



Critiquing Frameworks: Methods, Tools, and Evidence

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Learning Objectives

1. Distinguish between theory familiarity, theory critique, and theory selection as separate methodological tasks.
2. Explain the three foundational domains of theory evaluation: internal coherence, empirical adequacy, and pragmatic productivity.
3. Compare major nursing theory evaluation frameworks in terms of standards, procedures, abstraction sensitivity, and ethical scope.
4. Analyze how abstraction level, paradigm alignment, and contextual boundedness affect evaluative expectations.
5. Differentiate and utilize critique frameworks from implementation science selection tools such as T-CaST and SELECT-IT.
6. Justify an explicit evaluative and selection strategy for theory use in rehabilitation research.

The Problem: Why Can't We Just Trust a Theory?



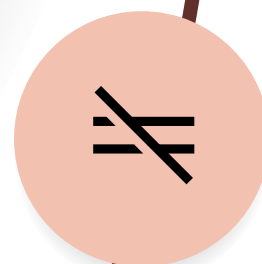
01 159 distinct KT frameworks were identified, most used rarely or only once
(Strifler et al., 2018).



02 No shared standard governs how researchers select among competing theories
(Birken et al., 2017).



03 Theory selection is sometimes driven by familiarity or convenience rather than structured comparison
(Birken et al., 2017).



04 Citing a theory does not ensure it structures study design, measurement, or analysis
(Birken et al., 2017).



05 The methodological problem is not theory scarcity, but unexamined theory choice
(Im, 2015; Birken et al., 2017).

What Should a Good Theory Do?

01

A theory must demonstrate internal coherence through clearly defined concepts and consistent propositions
(Hardy, 1974; Kuhn, 1977).

02

Logical adequacy precedes empirical testing; structural incoherence invalidates empirical evaluation
(Hardy, 1974).

03

A theory must correspond to observable phenomena and withstand systematic empirical scrutiny
(Hardy, 1974; Kuhn, 1977).

04

Theoretical strength includes comparative problem-solving effectiveness, not isolated confirmation
(Laudan, 1977).

05

A theory must generate new questions, research programs, and practical consequences
(Kuhn, 1977; Laudan, 1977).

06

These criteria converge across nursing and philosophy of science, indicating foundational dimensions of theoretical assessment

The Pioneer: Ellis (1968)

01

Ellis positioned theory evaluation as an explicit scholarly responsibility within nursing (Ellis, 1968).

03

She identified six characteristics of significant theories: scope, complexity, testability, usefulness, implicit values, and information generation (Ellis, 1968).

02

Theoretical legitimacy was framed as requiring articulated criteria rather than disciplinary acceptance (Ellis, 1968).

04

Her framework specified evaluative characteristics but did not operationalize them into structured analytic procedures (McEwen, 2018).

Hardy (1974): Establishing Evaluative Standards

Hardy formalized theory evaluation using terminology aligned with philosophy of science (Hardy, 1974).

She articulated five domains of adequacy: meaning, logical, operational, empirical, and pragmatic (Hardy, 1974)



Evaluation required defensible standards grounded in scientific reasoning (Hardy, 1974).

Her work positioned nursing theory within a broader epistemological framework (Hardy, 1974).

