“HABITUDES”
which lie below the level of reflection are those which have been formed in the constant give and take of relationships with others.

John Dewey, 1916

Everything should be made as simple as possible but not simpler.

Albert Einstein

If you can’t explain your theory to a six year old, you probably don’t understand it yourself.
By tapping diverse fields of study, we can discover the most powerful truths.

*William Whewell (1794-1866)*

Truth does not contradict truth.

*Rabbi Eli'ezer Zweifel (1815-1888)*

Pope John Paul II (1920-2005)

Life’s complexities can be broken down into powerful simple truths.

*E. O. Wilson*

Consilience: The New Standard for Evidence

Values

Social Science

Natural Science

Experience

EVIDENCE

Dignity & Respect

*Pope John Paul II (1920-2005)*

*William Whewell (1794-1866)*

Consilience

Rabbi Eli'ezer Zweifel (1815-1888)
Much knowledge about human nature predates Western science.

The old African men and women, particularly the old women, were consummate child psychologists.

Herbert Vilakazi
Zululand University

Children’s growth needs are universal in all cultures.

Martin Brokenleg
Consilience of Research on Positive Development

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These social brain drives served to insure group survival in hunter-gatherer societies.

But humans like all living creatures also have primitive self-preservation drives:

**Avoidance**
(evade pain, e.g., fear, anxiety, shame, loss)

**Approach**
(seek pleasure, e.g., hunger)

Brain-Based Drives
- Attachment
- Achievement
- Autonomy
- Altruism

Developmental Needs
- Belonging
- Achievement
- Power
- Purpose

Avoidance
Survival Brain

Approach
Social Brain

**The Resilience Compass**

The moment I entered their village, I was captivated by their respectful behavior, self-confident demeanor, and astonishing creativity.

**Children in Highland Peru**

Belonging:
Loneliness is seen as the saddest experience so all are included in circles of respect.
Achievement: Children are eager to learn and master but never flaunt their superiority.

Power: Children are never harshly punished but take responsibility caring for small children who idolize them.

Purpose: Teens are assigned important roles in the community like caring for and protecting the Alpaca herds.

Safety: In this cultural sanctuary, young people have close respectful bonds and all protect one another.

Adventure: Children joyfully engage in games, music, cultural ceremonies, exploring nature, and enjoying simple pleasures with peers and elders.

In a healthy ecology, young people thrive.
The Impact of Risk and Trauma

But when needs are unmet, youth are at risk.

The Drive to Thrive

Safety

Felt Safety
Physical Safety
Emotional Safety
Cultural Safety

Adverse Childhood Experiences

Household Risks
- Substance abuse
- Parent separation/divorce
- Mental illness
- Battered mother
- Criminal Behavior

Abuse
- Psychological
- Physical
- Sexual

Neglect
- Emotional
- Physical
1. Substance abuse
2. Parent separation/divorce
3. Mental illness
4. Domestic Violence
5. Criminal Behavior
6. Psychological abuse
7. Physical Abuse

8. Sexual abuse

9. Physical neglect

10. Emotional Neglect

PANIC ~ GRIEF SYSTEM

PANIC TRAUMA:
Terror
and Helplessness
What is the primary impact of relational trauma?

A breakdown in the capacity to regulate internal states like fear, anger, and sexual impulses.

Bessel van der Kolk

Physical and social pain use the same deep brain circuits.
Belonging

Attached

Affectionate

Friendship

Intimacy

Gregarious

Cooperative

Trusting

Distorted

Overly dependent

Craves affection

Gang loyalty

Promiscuity

Clinging

Easily misled

Gullible

Belonging

Absent

Unattached

Aloof

Rejection

Loneliness

Withdrawn

Oppositional

Distrustful

Touch, the most elementary tool we have to calm down, is proscribed from most therapeutic practices.

Bessel van der Kolk

Humans have two chemicals for bonding

OXYTOCIN tames aggression and fear. Females have more oxytocin for use in nurturing.

VASOPRESSIN can enhance aggression. Males have more vasopressin for protecting.

Trust? Liking?

BIDS TO CONNECT AND BELONG
School Connectedness is the student perception of belonging and closeness with others at school.

Engaging Students
Teachers who connect with students who distrust teachers.
Teachers who help struggling students achieve success.

The Drive to Thrive
Safety, Belonging, Achievement

The Challenge and Rewards of Learning
We only think when we have a problem, the solution of which is worth while to
Mastery grows myelin on brain pathways.

Two Theories of Intelligence
- Largely inherited, the fixed mindset
- Largely learned, the growth mindset

School Conflict and Failure damages self esteem and predicts poor life outcomes.

