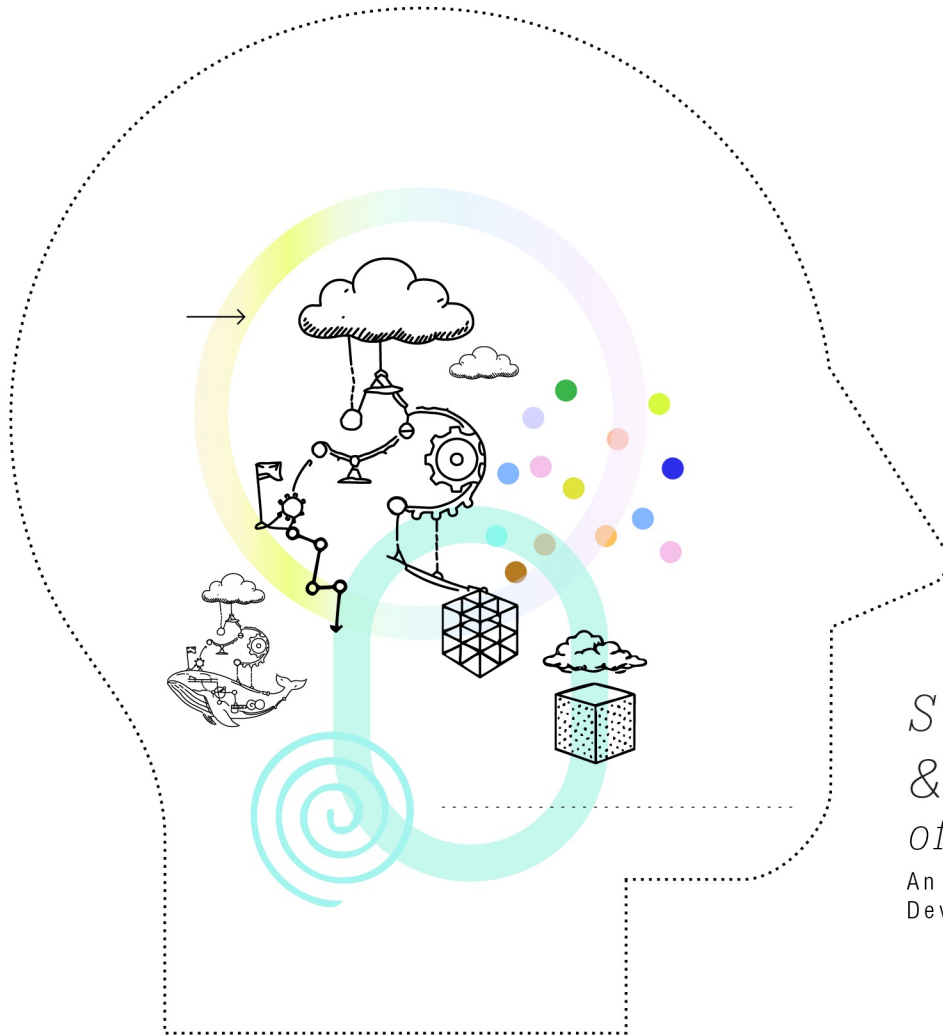




*SYSTEMS MAP
& KEY IDEAS
of Human Development*

An Integrative Atlas of Psychological,
Developmental, and Relational Concepts

Systems Map & Key Ideas of Human Development

An Integrative Reference Guide

Understanding human development requires more than a single theory or discipline. No single perspective fully explains why people think, feel, develop, struggle, heal, or flourish. Rather, human experience emerges through the continuous interaction of biological systems, psychological processes, relationships, culture, environments, and meaning-making across the lifespan (Bronfenbrenner, 1979, 2005; Lerner, 2006; Sameroff, 2009).

Contemporary counseling, psychology, neuroscience, and human development increasingly recognize that people cannot be understood through isolated explanations. Biological processes, cognitive development, relationships, culture, identity, trauma, neurodiversity, and meaning-making continuously interact across the lifespan to shape human experience (American Psychiatric Association, 2022; Engel, 1977; Siegel, 2020). Rather than reducing development to a single variable or theoretical orientation, contemporary scholarship increasingly embraces integrative and systems-oriented approaches that recognize the reciprocal influence of biological, psychological, social, cultural, and environmental processes.

This systems map was developed as an integrative reference guide that brings together foundational concepts from developmental psychology, counseling, neuroscience, systems theory, social psychology, and existential philosophy into a single visual framework. Rather than presenting these perspectives as competing explanations, the map illustrates how each contributes to a broader ecological understanding of human development.

The organization reflects an ecological and biopsychosocial perspective informed by Bronfenbrenner's Ecological Systems Theory (1979, 2005), Engel's Biopsychosocial Model (1977), Sameroff's Transactional Model of Development (2009), Lerner's Developmental Systems Theory (2006), and contemporary interpersonal neurobiology (Siegel, 2020). Development is viewed as a

dynamic, lifelong process emerging through reciprocal interactions among biological systems, psychological processes, interpersonal relationships, cultural environments, and individual meaning-making.

The concepts included in this atlas span multiple levels of analysis, including:

- Lifespan development
- Motivation and behavior
- Attachment and relational systems
- Trauma and neurobiology
- Executive functioning and neurodiversity
- Family and cultural systems
- Identity development
- Systems thinking
- Existential psychology
- Psychological measurement and research methods

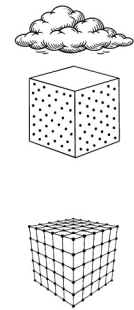
Collectively, these domains draw upon foundational work in developmental psychology, attachment theory, cognitive development, social learning, motivation, systems theory, and contemporary neuroscience (Bandura, 1986; Bowlby, 1988; Deci & Ryan, 2000; Erikson, 1968; Piaget, 1952; Vygotsky, 1978). Although each concept has its own theoretical history, they are intentionally presented as interconnected rather than independent. Human development is understood as an emergent process in which changes within one system influence every other system.

