The Model of Achievement Competence Motivation (MACM):
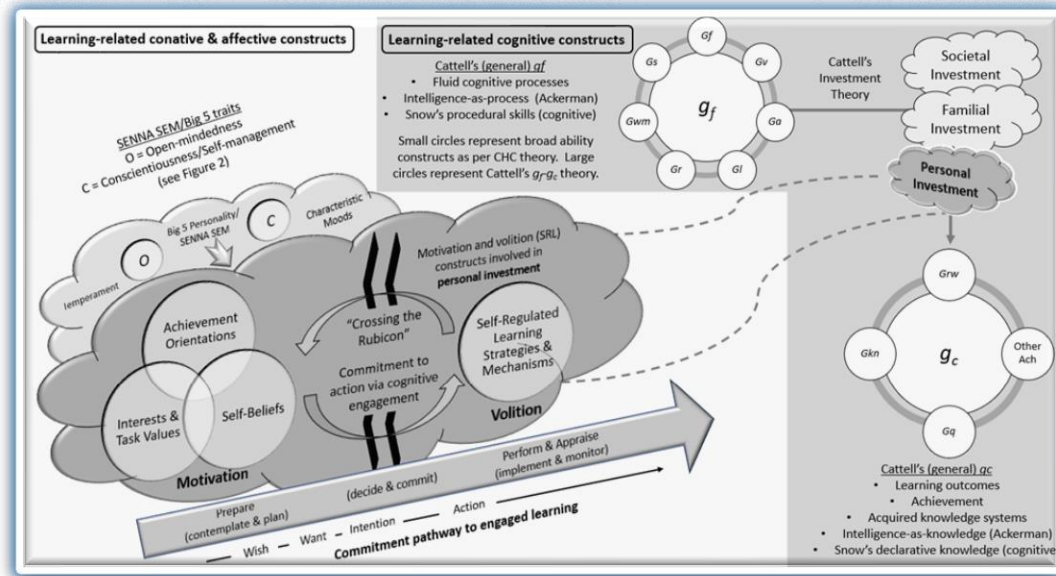## The motivation domains defined
(K. McGrew 01-06-2021)

These slides are provided as supplements to *The Model of Achievement Competence Motivation (MACM): Standing on the shoulders of giants* (McGrew, in press, 2021—for special issue on motivation in *Canadian Journal of School Psychology*). The slides in this PPT/PDF module can be used without permission for educational (not commercial) purposes.

The Model of Achievement Competence Motivation (MACM):
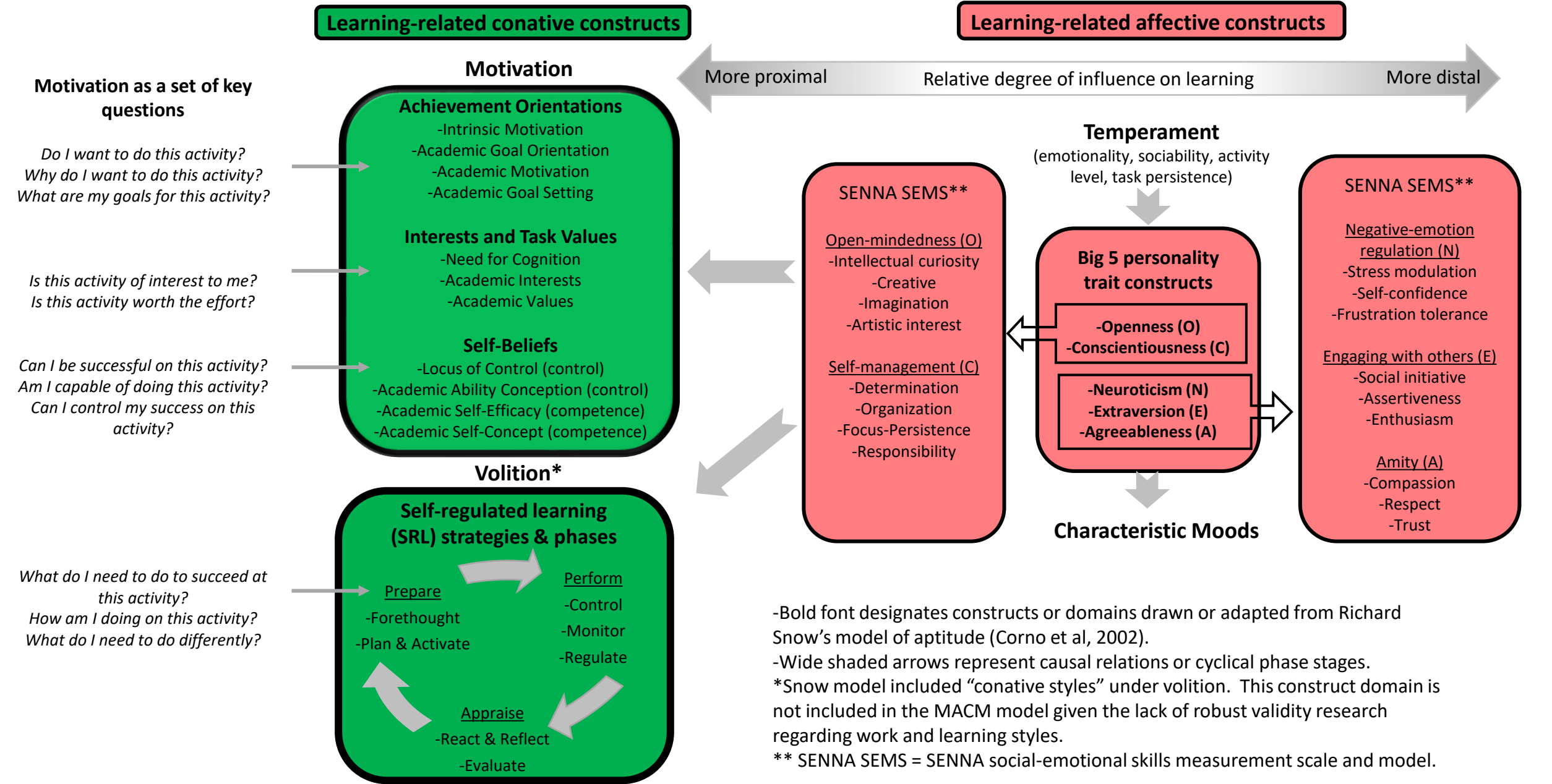## The motivation domains defined
(K. McGrew 01-06-2021)

This is the third in the MACM series of on-line PPT modules. The first, the Introduction to the model is available at:

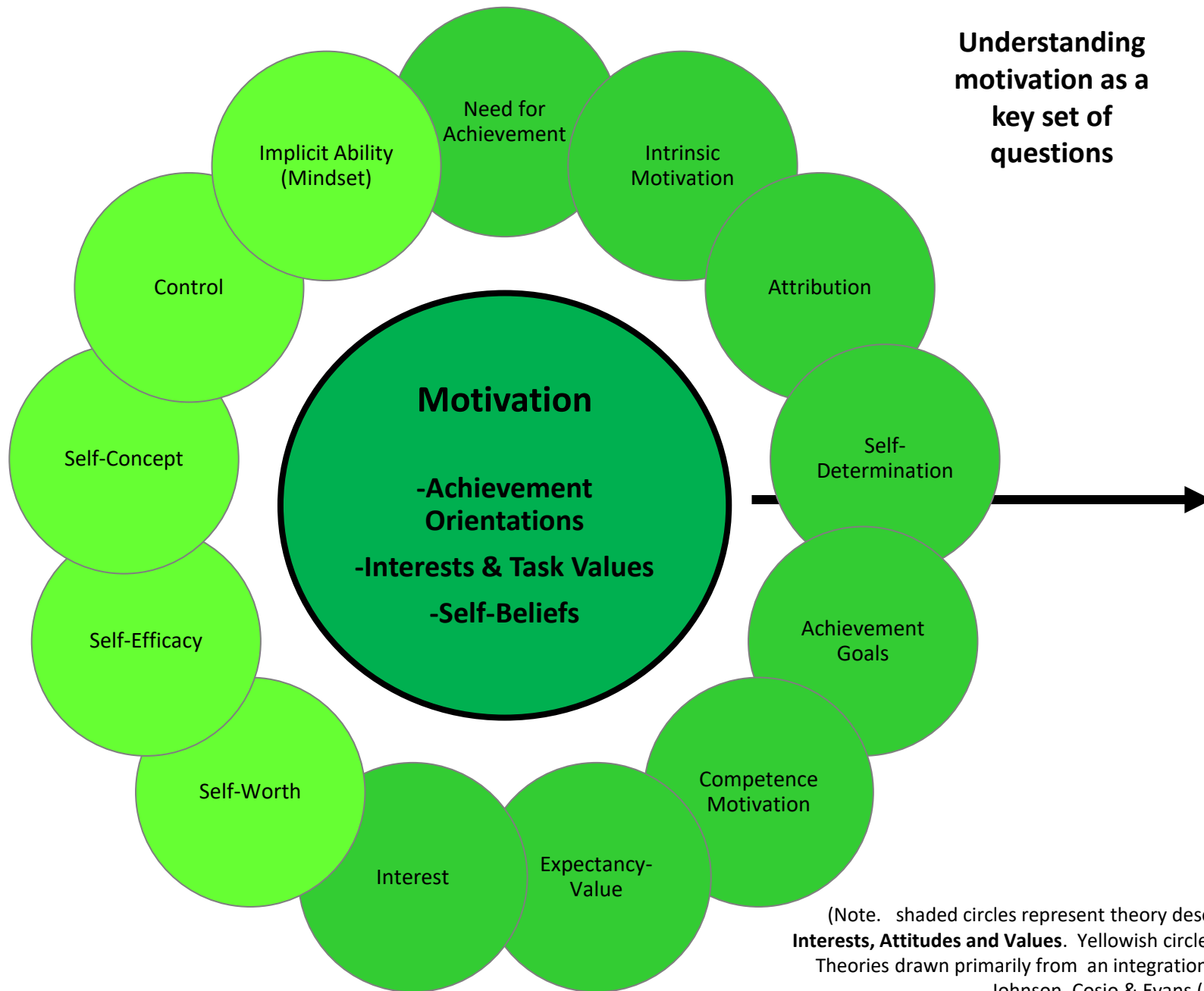https://www.slideshare.net/iapsych/the-model-of-achievement-competence-motivation-macm-part-a-introduction-of-series

The second, the Model Overview is available at:

https://www.slideshare.net/iapsych/the-model-of-achievement-competence-motivation-macm-part-b-an-overview-of-the-model

A proposed *Model of Achievement Competence Motivation (MACM):* Integration of Snow's affective (*aff*) and conative (*con*) construct domains (*affcon*) (McGrew, 2020)

Learning-related conative constructs

Learning-related affective constructs

More proximal — Relative degree of influence on learning — More distal

Motivation

Motivation as a set of key questions

Do I want to do this activity?
Why do I want to do this activity?
What are my goals for this activity?