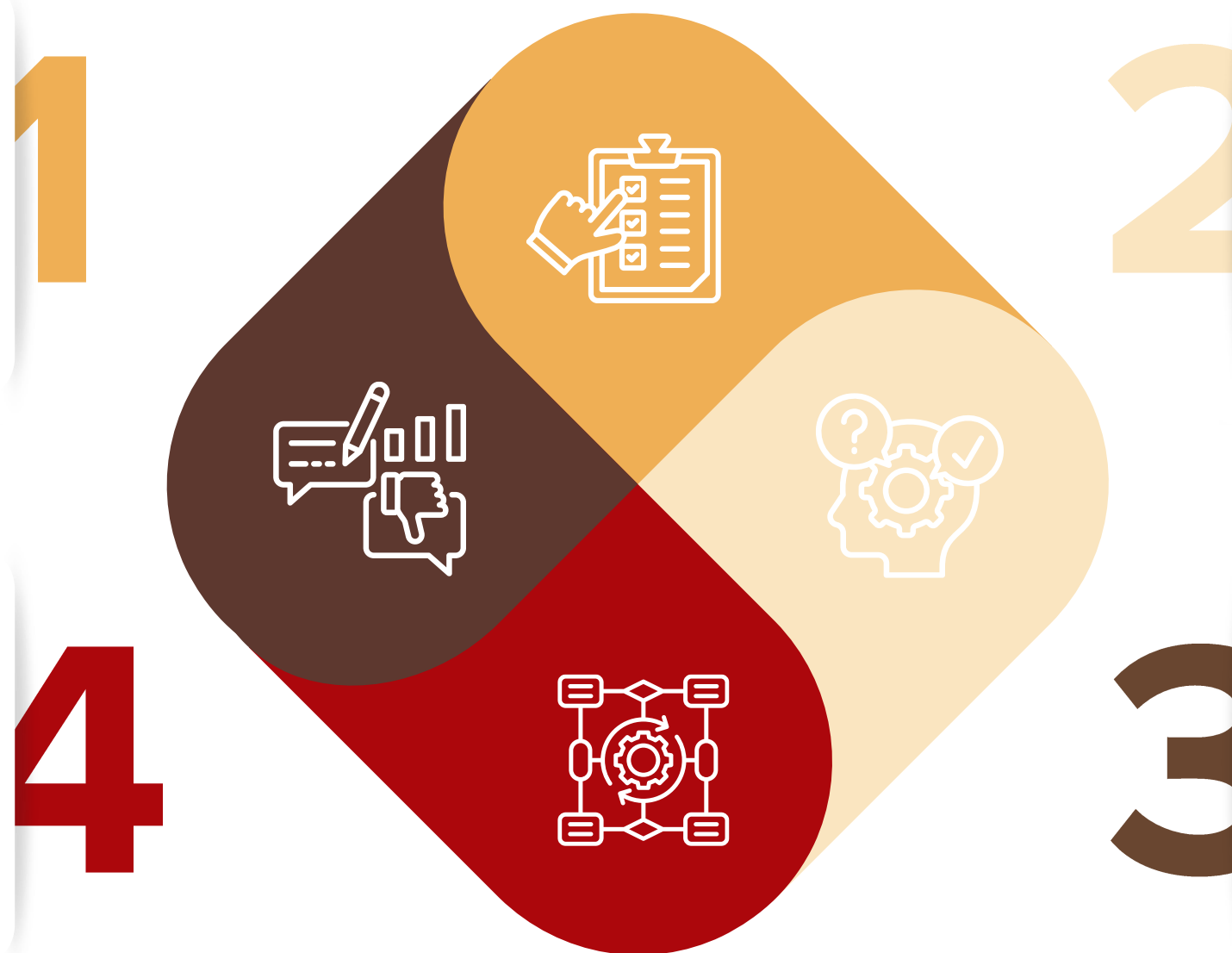
Duffey & Muhlenkamp (1974): Constructing Analytic Procedure

Introduced a structured analytic procedure for theory analysis

(Duffey & Muhlenkamp, 1974).

Their framework organized analysis around four guiding questions addressing origin, development, subject matter, and testing outcomes

(Duffey & Muhlenkamp, 1974).



They separated theory analysis from theory evaluation

(Duffey & Muhlenkamp, 1974)

Theory critique acquired operational sequence, not only evaluative criteria

(Duffey & Muhlenkamp, 1974).