This perspective reflects contemporary movements toward integration across counseling, psychology, neuroscience, education, and health sciences (Engel, 1977; Siegel, 2020). Rather than serving as a comprehensive textbook, this guide is intended as a conceptual atlas that helps students and professionals visualize the relationships among foundational theories, developmental processes, and evidence-based concepts that shape human experience.

This guide is intended as both a learning resource and a conceptual map for students, counselors, educators, and helping professionals seeking to understand the complexity of human development through an ecological and systems-oriented lens.

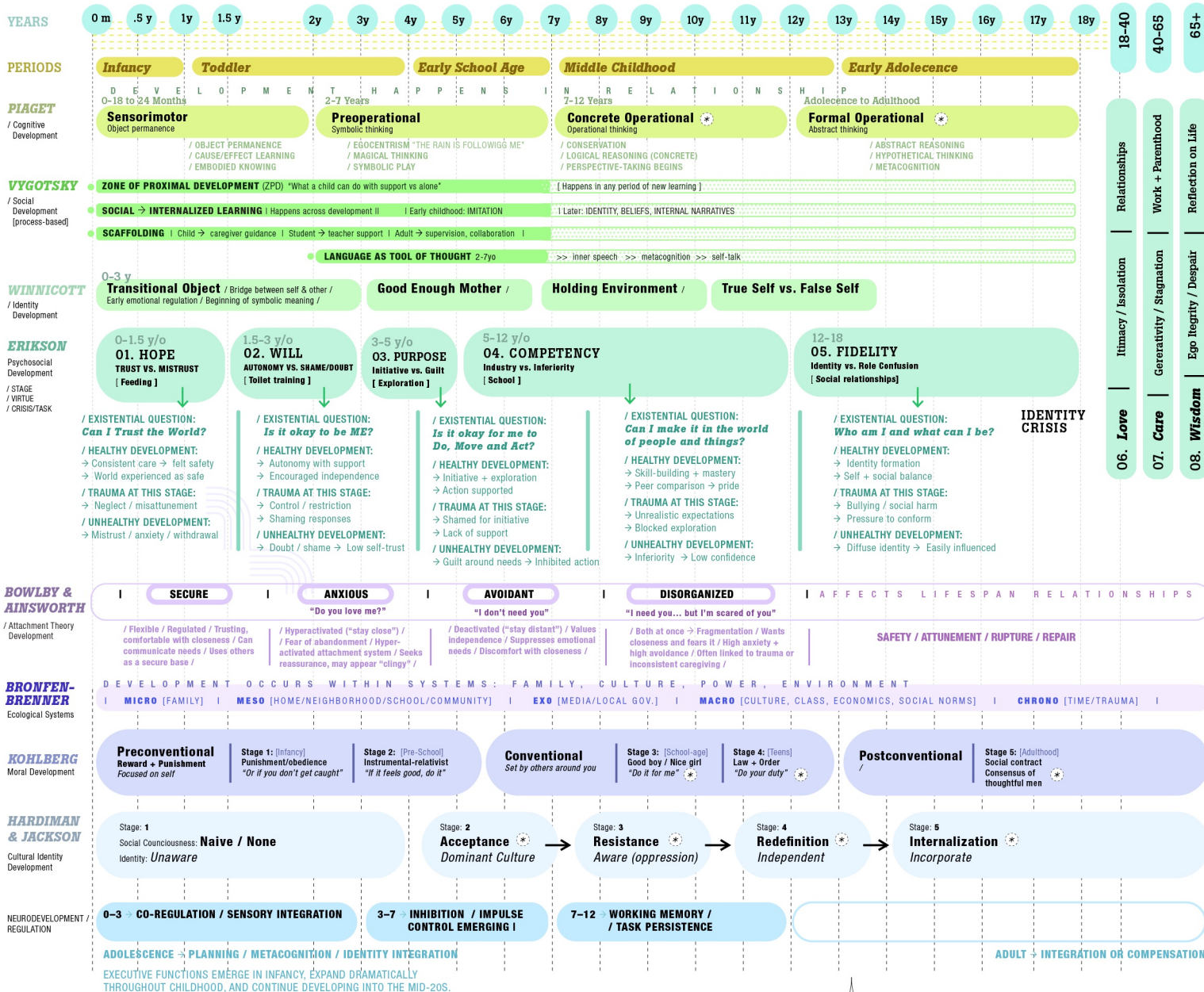
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systems map of human development

* May never move past this stage



/ KEY IDEAS

WHAT INVISIBLE SYSTEMS SHAPE HUMAN BEHAVIOR
BEFORE WE EVER PATHOLOGIZE THE INDIVIDUAL?

/ Behavior & Motivation

ATTRIBUTION THEORY



Attribution theories are models that attempt to explain the causes of behavior and events.

INTRINSIC MOTIVATION



Behavior that is **driven by internal rewards** (such as feelings about ourselves) rather than external rewards (such as praise from others).

COGNITIVE DISSONANCE



The discord individuals feel when they hold **inconsistent beliefs or attitudes**, or when their behaviors are inconsistent with their beliefs or values. Typically, cognitive dissonance is a source of motivation for seeking to reduce stress.

FAMILISM



Familism = loyalty specifically centered around family. Familism refers to the value held by many **cultures that prioritizes the role of families** in individuals lives.