Achievement Orientations
-Intrinsic Motivation
-Academic Goal Orientation
-Academic Motivation
-Academic Goal Setting

Is this activity of interest to me?
Is this activity worth the effort?

Interests and Task Values
-Need for Cognition
-Academic Interests
-Academic Values

Can I be successful on this activity?
Am I capable of doing this activity?
Can I control my success on this activity?

Self-Beliefs
-Locus of Control (control)
-Academic Ability Conception (control)
-Academic Self-Efficacy (competence)
-Academic Self-Concept (competence)

Volition*

Temperament
(emotionality, sociability, activity level, task persistence)

SENNA SEMS**

Open-mindedness (O)
-Intellectual curiosity
-Creative
-Imagination
-Artistic interest

Self-management (C)
-Determination
-Organization
-Focus-Persistence
-Responsibility

Big 5 personality trait constructs

-**Openness (O)**
-**Conscientiousness (C)**

-**Neuroticism (N)**
-**Extraversion (E)**
-**Agreeableness (A)**

Characteristic Moods

SENNA SEMS**

Negative-emotion regulation (N)
-Stress modulation
-Self-confidence
-Frustration tolerance

Engaging with others (E)
-Social initiative
-Assertiveness
-Enthusiasm

Amity (A)
-Compassion
-Respect
-Trust

Self-regulated learning (SRL) strategies & phases

What do I need to do to succeed at this activity?
How am I doing on this activity?
What do I need to do differently?

Prepare
-Forethought
-Plan & Activate

Perform
-Control
-Monitor
-Regulate

Appraise
-React & Reflect
-Evaluate

-Bold font designates constructs or domains drawn or adapted from Richard Snow's model of aptitude (Corno et al, 2002).
-Wide shaded arrows represent causal relations or cyclical phase stages.
*Snow model included "conative styles" under volition. This construct domain is not included in the MACM model given the lack of robust validity research regarding work and learning styles.
** SENNA SEMS = SENNA social-emotional skills measurement scale and model.

Understanding motivation as a key set of questions

Motivation
-Achievement Orientations
-Interests & Task Values
-Self-Beliefs

Implicit Ability (Mindset)

Need for Achievement

Intrinsic Motivation

Control

Attribution

Self-Concept

Self-Determination

Self-Efficacy

Achievement Goals

Self-Worth

Competence Motivation

Interest

Expectancy-Value

Do I want to do this activity?
Why do I want to do this activity?
What are my goals for this activity?

Achievement Orientations
-Intrinsic Motivation
-Academic Goal Orientation
-Academic Motivation
-Academic Goal Setting

Is this activity of interest to me?
Is this activity worth the effort?

Interest, Attitudes and Task Values
-Need for Cognition
-Academic Interests & Attitudes
-Academic Values

Can I be successful on this activity?
Am I capable of doing this activity?
Can I control my success on this activity?

Self-Beliefs
-Locus of Control (control)
-Academic Ability Conception (control)
-Academic Self-Efficacy (competence)
-Academic Self-Concept (competence)

(Note. shaded circles represent theory descriptions most associated with **Achievement Orientations** and **Interests, Attitudes and Values**. Yellowish circles represent theory descriptions most associated with **Self-Beliefs**. Theories drawn primarily from an integration of Eccles & Wigfield (2002), Wigfield & Eccles (2002), McGrew, Johnson, Cosio & Evans (2004) and by Elliot, Dweck & Yeager, 2017)

MACM currently addresses two major conative domains of learner characteristics
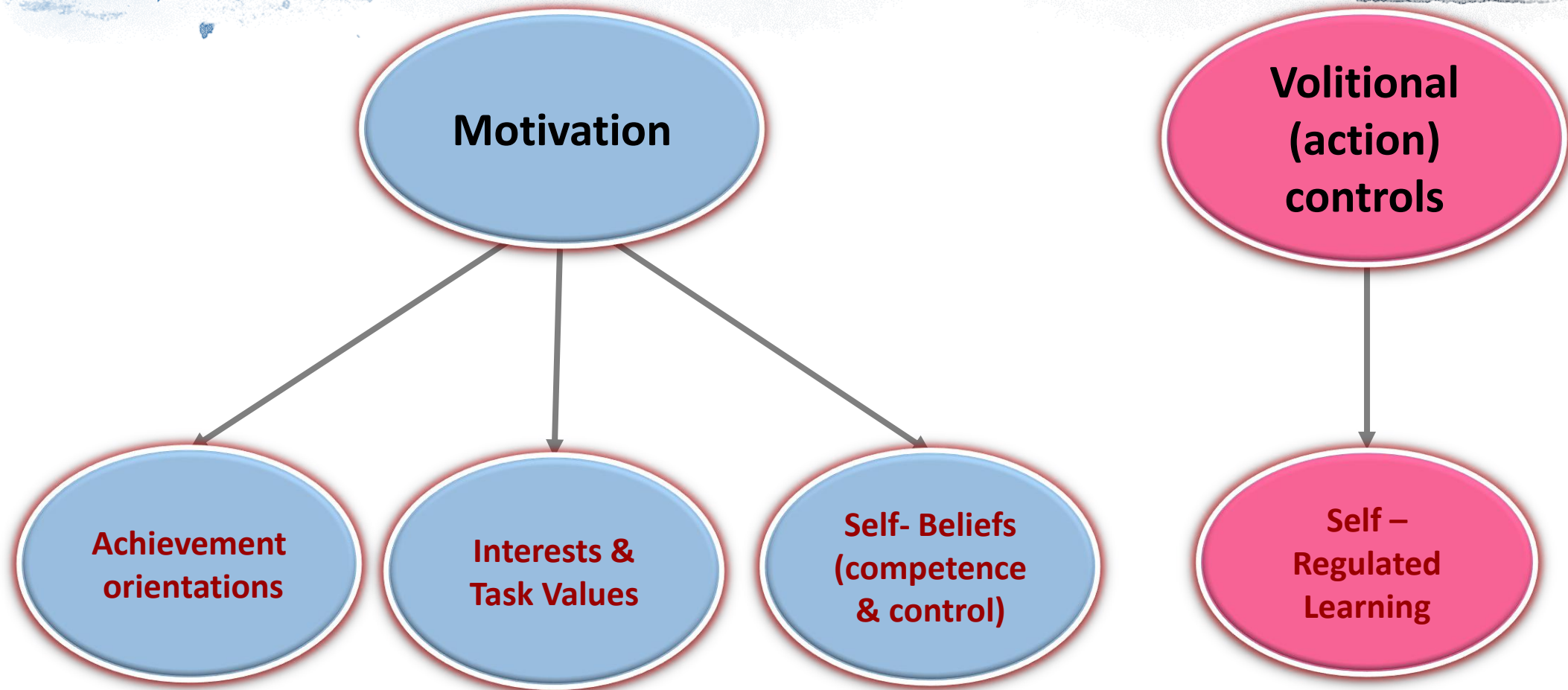
Motivation: Question Set # 1

Do I **want** to do this activity?

Why do I want to do this activity?

What are my goals for this activity?

"Is this activity of **interest** to me?"

"Is this activity **worth the effort**?"

Achievement orientations

Interests & Task Values

Achievement orientations

Achievement orientations: Motivational processes during the preparatory, deliberation or pre-decisional phase of learning that are primarily focused on **the source of motivation** (e.g., goals and incentives) that contributes to a readiness to act. Processes, during the wish-->want-->intention-->action commitment stages, that focus primarily on selecting goals (i.e., **do I want to do this activity? what are my goals for this activity?**).

Achievement orientations

Intrinsic Motivation: When a person engages in an activity because they are interested in and enjoy the activity (e.g., they perform the activity **for the sake of doing it**—for the enjoyment, fun or pleasure) and not because the activity will produce a reward, gain or result in the avoidance of a negative consequence.

Academic Goal Orientation: A person's set of beliefs that reflect the **reasons why** they approach and engage in academic learning tasks. A **performance goal orientation** reflects a concern for personal ability, a normative social comparison with others, preoccupation with the perception of others, and a need to avoid looking incompetent. A **learning or mastery goal orientation** reflects a focus on task completion and understanding, learning, mastery, solving problems, and developing new skills.

Achievement orientations

Academic Motivation: A person's desired **hope for success (as reflected in approach, persistence, and level of interest)** in academic subjects when competence is judged against a standard of performance or excellence. Can also involve an implicit or explicit desire to avoid negative outcomes and associated emotions (fear of failure).