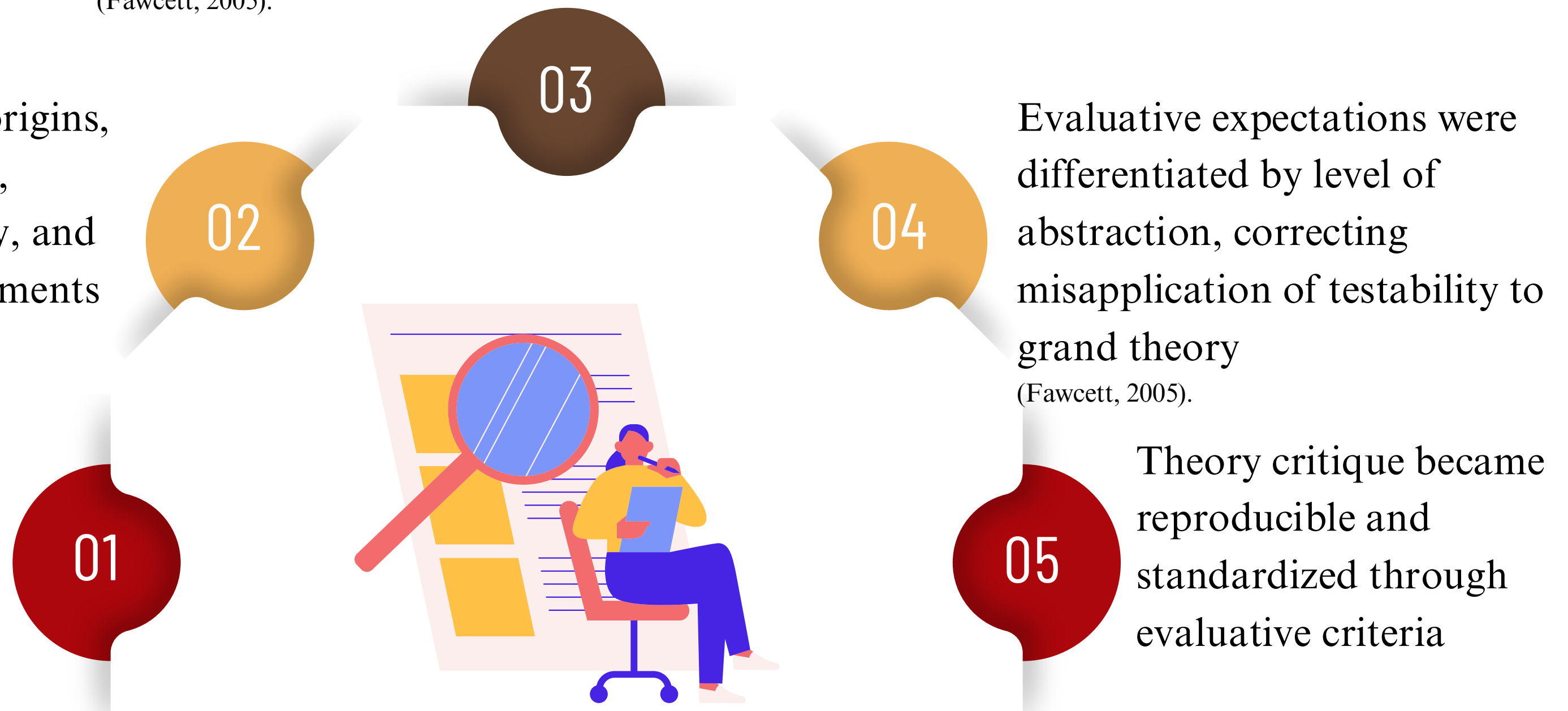
Procedural and Scientific Consolidation

(Walker & Avant; Fawcett)

Explicit named criteria formalized internal consistency, empirical adequacy, and pragmatic adequacy
(Fawcett, 2005).

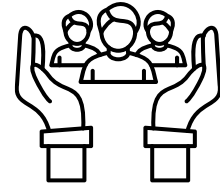
Evaluation distinguished origins, meaning, logical adequacy, parsimony, generalizability, and testability as separate judgments
(Walker & Avant, 2019).

Structured analysis preceded evaluation within a defined analytic sequence
(Walker & Avant, 2019).