SOCIAL LEARNING THEORY



Learning occurs through observing others, imitating behaviors, and experiencing the consequences of modeled actions. (Albert Bandura)

RELATIONAL AUTONOMY



Relational autonomy recognizes that personal agency develops within relationships, communities, and systems rather than in complete isolation. Feminist psychology

BICULTURAL IDENTITY INTEGRATION



Refers to how individuals reconcile and navigate multiple cultural identities within their sense of self. Bicultural identity integration

SELF-DETERMINATION THEORY



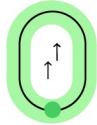
When the basic needs for autonomy, competence, and relatedness are consistently fulfilled. (Deci & Ryan)

LEARNED OPTIMISM



The counterpart to learned helplessness. People can learn explanatory styles that foster resilience. (Seligman)

GROWTH MINDSET



Intelligence and abilities develop through effort. (Carol Dweck)

MEANING-MAKING



Humans are motivated by meaning, not merely reward. (Frankl / Park)

NEED FOR BELONGING



Social connection is a fundamental human need. (Baumeister & Leary)

PSYCHOLOGICAL FLEXIBILITY



The ability to remain present while adapting thoughts and behaviors in ways that align with personal values despite discomfort. (ACT)

SELF-EFFICACY



The belief in one's ability to successfully organize and perform actions needed to achieve desired outcomes. (Albert Bandura)

FLOW



A state of complete absorption in an activity where skill and challenge are well matched, often accompanied by enjoyment and intrinsic motivation. (Mihaly Csikszentmihalyi)

ATTRIBUTION STYLE



The habitual way individuals explain successes and failures, influencing resilience, motivation, and emotional well-being. > Internal/external, stable/unstable, global/specific.

EXTRINSIC MOTIVATION



Behavior driven by external rewards or consequences such as praise, grades, money, or avoiding punishment.

GOAL ORIENTATION



The tendency to pursue learning for mastery and personal growth or to demonstrate competence through performance and achievement.

EXPECTANCY-VALUE THEORY

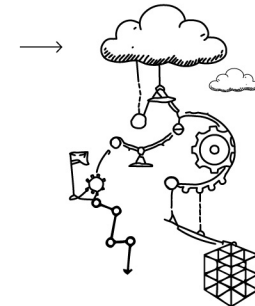


Motivation depends on the belief that success is possible and that the goal is personally valuable or meaningful.

CURIOSITY



An open and nonjudgmental orientation toward learning, exploration, and understanding that supports growth, creativity, resilience, and lifelong development.



/ Cultural & Family Systems

FILIAL PIETY



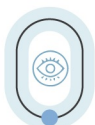
Strong obligation toward parents/elders, often discussed in East Asian cultural contexts. Distinct from familism because it emphasizes hierarchy, duty, and respect toward elders. [Cultural psychology]

INTERDEPENDENCE



A relational orientation where individuals rely on one another for support, decision-making, and identity. Emphasizes connection, mutual responsibility, and shared well-being within relationships or groups.

INDEPENDENCE



A value system that prioritizes self-reliance, personal autonomy, and individual decision-making. Individuals are encouraged to act based on personal goals rather than group expectations.

COLLECTIVISM



A cultural value that prioritizes group harmony, shared responsibility, and loyalty to family or community over individual goals.

INDIVIDUALISM



A broader cultural value emphasizing the importance of the individual over the group. Focuses on personal freedom, self-expression, and independence. Often contrasted with collectivism, though the two can coexist in nuanced ways.

FAMILY OBLIGATION



Frequently studied in immigrant family research, financial support, caregiving, translation responsibilities, role expectations.

PARENT-IFICATION



When a child takes on adult emotional/practical roles in the family system. [Family systems theory]

ENMESHMENT



Family boundaries become overly diffuse; helpful if you're exploring when loyalty becomes self-erasure.

PREJUDICE



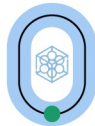
Negative attitudes toward a group (not just identifying groups)
/ **Example:** Assuming a client is "lazy" because of their socioeconomic status

CULTURAL PLURALISM



Cultural pluralism = multiple groups coexist with unique identities.
/ **Example:** A school celebrates different cultural holidays while honoring each group's traditions

CULTURAL ENCAPSULATION



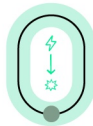
Being stuck in one worldview, unable to see others.
/ **Example:** A counselor assumes all families should prioritize independence and views collectivist values as unhealthy

DISPROPORTIONALITY



over/underrepresentation of groups in systems (e.g., schools, justice).
/ **Example:** Students of color being disproportionately placed in special education programs

MICRO-AGGRESSIONS



Everyday verbal, behavioral, or environmental messages that communicate subtle prejudice, exclusion, or invalidation toward marginalized individuals or groups.

ACCULTURATIVE GRIEF



Emotional pain, loss, or mourning connected to adapting to a new culture while feeling separated from aspects of one's original culture, identity, language, community, traditions, or sense of belonging. This can include grief related to immigration, cultural displacement, assimilation pressures, or feeling caught between cultures.

IDENTITY CONFUSION



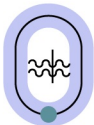
Difficulty developing or maintaining a clear, stable sense of self. A person may feel uncertain about who they are, what they value, where they belong, or what direction they want in life. Identity confusion can occur during developmental transitions, cultural conflict, trauma, family pressure, or when external expectations overshadow personal needs and self-definition.

SENSE OF BELONGING



The experience of feeling accepted, valued, respected, and connected within relationships, communities, cultures, and environments.

INTERSECTIONALITY



How multiple identities intersect to shape privilege, oppression, and lived experience. (Crenshaw)

CULTURAL HUMILITY



Lifelong openness, self-reflection, and learning rather than "cultural competence."

MINORITY STRESS



Chronic stress resulting from marginalized identities.

SOCIAL DETERMINANTS OF HEALTH



Housing, education, discrimination, transportation, food access, income.