Academic Goal Setting: A person's ability to **set and prioritize appropriate and realistic short-(proximal) and long-term (distal) academic goals** that serve to direct attention, effort, energy, and persistence toward goal-relevant activities (and way from goal-irrelevant activities). (May be part of the prepatory phase of self-regulated learning instead.

Achievement Orientations: Goal Orientation Research Ongoing: Two of Many Research Syntheses

The Contributions and Prospects of Goal Orientation Theory

Avi Kaplan · Martin L. Maehr

A Meta-Analytic Examination of the Goal Orientation Nomological Net

Stephanie C. Payne and Satoris S. Youngcourt
Texas A&M University

J. Matthew Beaubien
Aptima, Inc.

Academic Goal Orientation: A person's set of beliefs that reflect the reasons why they approach and engage in academic learning tasks. A **performance goal orientation** reflects a concern for personal ability, a normative social comparison with others, preoccupation with the perception of others, and a need to avoid looking incompetent. A **learning or mastery goal orientation** reflects a focus on task completion and understanding, learning, mastery, solving problems, and developing new skills.

GOAL ORIENTATION META-ANALYSIS

Antecedents
- Cognitive Ability
- Implicit Theory of Intelligence
- Need for Achievement
- Personality
- General Self-efficacy
- Self-esteem

Goal Orientation Dimensions
- Learning
- Prove Performance
- Avoid Performance

Proximal Consequences
- State Learning GO
- State Prove Performance GO
- State Avoid Performance GO
- Specific Self-efficacy
- Self-set Goal Level
- Learning Strategies
- Feedback Seeking
- State Anxiety

Distal Consequences
- Learning
- Academic Performance
- Task Performance
- Job Performance

Figure 1. Organizing framework for the variables examined. GO = goal orientation.
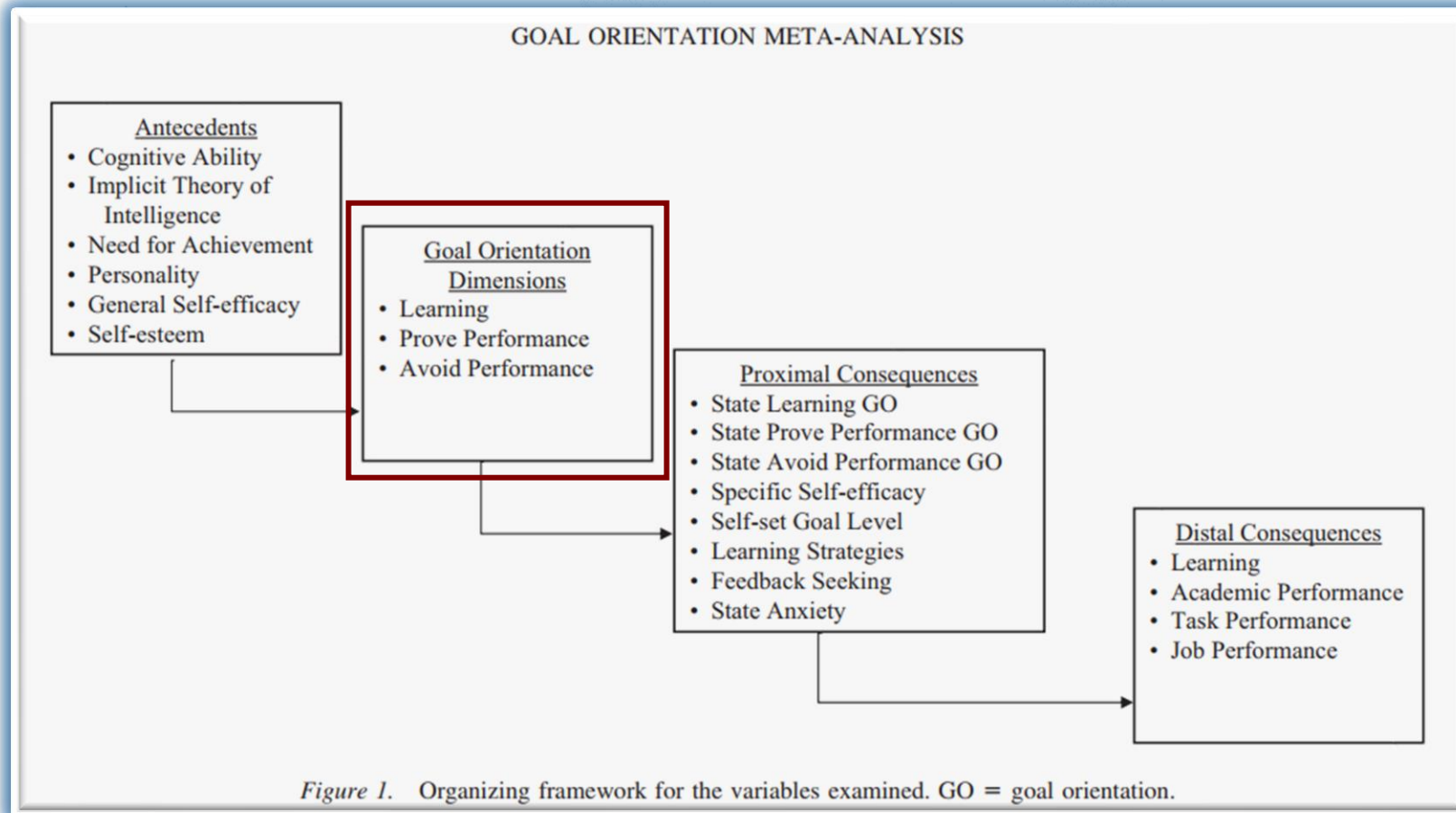
Achievement orientations

A 3 × 2 Achievement Goal Model

Andrew J. Elliot
University of Rochester and University of Munich

Kou Murayama and Reinhard Pekrun
University of Munich

Figure 1. The 3 × 2 achievement goal model. Definition and valence represent the two dimensions of competence. Absolute, intrapersonal, and interpersonal represent the three ways that competence may be defined; positive and negative represent the two ways that competence may be valenced.

This model is composed of the following goals: a task-approach goal focused on the attainment of task-based competence (e.g., "**Do the task correctly**"), a task-avoidance goal focused on the avoidance of task-based incompetence (e.g., "**Avoid doing the task incorrectly**"), a self-approach goal focused on the attainment of self-based competence (e.g., "**Do better than before**"), a self-avoidance goal focused on the avoidance of self-based incompetence (e.g., **Avoid doing worse than before**"), an other-approach goal focused on the attainment of other-based competence (e.g., "**Do better than others**"), and an other-avoidance goal focused on the avoidance of other-based incompetence (e.g., "**Avoid doing worse than others**").

Interests & Task Values

Interests & task values. Motivational processes during the preparatory, deliberation or pre-decisional phase of learning that are focused primarily on **the reasons for selecting goals** that contributes to a readiness to act. Processes, during the wish-->want-->intention-->action commitment stages, that focus primarily on the reasons for selecting goals (i.e., **why do I want to do this activity?**).

MOTIVATIONAL BELIEFS, VALUES, AND GOALS

Jacquelynne S. Eccles and Allan Wigfield

*Institute for Social Research, University of Michigan, Ann Arbor, Michigan 48106;
e-mail: jeccles@isr.umich.edu*
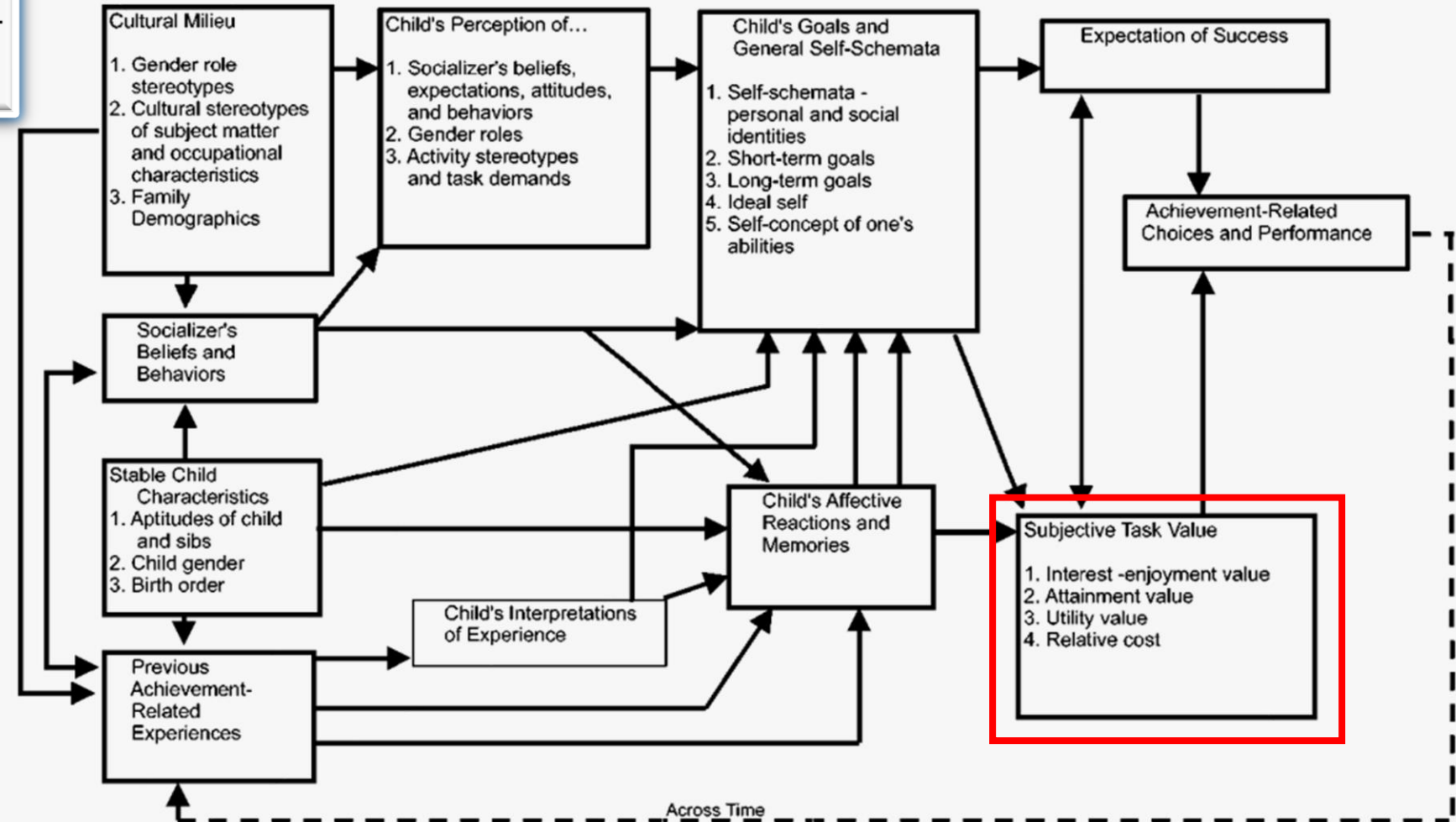
Figure 1   The Eccles et al. expectancy-value model of achievement.

