al. 2012)

1. Self-generation of strategies

- Some can execute the strategy in everyday life settings, but cannot generate strategies (need others to provide strategy)

2. Strategy execution that:

- Is complete, accurate, efficiently executed/used
- Is Monitored or evaluated as to its effectiveness
- Considers # of strategies being used at the same time

3. Considerations regarding quality of strategy use:

- Efficient timing
- Ability to adjust or switch strategies when needed
- Amount of effort needed to execute

4. Task demands and strategy requirements (e.g. number of simultaneous strategies to be used) that are matched with the person's cognitive abilities

5. Ability for ongoing monitoring and evaluation of strategy use

- Ability to recognize performance errors
- Ability to know that the strategy is not working

Developmental Expectations

What do we expect based on this age group?

Taking care of self

Getting out the door

- with everything need
 - things/objects
 - plan for day
- on time
- looking presentable

Self-regulate

- emotions
- tasks >> problem-solving
- social interactions

College/career

**But what about
diagnostically-related
expectations or demands?**

INSTRUCTIONS: text your response

- Text JIANNEAPOSTO913 to 22333 once to join
- THEN text your response
- [Word Cloud](#)

Diagnostically-related Demands From the data

What's involved in managing the LD & ADHD related symptoms?

Advocacy

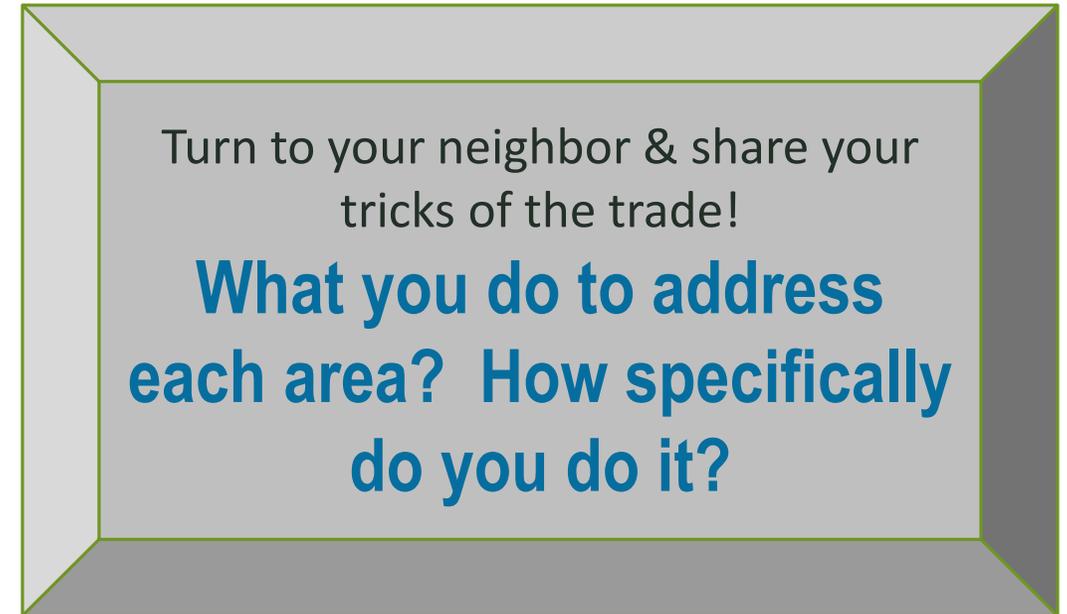
- managing accommodation
- able to talk about dx & symptoms
 - understanding the dx & symptoms
 - across contexts
- garnering supports/supporters

Health

- meds
- psychological supports

Prevention

- situations that make symptoms worse
- situations where can optimally perform (e.g., sleep)



Demands dictate strategies

DEVELOPMENTAL EXPECTATIONS

WHAT DO WE EXPECT BASED ON AGE GROUP?

Taking care of self

Getting out the door

- with everything need
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Self-regulate

- emotions
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College/career

DIAGNOSIS-RELATED DEMANDS

WHAT'S INVOLVED IN MANAGING THE LD & ADHD RELATED SYMPTOMS?

Advocacy

- managing accommodation
- able to talk about dx & symptoms
 - understanding the dx & symptoms
 - across contexts
- garnering supports/supporters

Health

- meds
- psychological supports

Prevention

- situations that make symptoms worse
- situations where can optimally perform (e.g., sleep)

Specific Strategies from our Participants

- Google Calendar
- Double dipping – being with friends while studying
- **Advocating and educating others**
- **Being persistent with professors**
- Taking breaks
- Going to resources on campus – Counseling and Wellness Center
- Seeking assistance
- Color coding planner
- Physical activity
- Eating healthy
- Meditation
- **Knowing own strengths and weaknesses of L/AD**
- Positive self-talk
- **Reframing thoughts about L/AD**
- Learning to accept themselves
- **Establishing habits and routines**

Symptoms

- Learning
- Processing speed, encoding differences (e.g., auditory/ visual skills)
- Focus & attention
- Memory
- Planning, prioritization, organization
- Temporal perceptual differences

Strategy: Communication & Everyday Advocacy

Everyday Advocacy: communication + the little things done within everyday lives to ensure needs met

Actions

Strategies		Forced Advocacy	Confidence to talk about L/AD needs & strategies
Time Management	Health & Wellness	Accommodations	Supports
Symptom Awareness & Understanding		Addressing threats to Sense of Support	Personal Strengths & self-awareness

Foundation

Strategy Mixing & Matching Across Contexts

Example Strategies: Knowing self & communicating

Classroom *issue = teacher/group pace*

- communicating needs to teacher & classmates; speaking up when needed
- teaching talking too fast; need to leave on the board longer

Interpersonal interactions *issue: how to remember what you want to say without interrupting*

- aware friend groups
- double dipping

Daily & community life *issue = not taking on too much*

- Visual cues
- Establishing routines
- Other's help – send reminders

Facilitating Strategy Tailoring/Personalization for Productive Performance

Think about your work context & home context (e.g., keeping up w/ household chores).

1. What are your strategies for ensuring a productive work day? – in other words what are the rules you live by? What do you do to make sure that you make it happen?
2. What or who helps ensure you're able to use these strategies at work? What hinders strategy use?
3. Now think about productive performance at home. What are your rules/strategies for home?
4. Who or what helps ensure you're able to use these home strategies? What hinders strategy use at home?
5. Are there parallels across your work and home environment?
 - ✓ Are they fundamentally the same strategies that have been tailored for both places?
 - ✓ Are there strategies that are uniquely different for each context?

How do we help clients tailor their strategies and extend strategies across contexts?





Questions?

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Research Team – it takes a village...



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