ECOLOGICAL SYSTEMS THEORY



Human development unfolds through continuous interactions between individuals and the multiple environmental systems they inhabit across time. (Bronfenbrenner)

CULTURAL IDENTITY



The evolving sense of belonging to one or more cultural groups that shapes values, worldview, traditions, and self-understanding.

CULTURAL RESPONSIVENESS



The ongoing ability to recognize, understand, and respectfully adapt to individuals' unique cultural backgrounds, values, and lived experiences in relationships and practice.

CULTURAL SAFETY



An environment where individuals feel respected, valued, and free from discrimination or cultural harm, allowing authentic participation and belonging.

INCLUSION



Creating environments in which diverse identities are welcomed, valued, and meaningfully supported rather than simply represented.

/ Agency & Control

SELF-DETERMINATION THEORY



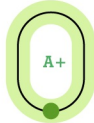
/ Autonomy, competence, relatedness. Motivation and well-being are strengthened when people experience autonomy, competence, and meaningful connection to others. [Deci & Ryan]

INTRINSIC MOTIVATION



/ Intrinsic motivation is when you do something because it feels interesting, meaningful, or satisfying in itself, not because of a reward or pressure from outside.
/ **Examples:** Drawing because you love creating.

EXTRINSIC MOTIVATION



/ Extrinsic motivation is when you do something because of external rewards or pressures, rather than because you genuinely enjoy the activity itself.
/ **Example:** Studying to get good grades or avoid punishment

LOCUS OF CONTROL



/ Internal vs external perceived control over outcomes. Refers to whether people perceive outcomes as primarily influenced by their own actions (internal) or by external forces beyond their control (external). [Rotter]

SELF-EFFICACY



/ Self-efficacy refers to an individual's belief in their ability to successfully complete tasks, navigate challenges, and influence outcomes. [Albert Bandura]

LEARNED HELPLESSNESS



/ Occurs when repeated experiences of lack of control lead someone to believe their actions no longer matter, resulting in passivity or resignation. [Martin Seligman]

ATTRIBUTION STYLE



Optimistic vs pessimistic explanatory style.

HOPE THEORY



Goals, Agency, Pathways (Snyder)

PSYCHOLOGICAL FLEXIBILITY



(ACT) Ability to remain present while choosing values-consistent action despite discomfort.

/ Social Identity & Adaptation

SOCIAL IDENTITY THEORY



How group membership shapes self-concept. Part of a person's identity is shaped through belonging to social groups and the meanings attached to those groups. [Tajfel & Turner]

NORMATIVE SOCIAL INFLUENCE



Conforming to be liked/accepted. Adjusting behavior in order to fit in, gain acceptance, or avoid rejection from others.

INFORMATIONAL SOCIAL INFLUENCE



Conforming because others seem correct. Looking to others for guidance when uncertain, assuming they may know what is correct or appropriate.

ROLE THEORY



Expected social roles and cultural expectations influence behavior, identity, and interpersonal interactions.

ACCULTURATION STRESS



When someone is trying to belong to multiple cultural worlds that may hold conflicting expectations about identity, behavior, and belonging.

IDENTITY DEVELOPMENT



Identity diffusion, Foreclosure, Moratorium, Achievement (Marcia)

SOCIAL COMPARISON THEORY



We understand ourselves through comparison with others. (Festinger)

STEREOTYPE THREAT



Fear of confirming stereotypes affects performance. (Steele)

SELF-CATEGORIZATION THEORY



Extension of Social Identity Theory explaining how people shift between personal and group identity.

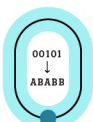
/ Relational Systems

FAMILY SYSTEMS THEORY



Individuals are understood within interconnected family and relational systems, where each person both influences and is influenced by the larger dynamic. [Bowen]

CODE-SWITCHING



Adjusting language, behavior, expression, or presentation depending on different social, cultural, or professional environments. [Sociolinguistics]

INTERGENERATIONAL CONFLICT



Tension that can emerge between generations when values, expectations, identities, or cultural experiences differ. [Developmental psychology]

ATTACHMENT THEORY



Early caregiver relationships help shape emotional bonds, relational expectations, regulation patterns, and experiences of safety throughout life. [Bowlby & Ainsworth]

INTERGENERATIONAL TRAUMA



Trauma responses, survival strategies, emotional patterns, and relational wounds that can be carried across generations through families, systems, and environments.

POLYVAGAL THEORY



How the autonomic nervous system shapes safety, connection, defense, and engagement.

MENTALIZATION



Understanding our own and others' mental states.

DIFFERENTIATION OF SELF



Remaining emotionally connected while maintaining identity. (Bowen)

RUPTURE & REPAIR



Relationships become stronger through successful repair.

EMOTIONAL CO-REGULATION



How nervous systems regulate together.

/ Trauma & Neurobiology

WINDOW OF TOLERANCE



/ The optimal zone of nervous system regulation where a person can think, feel, and respond flexibly. Outside this window, stress may lead to hyperarousal or hypoarousal. (Dan Siegel)

NEUROCEPTION



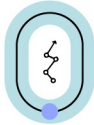
The nervous system's unconscious process of detecting cues of safety, danger, or life threat before conscious awareness. (Stephen Porges)

MEMORY RECONSOLIDATION



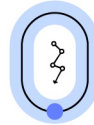
The process through which activated memories become temporarily malleable, allowing emotional learning to be updated and lasting therapeutic change to occur.

BOTTOM-UP PROCESSING



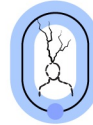
Information processing that begins with bodily sensations, emotions, and autonomic responses before conscious thought. Often emphasized in trauma treatment.

TOP-DOWN PROCESSING



Cognitive regulation through conscious awareness, reasoning, reflection, and executive functioning to influence emotions and behavior.