Interests & Task Values

Need for Cognition: A person's interest, desire, or inclination to engage in higher-level effortful cognitive or mental activities which focus on making sense of the world through a deep (vs surface level) conceptual understanding of information and its relations to other information or concepts. A disposition towards appreciating, seeking, acquiring, thinking about, and reflecting back on information to make sense of stimuli. Enjoyment of the process of thinking, not necessarily the mastery of a specific task. **Thinking for the sake of thinking**...the tendency to engage in and enjoy thinking.

Interest & Task Values

Academic interests. A person's relatively stable or enduring predisposition, positive affective orientation, preference for (want) certain specific academic content or task domains. **Personal interest** reflects a relatively stable or enduring predisposition, evaluative orientation, and tendency to persevere when working on certain specific content or task domains. **Situational interests** (spur-of-the-moment interests) are often triggered "in the moment".

Academic values: A student's desire, preference, or "wanting" for certain academic goals and outcomes, typically differentiated as valued for the sake of enjoyment or interest (i.e., **intrinsic**), **importance** (e.g., value of performing well on a specific task), **utility** (value for one's future), or **cost**.

Interests & Task Values

Construction and Validation of the Interest Development Scale

Jordan D. Boeder and Elyse L. Postlewaite
Claremont Graduate University

K. Ann Renninger
Swarthmore College

Susanne E. Hidi
University of Toronto

There is a need to be able to assess adult interest as a variable that can develop. In contrast to vocational interest measures in which interest is assessed as a stable, trait-like characteristic of a person, the Interest Development Scale (IDS) assesses interest as a cognitive and motivational variable that develops (Hidi & Renninger, 2006). Three studies are reported on the construction and validation of the IDS, a domain general assessment of adult interest development. In each, the participant group was drawn from the diverse Amazon Mechanical Turk (MTurk), and interest was not restricted to a specific domain. Using exploratory factor analysis and parallel analysis, we used Study 1 (n = 348) to identify items and underlying factors. These factors are *information seeking, motivation to reengage, persistence, self-regulation,* and *value.* Results from Study 2 (n = 515) confirmed the factor structure identified in Study 1 and examined convergent, discriminant, and concurrent validity of the items. Findings demonstrated that the IDS was a reliable and valid measure of domain-general interest for adults. In Study 3 (n = 103), results from mixed methods further revealed that the IDS differentiated between earlier and later phases of interest development. The factor *motivation to reengage* differentiated among the three phases studied, and the other 4 factors distinguished between earlier and later phases of interest.

Keywords: interest development, interest assessment, four-phase model, scale development, validity

When individuals develop an interest, they **voluntarily reengage with that content, and often begin to self-identify with others who also pursue it** (see Renninger & Hidi, 2016). They **search** for relevant information, continue to **seek deeper understanding**, and **persevere**, even when challenged (e.g., Azevedo, 2015; Hagay & Baram-Tsabari, 2011; Lakanen & Isomöttönen, 2018). They are also **involved in meaningful learning**, as they are more attentive, willing to expend greater effort, able to pursue and realize goals, and better able to develop and effectively use strategies…

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Keywords: interest development, interest assessment, four-phase model, scale development, validity

	Phases of Interest Development			
	Less-Developed (Earlier)		More-Developed (Later)	
	Phase 1: Triggered Situational Interest	Phase 2: Maintained Situational Interest	Phase 3: Emerging Individual Interest	Phase 4: Well-Developed Individual Interest
Definition	• Psychological state resulting from short-term changes in cognitive and affective processing associated with a particular class of content	• Psychological state that involves focused attention to a particular class of content that reoccurs and/or persists over time	• Psychological state *and* the beginning of relatively enduring predisposition to seek reengagement with a particular class of content over time	• Psychological state *and* a relatively enduring predisposition to reengage a particular class of content over time
Learner Characteristics	• Attends to content, if only fleetingly • May or may not be reflectively aware of the experience • May need support to engage from others and through instructional design • May experience either positive or negative feelings • May not persevere when with confronted with difficulty • May simply want to be told what to do	• Reengages content that previously triggered attention • Is developing knowledge of content • Is developing a sense of the content's value • Is likely to be able to be supported by others to find connections to content based on existing skills, knowledge, and/or prior experience • Is likely to have positive feelings • May not persevere when with confronted with difficulty • May want to be told what to do	• Is likely to independently reengage content • Has stored knowledge and stored value • Is reflective about the content • Is focused on their own questions • Has positive feelings • May not persevere when with confronted with difficulty • May not want feedback from others	• Independently reengages content • Has stored knowledge and value • Is reflective about the content • Is likely to recognize others' contributions to the discipline • Self-regulates easily to reframe questions and seek answers • Has positive feelings • Can persevere through frustration and challenge in order to meet goals • Appreciates and may actively seek feedback

Figure 1. The four phases of interest development (Hidi & Renninger, 2006): Definitions and learner characteristics, revised. From *The Power of Interest for Motivation and Engagement* (Table 1.2, p. 13) by K. A. Renninger & S. E. Hidi, 2016, New York, NY: Routledge. Copyright 2015 by Taylor and Francis. Reprinted with permission.
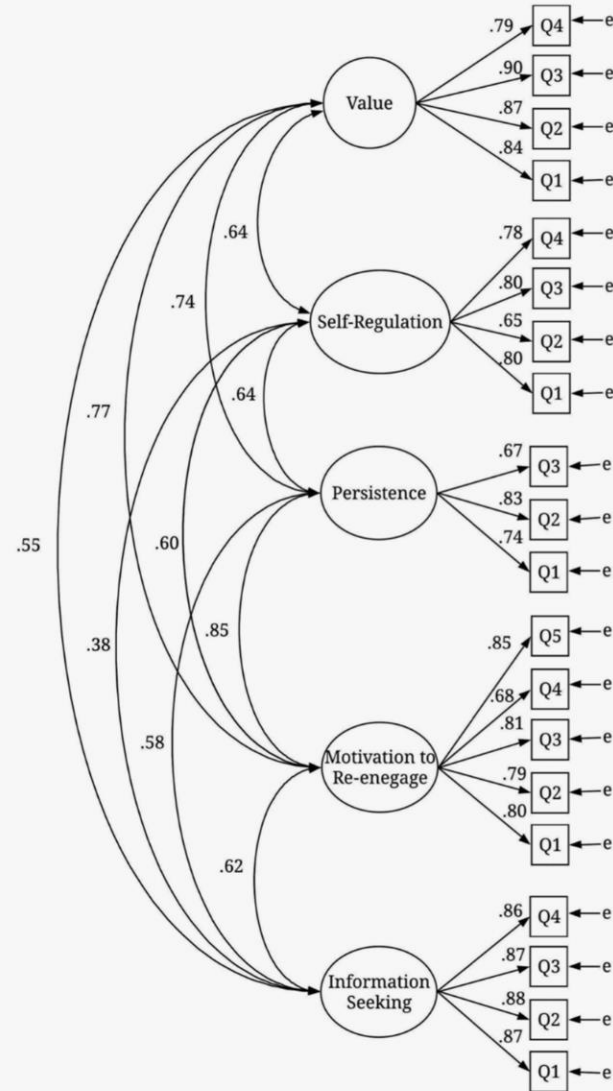
Interests & Task Values

Construction and Validation of the Interest Development Scale

Jordan D. Boeder and Elyse L. Postlewaite
Claremont Graduate University

K. Ann Renninger
Swarthmore College

Susanne E. Hidi
University of Toronto

Figure 2. Measurement model of IDS in Study 1. All factor loadings are standardized and significant at $p < .001$.