Defiant Behavior
Rejecting teachers and school is a youth’s attempt to cope and restore self-respect.

FAILURE IS FEEDBACK
Try again. Fail again. Fail better.

Samuel Beckett
1906-1989

Gold & Osgood, 1992
If a failing student invests in school, this predicts positive outcomes – even if family or community problems persist.

Martin Gold, University of Michigan

The Widening Gap

YEARS ENROLLED IN SCHOOL

Transformation

1.8 to 2.0 Grade yearly gain in alternative school

65 grade annual achievement gain in prior school history

YEARS ENROLLED IN SCHOOL

Intelligence Equals Resilience

intelligence (noun)

A person's ability to respond successfully to challenges and to learn from such experience.

(Sylwester, 2005, p. 78)

Positive Behavior Support (PBS) | Social and Emotional Learning (SEL):
---|---
Research Base | Behavioral Psychology | Developmental Psychology
Primary Goal | Managing Behavior | Developing Self-Discipline
Primary Intervention | Reinforcements | Relationships
Major Strength | Management Tools | Social and Emotional Skills
Major Limitation | Lacking Social and Emotional Skills | Lacking Behavior Management Tools

Voices of Youth

I was always afraid of messing up. Here teachers and peers help me if I make mistakes and teach me to do it right. My parents can see a difference in me. I think I carry myself in a successful "yes I am worth it" way.
The Drive to Thrive

Power  Safety  Belonging  Achievement

Power  Power  Power

Youth Testing His Power

Self-regulation involves the ability to “postpone the obtaining of pleasure, to put up with a little unpleasure and to abandon certain sources of pleasure altogether.” — Sig und Freud 1920

Ultimately, the only power to which man should aspire is that which he exercises over himself.

Elie Wiesel 1928-2016

How do children learn emotional regulation?
They borrow their caregiver’s calm brain.

They borrow their caregiver’s calm brain.

The Calming Cycle

MEET NEED
DISTRESS
NEED
CALM

Vera Fahlberg

Coping with Challenge

I. Manage external challenges and threats.
II. Regulate emotions and keep inner balance.

Murphy & Moriarty
Menninger Foundation

Self-Efficacy

The belief in one’s power to cope with challenges.

(Albert Bandura, 1997)

Resilience and Grit

Hard work and persistence were the assets most frequently mentioned by the youth with serious behavior problems in childhood who later improved.

Emmy Werner & Ruth Smith
Kauai’s Children Come of Age

Children are rarely respected as social equals.

RUDOLPH DREIKURS
Ever more people today have the means to live, but no meaning to live for.

Victor Frankl
1905-1997

Modern neuroscience shows humans have brain programs for both ego and empathy.

Gerald Cory, Jr., 2000

Only a positive prosocial purpose can provide the lasting inspiration, motivation, and resilience that is characteristic of a truly purposeful life.

Hillel the Elder, 110 BC-10 AD
Humans Have to Balance Two Brain Algorithms

Gerald Cory, Jr., *The Consilient Brain*

**EMPATHY**
Caring for Others

**EGO**
Self-Preservation

Compassion is Inborn in Children

Compassion in young children (17-36 months) predicts prosocial behavior through age seventeen.

(Rhee et al., 2013)

Being Mean is Not in Genes

Both identical twins and fraternal twins are similar in showing compassion or disregard to a person who is showing distress.

(Rhee et al., 2013)

True or False?
Helping, sharing, and consoling in third grade ...

predicts engaged and achieving in eighth grade

(Caprara, Barbaranelli, Pastorelli, Bandura, &)
The emotional brain of teens surges in seeking pleasure and peer relationships. The executive brain’s capacity for self-control and thinking ahead will mature years later.
A Tale of Two Cities
It was the best of times, it was the worst of times; it was the age of wisdom, it was the age of foolishness.
Charles Dickens, 1859

Play wires the frontal cortex for emotional regulation, planning ahead, and social cooperation.

In growing up, a child should know some joy in each day and look forward to some joyous event for the morrow.

Resilience means bouncing back from difficult experiences. The process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress.

False: No Child is Invulnerable.
Risk and resilience are human universals.

The world breaks everyone and, afterward, many are strong at the broken places. Ernest Hemingway, *Farewell to Arms* (1929)

Ordinary Magic

Resilience does not come from rare and special qualities, but from the everyday magic of the adaptive minds, brains, and bodies of children, in their families, relationships, and communities.

Ann Masten

The Kauai Resilience Studies

Roots of Resiliency

The resilient youngsters in our study all had at least one person in their lives who accepted them unconditionally, regardless of temperamental idiosyncrasies, physical attractiveness, or intelligence.