DISSOCIATION



A protective response in which awareness, memory, identity, or bodily experience becomes disconnected during overwhelming stress or trauma.

HYPER-AROUSAL



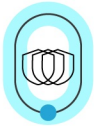
A heightened state of nervous system activation characterized by anxiety, hypervigilance, emotional reactivity, fight-or-flight responses, or difficulty calming.

HYPOAROUSAL



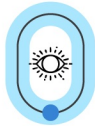
A shutdown state involving emotional numbness, fatigue, withdrawal, collapse, or reduced responsiveness associated with dorsal vagal activation.

STATE-DEPENDENT LEARNING



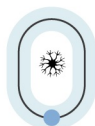
Experiences and memories are more easily encoded and retrieved when a person's emotional or physiological state matches the original learning context.

EMOTIONAL FLASHBACKS



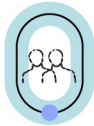
Sudden emotional states from unresolved trauma that occur without vivid visual memories, often involving shame, fear, abandonment, or helplessness. (Pete Walker)

SOMATIC MEMORY



Traumatic experiences may be stored through bodily sensations, movement patterns, and autonomic responses even when explicit memory is limited.

CO-REGULATION



The process through which calm, attuned relationships help regulate another person's nervous system and support emotional safety.

INTEROCEPTION



The awareness and interpretation of internal bodily sensations such as heartbeat, breathing, hunger, pain, and emotional states.

POLYVAGAL THEORY



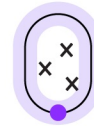
A framework describing how the autonomic nervous system shifts between states of safety, mobilization, and shutdown to support survival and social connection. (Stephen Porges)

ALLOSTATIC LOAD



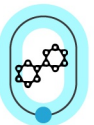
The cumulative physical and psychological wear on the body resulting from chronic stress and repeated activation of stress-response systems.

TRAUMA TRIGGERS



Internal or external cues that unconsciously activate past traumatic memories, emotions, or survival responses despite present safety.

PREDICTIVE PROCESSING



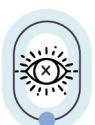
The brain continually generates predictions about the world using past experiences, updating expectations as new sensory information becomes available.

IMPLICIT MEMORY



Unconscious memory that influences emotions, behaviors, bodily responses, and relationships without deliberate recall or conscious awareness.

ATTACHMENT WOUNDS



Emotional injuries resulting from inconsistent, neglectful, or harmful relationships that shape expectations of safety, trust, and connection throughout life.

DEFENSIVE RESPONSES



(Fight, Flight, Freeze, Fawn) Automatic survival strategies activated in response to perceived threat, including fight, flight, freeze, and fawn responses.

RESILIENCE



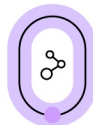
The capacity to adapt, recover, and grow following adversity through supportive relationships, adaptive coping, and protective internal and external resources.

INTEGRATION



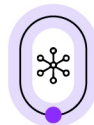
The process of linking thoughts, emotions, memories, bodily experiences, and relationships into a more coherent, flexible, and adaptive sense of self. (Dan Siegel)

NEURO PLASTICITY



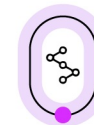
Positive psychological growth that may emerge through the struggle with adversity, leading to deeper meaning, stronger relationships, increased resilience, and renewed purpose.

ADAPTIVE PLASTICITY



The nervous system's capacity to modify patterns of thinking, feeling, and responding through repeated experience and corrective relational learning.

NEURAL INTEGRATION



The coordinated communication among different brain regions that supports emotional regulation, flexible thinking, and healthy adaptation.

/ Neurodiversity

MASKING



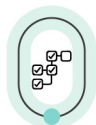
The conscious or unconscious suppression of natural behaviors to meet social expectations, often resulting in exhaustion, stress, and reduced authenticity.

MONOTROPISM



A theory suggesting autistic attention naturally focuses deeply on a limited number of interests or tasks, supporting intense engagement while making attention shifts more difficult.

EXECUTIVE FUNCTION



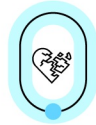
The cognitive processes involved in planning, organizing, initiating, sustaining attention, regulating emotions, and adapting behavior toward goals.

SENSORY PROCESSING



The way the nervous system receives, interprets, and responds to sensory information from the body and environment.

REJECTION SENSITIVITY



An intense emotional response to perceived criticism, rejection, or failure that may influence relationships, self-esteem, and decision-making.

DOUBLE EMPATHY PROBLEM



The idea that communication difficulties between autistic and non-autistic people arise from mutual differences in perspective rather than deficits within one group. (Damian Milton)

AUTISTIC/ ADHD BURNOUT



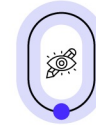
A state of profound physical, cognitive, and emotional exhaustion resulting from prolonged stress, masking, sensory demands, and unmet support needs.

COGNITIVE LOAD



The total mental effort required to process information, manage tasks, and regulate attention, which may become overwhelming when demands exceed cognitive resources.

ALEXITHYMIA



Difficulty identifying, interpreting, or describing one's own emotional experiences, which may occur alongside autism or other neurodevelopmental differences.

BODY DOUBLING



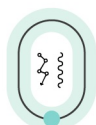
Working alongside another person whose presence increases motivation, attention, accountability, or task completion without direct assistance.

HYPER-FOCUS / FLOW STATE



Periods of intense concentration in which attention becomes deeply absorbed in an activity, often reducing awareness of time and external distractions.

DMN + TPN



The Default Mode Network (DMN) supports self-reflection and internal thought, while the Task Positive Network (TPN) supports focused attention and goal-directed behavior. Healthy functioning involves flexible shifting between these networks.

AUTHENTICITY VS. BELONGING



The ongoing tension between expressing one's authentic self and adapting to social expectations in order to gain acceptance and connection.