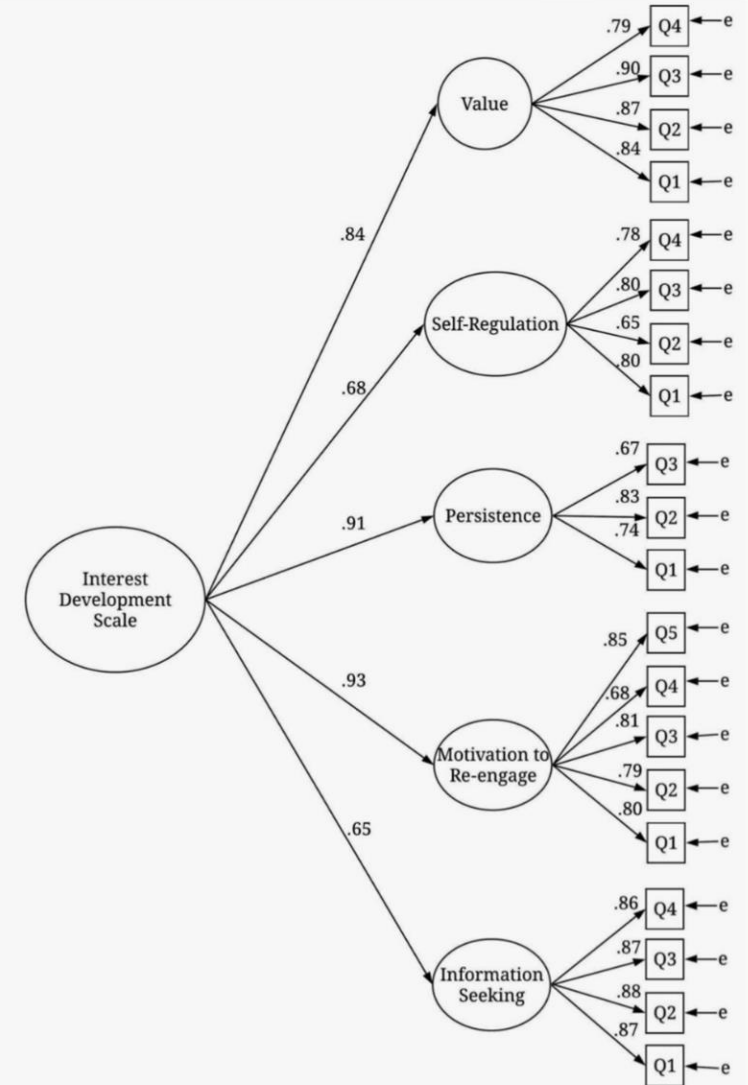*Figure 3.* Higher order model of the IDS in Study 1. All factor loadings are standardized and significant at $p < .001$.

MACM currently addresses two major conative domains of learner characteristics
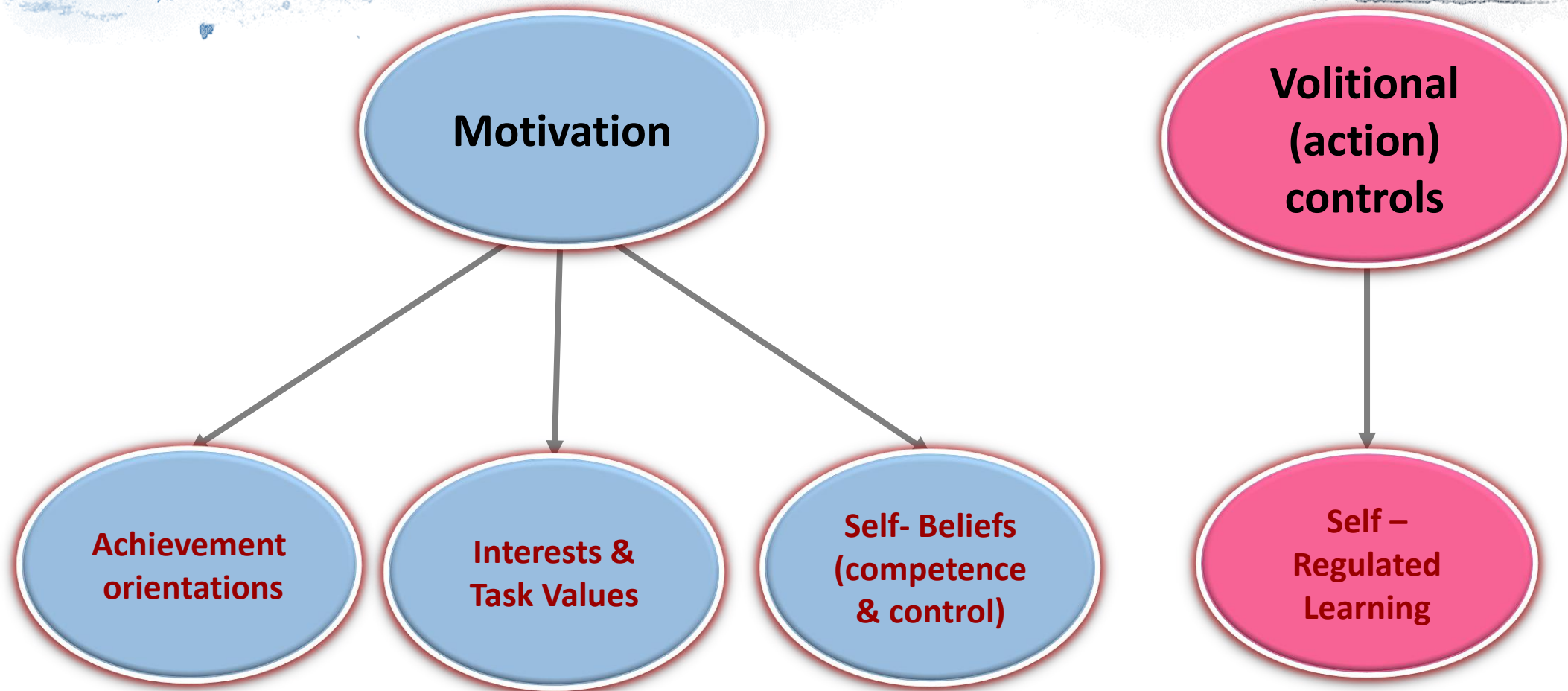
Motivation: As Three Sets of Key Questions

Can I be **successful** on this activity?

Can I **control my success** on this activity?

Am I **capable** of doing this activity?

Self- Beliefs (competence & control)

Self-Beliefs (competence & control)

Self-beliefs: Motivational processes during the preparatory, deliberation or pre-decisional phase of learning that are focused primarily on the **expectancies** for accomplishing goals that contributes to a motivational readiness to act. Processes, during the wish-->want-->intention-->action commitment stages, that focus primarily on **self-generated perceptions of competence to perform** and the **ability to control success** on an activity (i.e., **am I capable of doing this activity?; can I control my success on this activity?**).

Self-Beliefs (competence & control)

Academic Self-Efficacy (competence). A person's **confidence (conviction) in their ability** to organize, execute, and regulate performance in order to solve or accomplish academic problems at a designated level of skill and ability.

Academic Ability Conception (control). A person's **thinking mindset.** A person's beliefs, self-evaluation, and self-awareness (i.e., a thinking disposition) regarding their academic-related skills and abilities. The distinction between persons who hold **"entity/fixed" versus "incremental/growth" mindsets** is of particular interest in contemporary research.

Self Beliefs: Self-Efficacy and Other Self-Beliefs

Zimmerman, Schunk & DiBenedetto (2017)
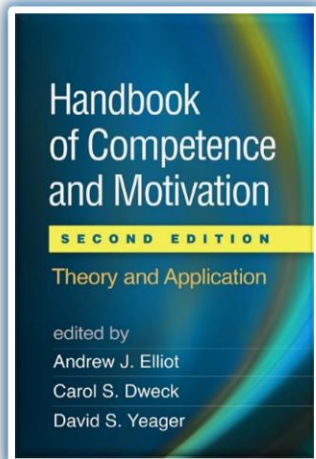
TABLE 17.1. Comparison of Self-Efficacy Beliefs and Other Self-Beliefs

Comparison criteria	Types of self-belief	
	Self-efficacy beliefs	Other self-beliefs
Type of self-judgment	Cognitive judgments of capability	Feelings of competence, adequacy, and affect
Type of self-evaluative standard	Confidence in goal mastery	Social/normative comparisons
Temporal focus of self-judgments	Predicted generative capability	Attained competence
Relation to task outcomes	Context-dependent	Domain-dependent
Reactions to experience	Adaptively malleable	Trait-like resistance

Self-Beliefs (competence & control)

Academic Self-Efficacy (competence). A person's confidence (conviction) in their ability to organize, execute, and regulate performance in order to solve a problem or accomplish a task at a designated level of skill and ability. **Academic self-efficacy** refers to a person's conviction that they can successfully achieve at a designated level in a specific academic subject area.

Academic Ability Conception (control). A person's thinking **mindset**. A person's beliefs, self-evaluation, and self-awareness (i.e., a thinking disposition) regarding their academic-related skills and abilities. The distinction between individuals who hold **"entity/fixed"** versus **"incremental/growth"** mindsets is of particular interest in contemporary research

Ability Conceptions or Fixed/Growth Mindsets: Research Implicates the Socialization Process Mediated by Adults

The Origins of Children's Growth and Fixed Mindsets:
New Research and a New Proposal