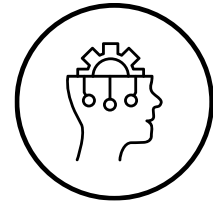
Ethical, Contextual, and Developmental Expansion

(Chinn & Kramer; Meleis)



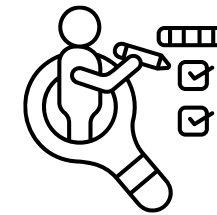
Evaluation expanded to include values, representation,
and sociopolitical consequence

(Chinn & Kramer, 2018).



Critique interrogates whose interests are served and whose
experiences are centered

(Chinn & Kramer, 2018).



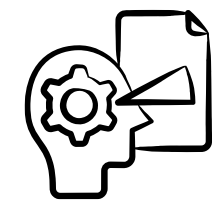
Theory evaluation was repositioned as
developmental, integrating critique, testing, and
continued support

(Meleis, 2018).



Structural, historical, philosophical, and sociocultural
context became explicit evaluative dimensions

(Meleis, 2018).



Abstraction level and contextual embeddedness became
variables in evaluation

(Meleis, 2018).

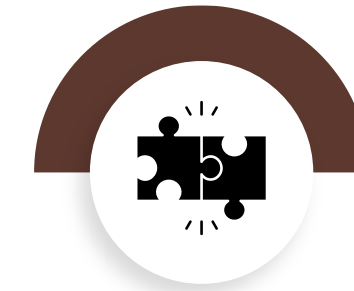
Refinements: Evaluation Becomes Sensitivity-Based



Evaluative standards must vary by level of abstraction across grand, middle-range, and practice theories
(Whall, 2005).



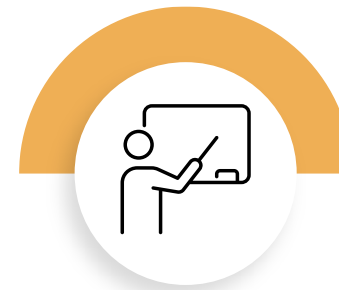
Abstraction level conditions expectations for empirical testability and explanatory scope
(Whall, 2005).



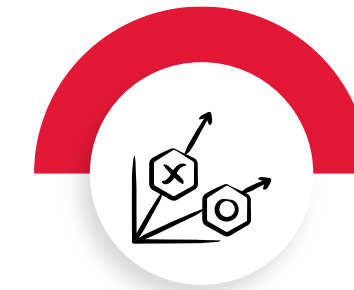
Evaluation criteria must align with the theory's underlying philosophical paradigm
(Dudley-Brown, 1997).



Positivist standards are insufficient for interpretive and critical theories
(Dudley-Brown, 1997).



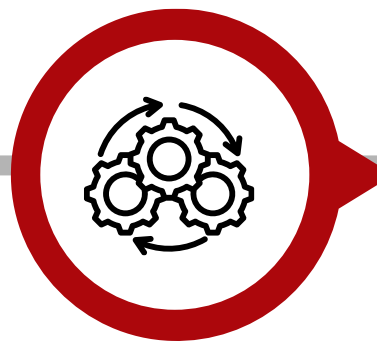
Situation-specific theories legitimate bounded scope and contextual limitation as theoretical properties
(Im & Meleis, 1999).



Abstraction, paradigm, and sociocultural context become explicit evaluative variables