NEURODIVERSITY PARADIGM



The perspective that neurological differences are natural forms of human variation rather than disorders to be cured, emphasizing accommodation, strengths, and inclusion.

SELF-ADVOCACY



The ability to recognize, communicate, and advocate for one's needs, boundaries, strengths, and accommodations across different environments.

SPECIAL INTERESTS



Highly focused interests that provide joy, motivation, learning, emotional regulation, and identity while often contributing to expertise and creativity.

ENVIRONMENTAL FIT



Well-being improves when environments are adapted to support an individual's cognitive, sensory, emotional, and relational needs rather than requiring constant adaptation by the individual.

STRENGTHS-BASED MODEL



An approach that recognizes neurodivergent differences as sources of unique abilities, perspectives, and potential while also acknowledging support needs.

INTEREST-BASED NERVOUS SYSTEM



A pattern of motivation in which attention is driven more by interest, novelty, urgency, challenge, or meaning than by importance or external expectations. Commonly described in ADHD.

REJECTION SENSITIVE DYSPHORIA



An intense emotional response to perceived or actual rejection, criticism, or failure that can lead to overwhelming emotional pain and avoidance. Often associated with ADHD. (William Dodson)

INFLEXIBILITY



Difficulty shifting attention, expectations, routines, or strategies when circumstances change, often reflecting differences in cognitive flexibility rather than unwillingness.

SENSORY OVERWHELM



A state in which sensory input exceeds the nervous system's capacity to process information, leading to distress, fatigue, shutdown, or escape behaviors.

MONOTROPIC ATTENTION



The tendency to sustain deep attention on one area of interest while filtering out competing stimuli, supporting expertise, creativity, and focused engagement.

STIMMING



Repetitive movements, sounds, or behaviors that help regulate sensory input, emotions, attention, or nervous system arousal.

DEMAND AVOIDANCE



A nervous system response in which everyday demands trigger distress or a need to regain autonomy, often increasing when expectations feel overwhelming or controlling.

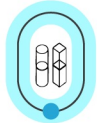
SELF-COMPASSION



Responding to personal challenges with kindness, understanding, and acceptance rather than self-criticism, supporting resilience and psychological well-being.

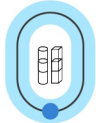
/ Systems Thinking

EQUIFINALITY



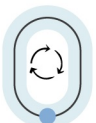
Different developmental pathways or life experiences can lead to similar outcomes.

MULTIFINALITY



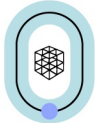
Individuals with similar beginnings or experiences may develop along very different pathways and outcomes.

FEEDBACK LOOPS



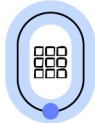
Circular patterns in which behaviors and environments continually influence one another, reinforcing or altering future interactions.

EMERGENCE



Complex patterns, behaviors, or properties arise from interactions among simpler parts and cannot be understood by examining the parts alone.

HOMEOSTASIS



The tendency of biological, psychological, and family systems to maintain stability by resisting or adapting to change.

CIRCULAR CAUSALITY



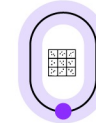
The systems principle that behavior is maintained through reciprocal influence rather than simple linear cause-and-effect relationships.

NONLINEARITY



Small changes within a system may produce large effects, while significant interventions may sometimes produce little immediate change.

SELF-ORGANIZATION



The tendency of complex systems to spontaneously develop new patterns, structures, or forms of stability through ongoing interactions without centralized control.

TRANSFORMATION



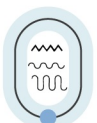
Fundamental change in the organization or functioning of a system that creates new possibilities for adaptation and growth.

INTEGRATION



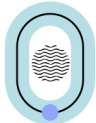
The coordination of differentiated parts into a flexible, coherent whole while preserving their unique functions.

BOUNDARIES



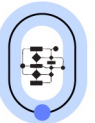
The physical, emotional, or relational limits that regulate interactions between individuals and systems, supporting autonomy, safety, and healthy functioning.

ADAPTATION



The continual process through which individuals and systems adjust to changing environments, challenges, and developmental demands.

OPEN SYSTEMS



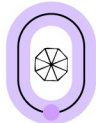
Systems that exchange information, energy, and resources with their environments, allowing ongoing growth, adaptation, and change.

CLOSED SYSTEMS



Systems that resist new information or external influence, limiting flexibility, adaptation, and opportunities for growth.

RESILIENCE



The capacity of individuals or systems to recover, reorganize, and continue functioning following adversity or disruption.

LEVERAGE POINTS



Strategic places within a complex system where relatively small changes can produce meaningful and lasting transformation. (Donella Meadows)

DYNAMIC EQUILIBRIUM



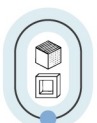
A balanced state in which systems remain stable through continual adaptation rather than remaining static.

INTERDEPENDENCE



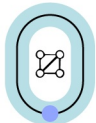
The mutual influence of individuals, relationships, and systems in which changes to one part affect the functioning of the whole.

COMPLEXITY



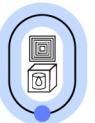
The understanding that human behavior emerges from multiple interacting biological, psychological, relational, cultural, and environmental systems.

NETWORKS



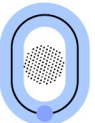
Patterns of interconnected relationships through which information, resources, influence, and support flow within systems.

NESTED SYSTEMS



The principle that individuals exist within multiple interconnected systems, each embedded within larger systems across time and context.

ADAPTABILITY



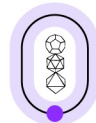
The capacity of individuals and systems to flexibly respond to changing demands while maintaining overall functioning.

PATTERN RECOGNITION



Identifying recurring relational, behavioral, or systemic patterns that reveal how systems maintain themselves over time.