Kyla Haimovitz and Carol S. Dweck
Stanford University
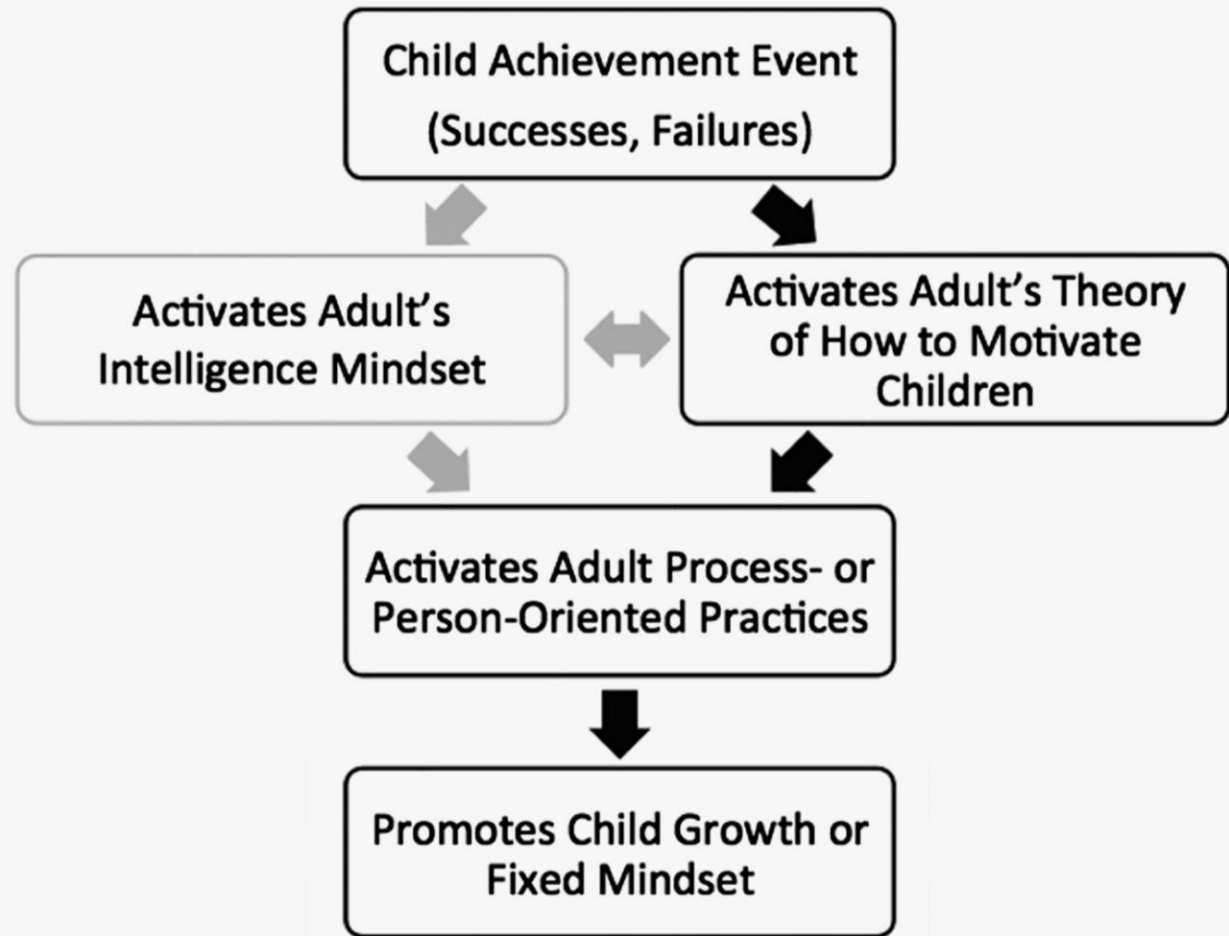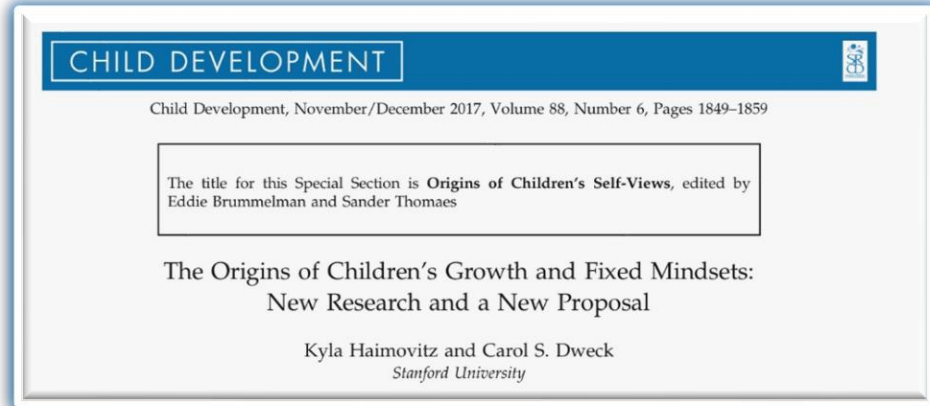
Figure 1. Hypothesized model for how adults socialize children's growth and fixed mindsets.

Self-Beliefs (competence & control)

Locus of Control (control). A person's **belief about the perceived causes** (internal vs. external) for their success or failure. An **internal attribution** orientation is when a person perceives their success or failure as contingent on their own behavior and due to relatively unchanging personal characteristics. An **external orientation** is when success or failure is perceived as being under the control of others, unpredictable, and the result of luck, chance, or fate.

Academic Self-Concept (competence). Self-concept is a person's general overall view of self, based on self-knowledge and evaluation of **value or worth of one's own capabilities**, across a multidimensional set of domain specific-perceptions. **Academic self-concept** is a person's perception of self-efficacy and satisfaction in academic subjects.

Some self concept definitions in the literature

"Research often adopts a cognitive approach, where the self-concept is defined as a **cognitive schema** that is "an **organized knowledge structure** that contains beliefs about one's attributes as well as episodic and semantic memories about the self and that controls the processing of self-relevant information" (Campbell et al., 2000, p. 67)

Self-Beliefs (competence & control)

Some self concept definitions in the literature

"…an important distinction has been made between **two main features of the self-concept: contents and structure** (Campbell et al., 1996, 2000). The **contents are typically divided into knowledge and evaluative components. Knowledge components** involve beliefs about one's attributes (e.g. personality traits, values) and **evaluative components** include the positivity of one's self-beliefs and self-esteem. The structure of the self-concept refers to how the contents of the self-concept (i.e. knowledge and evaluative components) are organized" (Pomerance et al., 2020)

Self Beliefs: Self-Concept Research is Massive

Shavelson model and Marsh-Shavelson revision

Self Beliefs: Academic Self-Concept Stability

Disentangling Different Sources of Stability and Change in Students' Academic Self-Concepts: An Integrative Data Analysis Using the STARTS Model

Malte Jansen
Institute for Educational Quality Improvement (IQB), Berlin, Germany, and Centre for International Student Assessment (ZIB), Munich, Germany

Oliver Lüdtke and Alexander Robitzsch
Leibniz Institute for Science and Mathematics Education, Kiel, Germany, and Centre for International Student Assessment (ZIB), Munich, Germany

Academic self-concept (ASC) is characterized by the dual nature of stability and change. That is, students strive for consistency in their self-concept but also receive achievement feedback that leads to changes in ASC. Only a few previous studies have scrutinized the stability of ASC. The STARTS model (Stable, AutoRegressive Trait, and State) disentangles three sources of variation that underlie individual differences in a construct across time: (a) a time-invariant stable component, (b) a time-varying, partly stable component, and (c) an occasion-specific state component. This study is the first to analyze the stability of ASC with the STARTS model. Rather than selecting a single data set, we followed the idea of using an integrative data analysis (IDA) and applied the STARTS model to 11 longitudinal studies that included more than 20,000 students. Our results show that there is a substantial proportion of stable trait variance in both mathematical (26%) and verbal self-concept (24%)—that is, some sources of individual differences in ASC are completely stable (e.g., genes, preschool environment). The largest part of the variation in ASC across time could be attributed to factors that systematically changed in an autoregressive way (e.g., achievement feedback). Mathematical self-concept showed higher stability than verbal self-concept as a result of a smaller proportion of occasion-specific state variance. The IDA also revealed substantial heterogeneity across studies. We argue that disentangling stable and temporally changing aspects of ASC is important not only for informing theory but also for assessing the potential of psychological interventions.

Educational Impact and Implications Statement

Promoting the academic self-concept of students, that is, their confidence in their own academic abilities, is an important educational goal (a) in and of itself and (b) because students with higher self-concepts have been shown to have more successful school careers. In this study, we focused on the stability of academic self-concept—that is, the extent to which it is a student characteristic that is stable or malleable and changing over time. Our study is the first to employ the STARTS model to academic self-concept research showing that there is a completely academic stable self-concept component, but most of the variation over time is only partly stable. Our results further suggest that because academic self-concept changes over students' school careers, it is thus malleable and can be targeted by specific interventions and influenced by teaching practices. Finally, self-concept in mathematics was found to be more stable than self-concept in the language of instruction. One interpretation may be that students hold more fixed beliefs or mindsets about mathematical ability; such beliefs could be challenged by teachers. Overall, our results contribute to the understanding of academic self-concept, which is one of the most important motivational factors in students' school careers.

Self Beliefs: Academic Self-Concept & Achievement

Nonlinear Relations Between Achievement and Academic Self-Concepts in Elementary and Secondary School: An Integrative Data Analysis Across 13 Countries

Lena Keller
University of Potsdam and Freie Universität Berlin

Franzis Preckel
University of Trier

Martin Brunner
University of Potsdam

It is well-documented that academic achievement is associated with students' self-perceptions of their academic abilities, that is, their academic self-concepts. However, low-achieving students may apply self-protective strategies to maintain a favorable academic self-concept when evaluating their academic abilities. Consequently, the relation between achievement and academic self-concept might not be linear across the entire achievement continuum. Capitalizing on representative data from three large-scale assessments (i.e., TIMSS, PIRLS, PISA; $N = 470,804$), we conducted an integrative data analysis to address nonlinear trends in the relations between achievement and the corresponding self-concepts in mathematics and the verbal domain across 13 countries and 2 age groups (i.e., elementary and secondary school students). Polynomial and interrupted regression analyses showed nonlinear relations in secondary school students, demonstrating that the relations between achievement and the corresponding self-concepts were weaker for lower achieving students than for higher achieving students. Nonlinear effects were also present in younger students, but the pattern of results was rather heterogeneous. We discuss implications for theory as well as for the assessment and interpretation of self-concept.

Educational Impact and Implications Statement

The present study significantly advances the understanding of how performance on a standardized achievement test in a certain academic domain is related to students' corresponding academic self-concept. In representative student samples, we show that the relations between achievement and self-concepts in mathematics and the verbal domain can be better approximated by nonlinear relations, demonstrating weaker relations for lower achieving students than for higher achieving students in secondary school (and to some extent also in elementary school). Practitioners should be aware that there is no general linear trend between students' achievement and their corresponding academic self-concepts and should take this into consideration when assessing and interpreting students' academic self-concepts in counseling contexts.