The Philosophical Frontier: Reframing Theory Evaluation

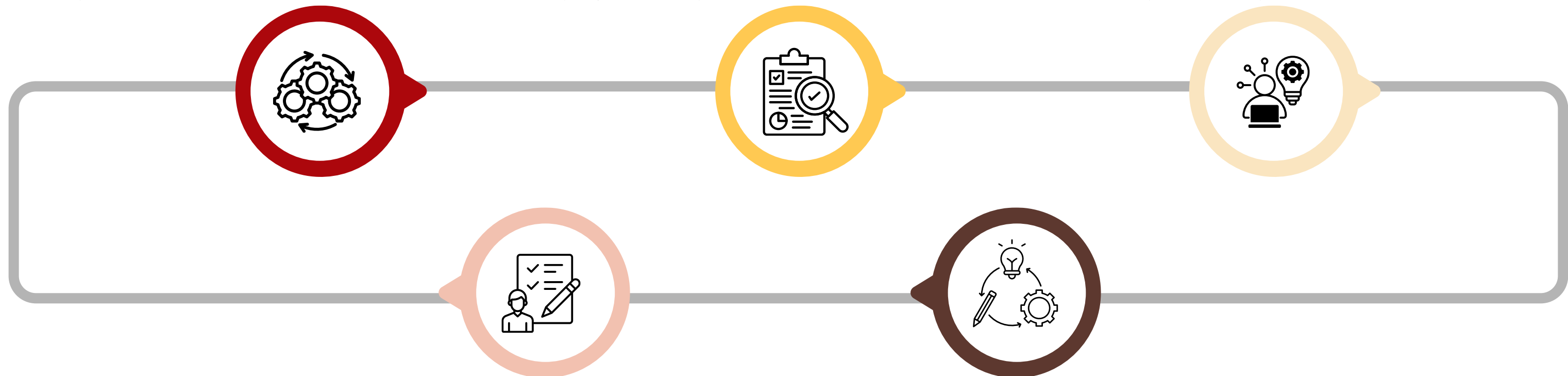
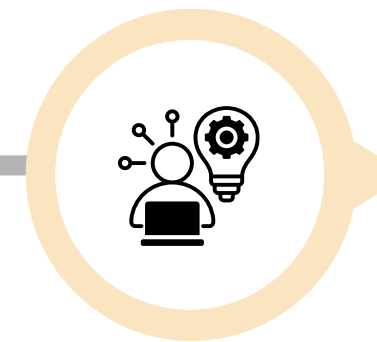
Middle-range theories often function as models rather than propositional systems (Risjord, 2019).



Model-based theories are evaluated for representational adequacy, not only testability (Risjord, 2019).



Evaluation is developmental and iterative rather than a one-time analytic verdict (Reed, 2022).



Theory evaluation now interrogates both the ontology of theory and the temporality of its assessment

Theoretical adequacy is demonstrated through sustained refinement and responsiveness to accumulating evidence (Reed, 2022).

From Critique to Selection: The Implementation Science Pivot

01

Implementation science confronts a theory selection problem under conditions of abundance (Birken et al., 2017).

02

No stable consensus governs which criteria make a theory preferable (Birken et al., 2017).

03

Theory selection is sometimes driven by familiarity, convenience, or political factors (Birken et al., 2017).

04

Theoretical strength includes comparative problem-solving effectiveness, not isolated confirmation (Laudan, 1977).

05

A theory must generate new questions, research programs, and practical consequences (Kuhn, 1977; Laudan, 1977).

06

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From Critique to Selection: The Implementation Science Pivot

01

Proliferation of 159 TMFs with limited repeated use intensified the need for structured selection tools
(Strifler et al., 2018).

02

T-CaST provides empirically derived criteria to compare and justify theory selection
(Birken et al., 2018).

03

T-CaST organizes selection across domains including applicability, usability, testability, and acceptability
(Birken et al., 2018).

04

SELECT-IT synthesizes TMF purposes, attributes, and practical considerations into a four-step selection process
(Fontaine et al., 2025).

05

SELECT-IT distinguishes intrinsic theoretical qualities from contextual feasibility constraints
(Fontaine et al., 2025).

Selection Tools vs. Evaluation Frameworks



Evaluation frameworks assess theoretical quality through criteria such as coherence, empirical adequacy, and pragmatic strength.



T-CaST and SELECT-IT support structured comparison among multiple viable TMFs

(Birken et al., 2018; Fontaine et al., 2025).



Selection tools separate intrinsic theoretical attributes from contextual feasibility factors

(Fontaine et al., 2025).