(Werner & Smith, 1992, p. 205)

Children who received negative responses from others were vulnerable.

Children with mostly positive responses became stress resistant.

We could not help being deeply impressed by the resiliency of the overwhelming majority of children and youth and by their potential for positive change and personal growth.

(Werner & Smith, 1977, p. 210)
Talent Hunts
finding strengths in all young people.

Values in Action
Inventory of Strengths
www.viacharacter.org

Resilient and Reactive Coping Cycles
Nicholas Long

Four Waves of Resilience Research

Resilient and Reactive Coping Cycles

Ramon y Cajal, Father of Neuroscience
Nobel Prize, 1906

Neuroplasticity
Neurons that fire together wire together
Donald Hebb, 1949

Neuron at 9 Months

Neurons at 9 Months

Neurons at 2 Years

Neurons at 2 Years

Neurons at 4 Years

Neurons at 4 Years

Neuroplasticity: Long Term Learning

Repitition: Rote

Emotion: Pleasure

Epigenetics

If genes were fixed, humans would be locked in one way of responding. Instead, life experiences turn genes off or on to adapt to the environment.
—Bruce Perry, 2011
All 20,000+ genes are in every bodily cell, and 84% can affect the brain.

Our genes occupy only 5% of our chromosomes. Until recently, the rest was called “junk DNA.”

But “Junk DNA” contains 4 million epigenetic switches that can turn genes on and off.

Epigenetics is highly influential in prenatal development.

Epigenetics is highly influential in prenatal development.

Drugs
Stress
Poverty
Nutrition
Bereavement
Natural Disaster
Cultural Disruption

Diet and Epigenetics

Bisphenol A

Boys who smoke before puberty can pass on harmful epigenetic changes to offspring. (Pembrey et al., 2006)
Drugs and Epigenetics
These drugs do not just have the action we are told about but often have much greater effects throughout the body than the one the company markets.
David Healy
University of Cardiff, UK

These twins both have autism. John has little speech and flaps his hands. Sam focuses intensely on his iPad. Surgery and massive drugs at 3 months made the difference. (Miller, 2012)

Trauma and Epigenetics
Epigenetics and Caregiving
Michael Meaney, 2001

High Nurture
Low Stress
Low Anxiety

Low Nurture
High Stress
High Anxiety
Historic Trauma: Some epigenetic effects can last for three or four generations.

When environments fall outside the expectable range, normal development is impeded and often goes awry.

Dante Cicchetti, PhD, University of Minnesota

When environments fall outside the expectable range, normal development is impeded and often goes awry.

Dante Cicchetti (2010, p. 249)

Temperament and Epigenetics

BOLD: Low Amygdala Reactivity

These youngsters are more insulated from environmental experience and feel less fear, anxiety, or guilt.

With love and guidance, they can become positive leaders. But with neglectful parenting or teaching, they may develop impulsive or antisocial behavior.

(Kagan, 2010)

TIMID: High Amygdala Reactivity

These children are more influenced by the environment and experience more fear, anxiety, and shame.

With warmth and acceptance, they can become confident and resilient. But rejection or maltreatment can lead to emotional problems.

(Kagan, 2010)
1 in 5 Children Mirror the Quality of Child Rearing
High reactive kids have more responsive neuroplasticity. They thrive with positive caregiving but not if needs are unmet. (Hankin, et al., 2011)

For Better or Worse

Epigenetic Changes are Reversible.
Responsive care builds resilient brain pathways.

With positive upbringing, both show strengths.
I need to be careful. I don’t need to be afraid.

Creating Environments Where Children Thrive
1. Safety—Children are protected from emotional, physical, and cultural threat.
2. Belonging—All members of the community are valued and develop positive relationships.
3. Achievement—Every
4. Power—Young people are given responsibility and grow in self-confidence.
5. Purpose—Contributing to the well-being of others gives meaning to life.
6. Adventure—The courage to overcome

Sioux Falls theater students performed Broadway musical hits to a packed audience with the goal of raising $10,000 for research on Friedreich’s Ataxia, a rare neuromuscular disorder.
They were inspired by fellow student Raena Brendtro who was diagnosed with FA two years ago at age 13.

Resilience in Youth

Purpose
Power
Safety
Belonging
Achievement
We must look at children in need not as problems but as individuals with potential to share if given the opportunity.

Desmond Tutu in *Reclaiming Youth at Risk: Adverse Childhood Experiences (ACES) and the Developing Brain* by Larry K. Brendtro, PhD