Keywords: academic achievement, academic self-concept, mathematics, reading, nonlinear relations

Self Beliefs: Academic Self-Concept Stability Research via STARTS Model

STARTS model (Stable Trait, AutoRegressive Trait, and State; see Kenny & Zautra, 1995, 2001) to disentangle different sources of construct trait stability

Might be useful to investigate and partition the **state-trait variance** components of MACM model constructs

- **Stable, partly stable, and occasion-specific** components of constructs

Self Confidence: The Amazon of the "jingle jangle jungle"

**Self-concept content and structure: motivation and performance implications**

Self-concept content and structure

Marne H. Pomerance, Patrick D. Converse and Nicholas A. Moon
Florida Institute of Technology, Melbourne, Florida, USA

"CSE is defined as 'fundamental premises that individuals hold about themselves and their functioning in the world' (Judge et al., 1998, p. 168). CSE involves four traits: self-esteem, generalized self-efficacy, locus of control and emotional stability (Judge and Bono, 2001). Although CSE and associated characteristics are often seen as stable, there are conceptual considerations and empirical evidence suggesting that CSE varies within-person."

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Self-concept content and structure: motivation and performance implications

Self-concept content and structure

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"SCC (self concept clarity) is defined as "the extent to which the contents of an individual's self-concept (e.g. perceived personal attributes) are clearly and confidently defined, internally consistent, and temporally stable" (Campbell et al., 1996, p. 141)."

Self Confidence: The Amazon of the "jingle jangle jungle"

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Self-concept content and structure: motivation and performance implications

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Integrating self-concept content, self-concept structure and motivational orientation

Self-concept content and structure: motivation and performance implications

Self-concept content and structure

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Florida Institute of Technology, Melbourne, Florida, USA

A major focus of this research is how, at the within-person level, **self-concept structure (SCC) interacts with content (CSE) to influence motivational orientation in performance contexts**. To further illustrate the nature of the two focal self-concept constructs and explain how they may interact to influence **motivational orientation**, we draw from and extend Greenwald et al.'s (2002) unified theory of implicit social cognition.

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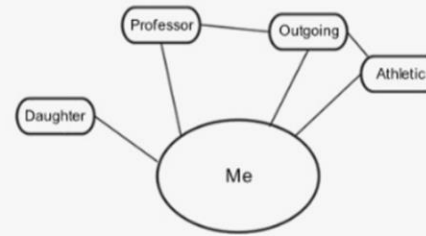
(a)

Note(s): Associations between the concept of self (the "Me" concept) and the role/trait concepts of athletic, outgoing, daughter, and professor
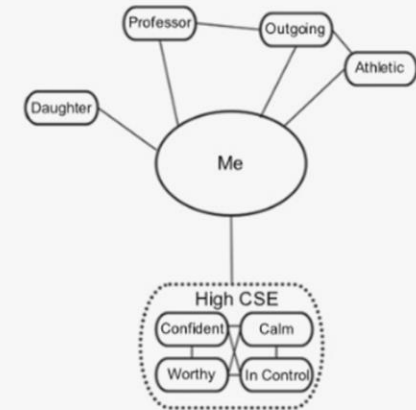
(b)

Note(s): Extending the unified theory: self-concept. CSE is included as the focal aspect of self-concept
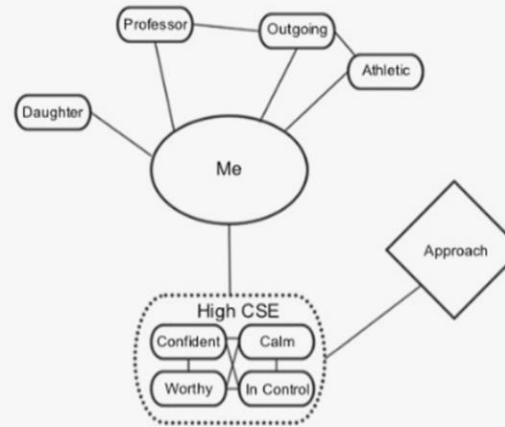
(c)

Note(s): Extending the unified theory: concept activation. Activating certain aspects of the self-concept may trigger activation of approach or avoidance motivational orientation
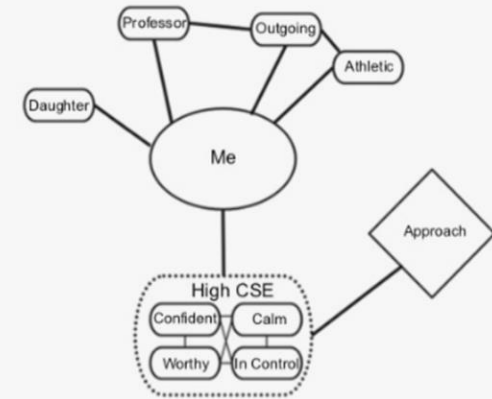
(d)

Note(s): Extending the unified theory: association strength. SCC can be understood in terms of association strength, where the intrapersonal process of concept activation may operate differently when SCC is low versus high. Here, higher SCC entails stronger associations/within-person relationships

The framework should use clear and consistent construct definitions
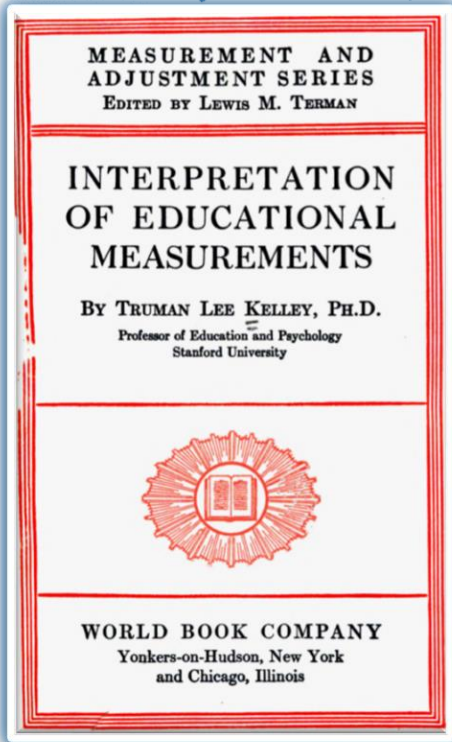
(Kelly, 1927)

The **jingle-jangle-jungle** is when erroneous assumptions are made that two different things are the same because they have the same name (**jingle fallacy**) or are identical or almost identical things are different because they are labeled differently (**jangle fallacy**).

(Schneider & McGrew, 2018)

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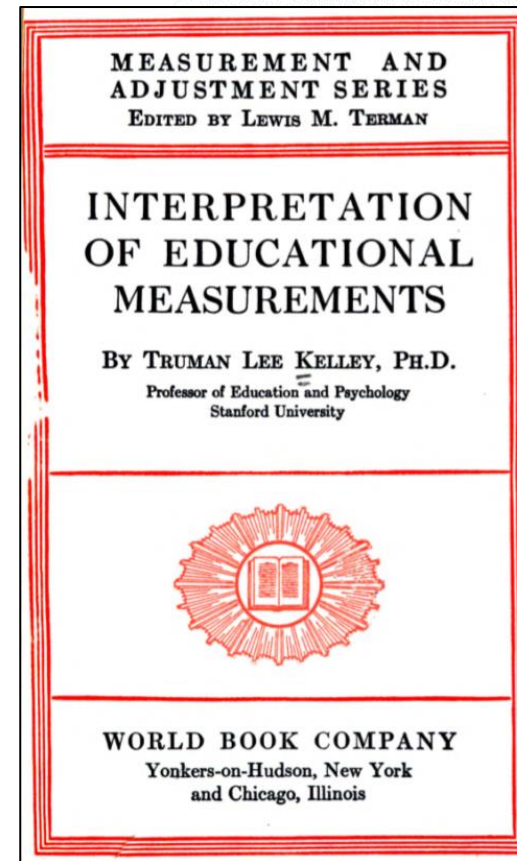
APA Dictionary of Psychology

self-confidence

n.

1. self-assurance: trust in one's abilities, capacities, and judgment. Because it is typically viewed as a positive attitude, the bolstering of self-confidence is often a mediate or end goal in psychotherapy.

2. a belief that one is capable of successfully meeting the demands of a task.
—self-confident *adj.*

Self-Confidence

The *Oxford Advanced Learner's Dictionary* defines *self-confidence* as a feeling of trust in one's abilities, qualities, and judgment—as in confidence in oneself and one's abilities. In a sporting context, Horn (2004) defined *self-confidence* as positive self-beliefs about abilities or expectations about being able to achieve success. She distinguishes between self-confidence in relation to winning (outcome); performance in relation to standards; self-regulation of thoughts, emotions, and resilience; and physical skills. In psychology more generally, self-confidence is often operationalized as self-esteem, self-efficacy, self-concept, positive self-beliefs, and optimism. In a recent series of studies, Stankov (see overview by Stankov & Lee, 2015) developed an alternative perspective of confidence, as a mindset of having done well on a previously completed task (e.g., "I am sure that I have done this correctly"), in contrast to perceptions of self-efficacy ("I can do this") in relation to a future activity. This notion of confidence in relation to an activity that has already been performed, such as the likelihood or subjective probability that one correctly answered each question on an achievement test, is different to notions predicting what one might be able to accomplish on a specific task.

In marked contrast to domain-specific measures of self-concept, Stankov and Lee (2015) present evidence that confidence is a global construct that generalizes over diverse activities, somewhat akin to the "big-G" factor for cognitive tasks, and that it is empirically distinguishable from other self-belief constructs such as self-efficacy, self-concept, and anxiety. Not surprisingly, perhaps, confidence in relation to each item on a test more accurately predicts test performance than do other self-belief items, but confidence remains a significant predictor of subsequent school grades 3 months later, even after researchers control for test scores and other self-belief constructs. However, although more research into confidence as defined by Stankov and Lee is clearly warranted, it seems to be conceptually and operationally distinct from other self-belief constructs that are used to represent competence self-perceptions.