Rigorous research requires evaluation of theoretical robustness followed by explicit justification of contextual fit.

Rehabilitation Research: The Responsibility of Evaluation

01

Rehabilitation research draws from multiple disciplines without a unified evaluative framework.

02

Researchers must explicitly justify both their evaluative criteria and their theory selection.

03

Critique frameworks assess theoretical quality; selection tools justify comparative fit within context
(Birken et al., 2018; Fontaine et al., 2025).

04

The defensibility of a research program depends on the strength of its theoretical architecture
(Risjord, 2019; Reed, 2022).

Ann-Marie

The Physical Literacy Model for
Older Adults (Jones et al., 2018)

Social Cognitive Theory
(Bandura, 1986; Bandura 1989)

The Health Belief Model
(Rosenstock, 1974)



JAY

ICF Framework,

Ecological/Systems Theory, and

Critical Race Theory (CRT).

Criteria	Description	Pertinent Questions
Historical Evolution	Refers to the details of the development of the product design framework including the philosophical and theoretical antecedents and the changes in the framework over time	• How was the framework developed? • What are the philosophical and theoretical antecedents to the framework? • What changes have been made since the first publication of the framework
	Refer to the philosophical assumptions underpinning the framework and the major concepts of the framework. These are written at an abstract level and are the framework developer's beliefs about the phenomenon of concern to the discipline, the human-universe-health process.	• Are the philosophical assumptions explicitly stated? • Are the major concepts explicitly stated? • Do the philosophical assumptions and major concepts refer to the human-universe-health process? • How is the human-universe-health process defined?
Relational Statements	Refer to the principles that are created from the unique weaving of the concepts into descriptions of the human universe-health process, and they also are written at an abstract level	• How are the philosophical assumptions reflected in the principles? • How do the principles reflect the unique weaving of the basic concepts?
Correspondence		
	Refers to the consistency of meanings among the terms used to explain the human-universe-health process in the philosophical assumptions and in the definitions of the concepts and principles	• Are the meanings of the terms that appear in the assumptions, the concepts, and the principles consistent? • Does clarity prevail in the descriptions of the assumptions, concepts, and principles? • Are consistent levels of discourse evident within and among the assumptions, concepts, and principles? • Are the meanings of words consistent throughout the description of the theory? • Do the principles interrelate concepts at the same abstract level of discourse to describe, explain, or predict about the human-universe-health process? • With what paradigmatic perspective does the theory correspond?
Simplicity	Refers to the uncluttered abstract descriptions and economy of words used to explain the theory.	• Are the descriptions of the assumptions, concepts, and principles clearly written at an abstract level? • Is the word usage economical?
Syntax	Refers to the precision with which ideas are presented, that is, the logical flow in organization and movement of the central ideas from philosophical assumptions to major concepts to principles	• Is there a logical flow from the philosophical assumptions to major concepts to principles? • Are the foundational elements presented precisely at the same level of discourse? • Are the relational statements presented precisely at the same level of discourse?
	Refer to the beauty of the presentation of the theory, that is, the symmetry and harmony present in the descriptions of the major concepts, principles, basic concepts, and the connection of these to the philosophical assumptions	How is the beauty of the theory expressed? Is the framework structured symmetrically?
Pragmatics		
	Refers to the way the theory is used as a guide to research and practice. This is shown through publications and presentations of research findings and reports of projects related to practice.	• How is the framework used as a guide for research? • How is the framework used as a guide for practice? • What publications and presentations have emanated from the research studies and practice projects?
Heuristic Potential	Refers to the possibilities for further inquiry arising from the contributions made through the use of the theory in research and practice. The potential is shown in the ways that the research findings advance knowledge and further develop the theory	• What possibilities for further inquiry arise from the research findings of studies guided by the framework? • How have the research findings from studies guided by the framework advanced nursing knowledge? • What new knowledge surfaced from the research studies? • What possibilities for different practice projects arise from the reports of projects guided by the theory?

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