SYSTEM MAPPING



A visual process for identifying relationships, interactions, feedback loops, and influences within complex systems.

/ Existential Psychology

MEANING



The human drive to create purpose and significance through relationships, values, work, suffering, and personal experience. (Viktor Frankl)

FREEDOM



The capacity to choose one's attitudes and actions despite life's limitations, accompanied by the responsibility that choice entails.

ISOLATION



The inherent separateness of human existence despite our desire for deep connection with others.

MORTALITY



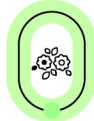
Awareness of life's finite nature, which often motivates reflection on purpose, priorities, and authentic living.

RESPONSIBILITY



Accepting ownership for one's choices, actions, and responses while recognizing the influence of circumstances beyond one's control.

AUTHENTICITY



Living in alignment with one's values, identity, and lived experience rather than external expectations or prescribed roles.

VALUES



Personally chosen principles that provide direction and meaning, serving as guides for intentional behavior even during adversity.

PURPOSE



A broader sense of direction that organizes goals, relationships, and contributions into a meaningful life narrative.

EXISTENTIAL ANXIETY



The awareness of life's uncertainties, freedom, mortality, and responsibility that can evoke discomfort while also motivating growth and authentic living.

CHOICE



The continual capacity to choose one's attitudes, actions, and responses despite external circumstances, recognizing that every choice shapes one's becoming.

UNCERTAINTY



The acceptance that life cannot be fully predicted or controlled, requiring openness, courage, and adaptability in the face of the unknown.

TRANSCENDENCE



The capacity to move beyond immediate circumstances or the self by pursuing meaning, connection, creativity, compassion, or a greater purpose.

HOPE



The belief that meaningful possibilities remain despite adversity, fostering resilience, motivation, and movement toward valued goals.

PRESENCE



The intentional practice of engaging fully with the present moment through awareness, openness, and authentic connection with oneself and others.

IDENTITY



The evolving understanding of who we are, shaped through experience, relationships, culture, values, and the meanings we construct over time.

BECOMING



The lifelong process of growth, adaptation, and self-discovery through which individuals continually construct identity, meaning, and purpose across changing contexts.

DIMENSIONS OF BEING



An existential framework describing the interconnected worlds through which human life is experienced. Every person continually navigates the physical, social, personal, and spiritual dimensions, each shaping identity, relationships, resilience, and the search for meaning. (Emmy van Deurzen)

PHYSICAL WORLD (UMWELT)



The embodied dimension of existence involving the body, health, sensory experience, environment, survival, and our relationship with the natural world. (van Deurzen)

SOCIAL WORLD (MITWELT)



The relational dimension encompassing family, friendships, culture, community, belonging, roles, and our connections with others. (van Deurzen)

PERSONAL WORLD (EIGENWELT)



The inner world of thoughts, emotions, identity, values, self-awareness, and the ongoing relationship we have with ourselves. (van Deurzen)

SPIRITUAL WORLD (ÜBERWELT)



The dimension of meaning, purpose, beliefs, ideals, transcendence, and the ways individuals make sense of existence beyond the self. (van Deurzen)

BELONGING



The fundamental human need to feel accepted, connected, and valued within relationships, communities, and the broader world.

ENCOUNTER



The authentic meeting between self and other in which genuine presence, dialogue, and mutual recognition become possible. (Buber / Existential tradition)

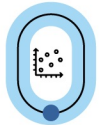
PARADOX



The coexistence of seemingly opposing truths, such as freedom and limitation, joy and suffering, or autonomy and connection, that are held rather than resolved.

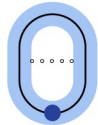
Measurement & Variables

SCATTERGRAM



Scattergram = relationship between variables. The scattergram displays a link between two variables. **Example:** Hours studied vs. exam score (points forming a pattern).

SEMANTIC DIFFERENTIAL



Semantic differential = bipolar adjectives (good-bad). The semantic differential scale uses opposing terms like good-bad to assess frequency/intensity. **Example:** "How do you feel about your therapist?" Warm * * * * * Cold.

LIKERT SCALE



Likert scale = rating degree. Used for agreement, satisfaction, frequency (low → high). **Example:** "I feel satisfied with my therapy." "strongly agree → strongly disagree".

FACTOR ANALYSIS



Factor analysis = statistical method. The factor analysis measures more abstract terms. For example, the facilitator might ask the participants several questions about the product's aesthetic to gain more insight into their opinions. **Example:** A survey on anxiety reveals hidden clusters like → social anxiety → physical symptoms → worry patterns.

→ Levels of Measurement

NOMINAL



Categories, no order

Examples: gender, diagnosis, yes/no

Think: labels only

Leads to: Chi-square
Fisher's Exact
Logistic regression (if predicting)

ORDINAL



Ranked, order but uneven spacing

Examples: Likert scales, severity rankings

Think: ordered, but not evenly spaced

Leads to: Nonparametric tests
Mann-Whitney U
Kruskal-Wallis
Spearman correlation

INTERVAL



Equal spacing, no true zero

Examples: IQ, temperature (Celsius)

Think: differences matter, zero is arbitrary

Leads to: Usually treated like ratio in stats → use: t-tests
ANOVA
Pearson correlation

RATIO



Equal spacing + true zero

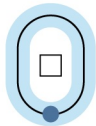
Examples: age, income, reaction time

Think: you can multiply/divide meaningfully

Leads to: Same tests as interval: t-tests
ANOVA
Regression

Reliability and Validity

RELIABILITY



Reliability refers to the consistency or stability of a measurement. If you measure the same thing multiple times under the same conditions, a reliable tool will give you similar results each time.