Review

Low Correlations between Intelligence and Big Five Personality Traits: Need to Broaden the Domain of Personality

Lazar Stankov [1,2]

[1]   School of Psychology, The University of Sydney, Sydney 2006, Australia; lazar.stankov@sydney.edu.au
[2]   School of Psychology, The University of Southern Queensland, Toowoomba 4350, Australia

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Abstract: The correlations between the measures of cognitive abilities and personality traits are known to be low. Our data based on the popular Big Five model of intelligence show that the highest correlations (up to $r = 0.30$) tend to occur with the Openness to Experience. Some recent developments in the studies of intelligence (e.g., emotional intelligence, complex problem solving and economic games) indicate that this link may become stronger in future. Furthermore, our studies of the processes in the "no-man's-land" between intelligence and personality suggest that the non-cognitive constructs are correlated with both. These include the measures of social conservatism and self-beliefs. Importantly, the Big Five measures do not tap into either the dark traits associated with social conservatism or self-beliefs that are known to be good predictors of academic achievement. This paper argues that the personality domain should be broadened to include new constructs that have not been captured by the lexical approach employed in the development of the Big Five model. Furthermore, since the measures of confidence have the highest correlation with cognitive performance, we suggest that the trait of confidence may be a driver that leads to the separation of fluid and crystallized intelligence during development.

CrossMark

Self-beliefs: Strong correlates of mathematics achievement and intelligence

Lazar Stankov [a,*], Jihyun Lee [b]

[a] The University of Sydney, Sydney, Australia
[b] The University of New South Wales, Sydney, Australia

ARTICLE INFO

ABSTRACT

In this paper we summarize recent findings from large-scale international surveys (PISA and TIMSS) of relevance to the predictability gradient hypothesis (Stankov, 2013). Non-cognitive measures are divided into two groups on the basis of their correlation with mathematics achievement. Many have low ($r < 0.20$) correlations. The best predictors of cognitive performance are a cluster of self-beliefs consisting of confidence, self-efficacy, anxiety, and self-concept. These appear to be the most potent influences underpinning Cattell's (1987) investment theory of fluid and crystallized intelligence. Self-beliefs affect cognitive performance either as impediments (anxiety) or facilitators (good calibration of self-efficacy and confidence). This information about the role of self-beliefs can inform future efforts at intervention.

Contents

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Confidence: the best non-cognitive predictor of academic achievement?

Lazar Stankov[a]*, Suzanne Morony[a] and Yim Ping Lee[b]

Self Confidence: The Amazon of the "jingle jangle jungle"

Stankov, L., Kleitman, S., and Jackson, S. A. (2014). Measures of the Trait of Confidence. In G. J. Boyle, D. H. Saklofske and G. Matthews (Eds.),
Measures of Personality and Social Psychological Constructs 158-189. Academic Press.

CHAPTER

7

Measures of the Trait of Confidence

Lazar Stankov[1], Sabina Kleitman[2] and Simon A. Jackson[2]

[1]Australian Catholic University, Strathfield, NSW, Australia
[2]University of Sydney, Sydney, NSW, Australia

Self Confidence: The Amazon of the "jingle jangle jungle"

Factor Structure and Longitudinal Factorial Validity of the Core Self-Evaluation Scale

Exploratory Structural Equation Modeling

Anne Mäkikangas,[1] Ulla Kinnunen,[2] Saija Mauno,[1,2] and Eva Selenko[3]

[1]Department of Psychology, University of Jyväskylä, Finland
[2]School of Social Sciences and Humanities (Psychology), University of Tampere, Finland
[3]Institute of Work Psychology, Management School, Sheffield University, United Kingdom
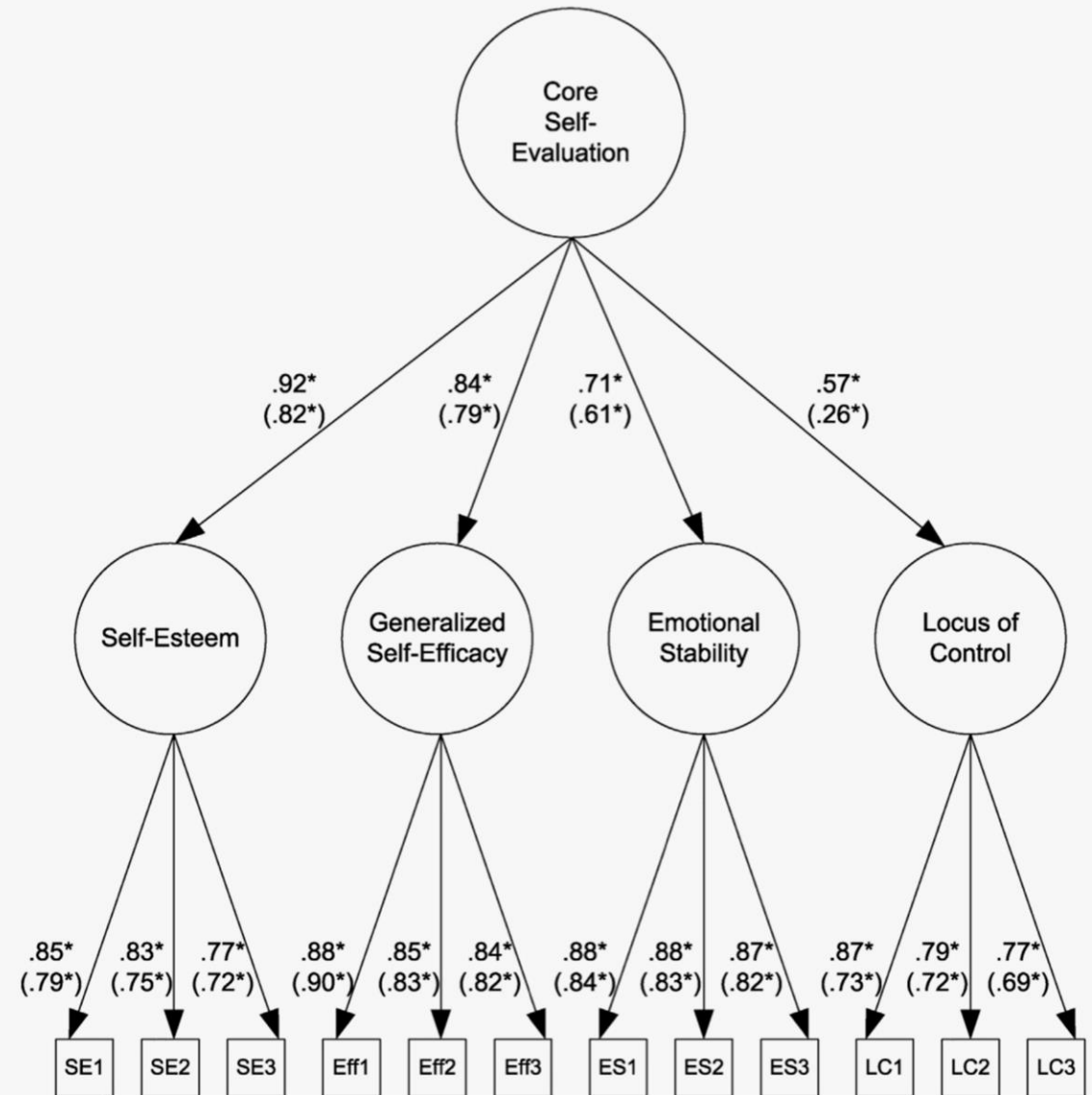
Abstract: The personality high-order concept of core self-evaluations (CSE), which refers to a basic evaluation of one's worth, capability, and effectiveness, has attracted a lot of research interest. Yet little is known about the construct validity of the core self-evaluation scale (CSES) while information on its longitudinal factorial validity is wholly lacking. This study investigated the factor structure of the CSES using both confirmatory and exploratory factor analysis implemented in Mplus program. In addition, the factor loading invariance over time was investigated using exploratory structural equation modeling. Longitudinal data with three follow-ups over 2 years, gathered among university employees (n = 926 (T3)–2,137 (T1)), were used. The results showed that a two-factor solution comprising the sub-dimensions Internal and External self-evaluations fitted to the data better than the alternative factor models. The two-factor solution was also invariant across the three measurements. It is concluded that the CSES could be used as a two-dimensional instead of a one-dimensional scale. Splitting the scale into the two sub-dimensions of Internal and External self-evaluations revealed that the concept has a finer-grained structure than hitherto thought.

Keywords: core self-evaluations, factorial validity, longitudinal study, exploratory structural equation modeling

Self Confidence: The Amazon of the "jingle jangle jungle"

Self-beliefs

- Locus of control
- Academic self-efficacy
- Academic self-concept
- Academic ability conception
- ....

Core Self-Evaluation

.92* (.82*)   .84* (.79*)   .71* (.61*)   .57* (.26*)

Self-Esteem   Generalized Self-Efficacy   Emotional Stability   Locus of Control

.85* (.79*)   .83* (.75*)   .77* (.72*)   .88* (.90*)   .85* (.83*)   .84* (.82*)   .88* (.84*)   .88* (.83*)   .87* (.82*)   .87* (.73*)   .79* (.72*)   .77* (.69*)

SE1   SE2   SE3   Eff1   Eff2   Eff3   ES1   ES2   ES3   LC1   LC2   LC3

Note: N = 201. Standardized factor loadings are reported in the figure. Values in the first row (second row, in parentheses) are before (after) social desirability was partialed out of the item parcels. * p < .05.