Examples: A scale that shows your weight as 150 lbs every time you step on it (within reason) → reliable. A personality test that gives you very different results every time → not reliable

Common types:

- Test-retest reliability → consistency over time
- Inter-rater reliability → consistency between different observers
- Internal consistency → items on a test measure the same construct

VALIDITY



Is it measuring the right thing?

Validity refers to whether a test or measurement actually measures what it is supposed to measure.

Examples: A depression inventory that truly measures depression → valid
A test that claims to measure anxiety but actually reflects stress → not valid

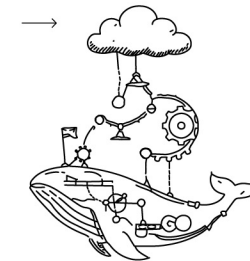
Common types:

- Content validity → covers all aspects of the concept
- Construct validity → actually represents the theoretical concept
- Criterion validity → correlates with an external standard (predictive or concurrent)

KEY RELATIONSHIP:

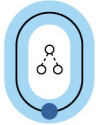
• A measure can be reliable but NOT valid (e.g., a broken scale that always shows 150 lbs → consistent but wrong)

• A measure cannot be valid unless it is reliable



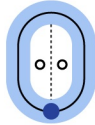
→ Stat Test

ANOVA



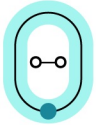
Compare means between 3+ independent groups.
 > 3+ groups, normal data → One-way ANOVA. > Example: Compare three therapy approaches

T-TEST



Compare means between 2 independent groups.
 > 2 groups, normal data → Independent t-test.
 > Example: Compare CBT vs. ACT depression scores

PAIRED



Compare the same people twice.
 > 2 measurements, same participants → Paired t-test.
 > Example: Anxiety before vs. after treatment

NONPARAMETRIC



Used when data are not normally distributed or are ordinal (ranked). Analyzes ranked data and makes fewer assumptions about the distribution. Includes Mann-Whitney U, Wilcoxon Signed-Rank, and Kruskal-Wallis tests. > Example: Compare client satisfaction ratings (1–5) across therapy groups.

CORRELATION (R)



Relationship between two continuous variables. Measures the strength and direction of a linear relationship. > Example: Hours studied & exam score

REGRESSION



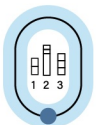
Predict a continuous outcome. > Predict an outcome from one or more predictor variables. > Example: Predict depression score from stress and sleep

CHI-SQUARE



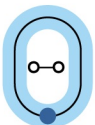
Compare frequencies between categorical variables. > Tests whether two categorical variables are associated. > Example: Gender × Diagnosis

KRUSKAL-WALLIS



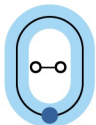
3+ groups, NOT normal → Kruskal-Wallis. > Nonparametric alternative to One-Way ANOVA. > Example: Compare therapy satisfaction ratings (1–5) across three therapy groups.

INDEPENDENT T-TEST



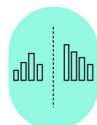
2 independent groups, normal, → compare means. > Tests whether two separate groups have different average scores. > Example: CBT group vs. ACT group depression scores

PAIRED T-TEST



Before and after. Same people, 2 measurements. > Compares the means of the same participants measured twice. > Example: Anxiety before vs. after treatment

MANN-WHITNEY U



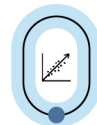
2 groups, NOT normal → Mann-Whitney U

SPEARMAN CORRELATION (P)



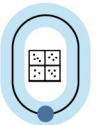
Ranked or non-normal variables. > Measures the strength of a monotonic relationship using ranked data. > Example: Ranked anxiety levels & sleep quality

LINEAR REGRESSION



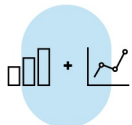
Predict a continuous outcome. > Uses one or more predictors to estimate a continuous dependent variable. > Example: Predict depression score from stress and sleep

FISHER'S EXACT



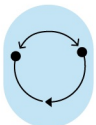
Categorical variables + small sample. > Alternative to Chi-square when expected cell counts are very small (typically <5). > Example: Gender × Diagnosis in a small pilot study

MANOVA



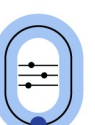
Multiple dependent variables. Tests whether groups differ on two or more related outcomes simultaneously. > Example: Compare anxiety AND depression after different therapies

REPEATED MEASURES ANOVA



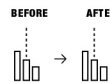
Same group, 3+ time points. > Tests whether scores change across multiple measurements from the same participants. > Example: Stress measured pre-treatment, post-treatment, and 3-month follow-up

ANCOVA



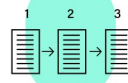
Compare means while controlling for another variable. > Tests group differences after adjusting for the influence of a continuous covariate. > Example: Compare therapy outcomes while controlling for age

WILCOXON SIGNED-RANK TEST



2 related samples, NOT normal. > Nonparametric alternative to the paired t-test. > Uses ranks instead of raw scores. > Example: Pain ratings before vs. after treatment (non-normal data)

FRIEDMAN TEST



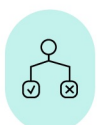
Same group, 3+ measurements, NOT normal. > Nonparametric alternative to repeated measures ANOVA. > Example: Stress ratings across three counseling sessions

PEARSON CORRELATION (R)



Relationship between two continuous variables. > Measures the strength and direction of a linear relationship. > Example: Hours studied & exam score

LOGISTIC REGRESSION



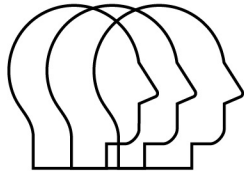
Predict a categorical outcome. > Estimates the probability of group membership or an event occurring. > Example: Predict treatment success (Yes/No)

CRONBACH'S ALPHA



Measure internal consistency (reliability). > Evaluates how consistently items measure the same construct. > Example: Reliability of a 10-item anxiety questionnaire

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