

RESEARCH ON TAP

Human Flourishing in Diverse Populations and Contexts

Wednesday, November 3, 2021

bu.edu/research/events



Human Flourishing in Diverse Populations and Contexts

Deborah Carr

Professor of Sociology (CAS)
Director, Center for Innovation in Social Science



Welcome to our Presenters and Audience

- Jonathan Zaff (Wheelock)
- Catherine Caldwell-Harris (CAS)
- Nicolette Manglos-Weber (STH)
- Brenda Phillips (CAS)
- Steven Sandage (STH)
- Merav Shohet (CAS)
- Insa Schmidt (SOM)
- Makarand Mody (SHA)
- Taylor Peyton (SHA)
- Jessica Sibley (Law)
- James Katz (COM)
- Parker Shipton (CAS)



- ❖ What is it?
- ❖ Is flourishing possible under conditions of extreme physical, economic, and social adversity?
- ❖ How can we challenge and advance core themes of positive psychology to incorporate structural inequalities?
- ❖ Can our work identify potentially modifiable factors to enhance flourishing?

Multidisciplinary, Mixed Methods Approaches to Understanding Flourishing

- ***Large-scale surveys:*** measuring flourishing; identifying diverse communities living with diversity; documenting patterns.
- ***In-depth interviews:*** understanding from the ground up how persons living in contexts of adversity think about, define, and experience flourishing.
- ***Textual analysis:*** how do classic works of literature, diaries, and other sources portray positive experience and connections against adversity.
- ***Developing interventions:*** can individual- or community level interviews enhance flourishing?

Formation of Center for Innovation in Social Sciences



- A new venue for fostering and encouraging interdisciplinary, mixed-methods work within and beyond the social sciences at BU.
- Please join us as an affiliate, share your news, and participate in our upcoming programs!
 - Call for Pilot Grant proposals due 12/1, with informational session on 11/8.
- <http://www.bu.edu/ciss>

Youth Flourishing under Extremely Adverse Conditions

Jonathan Zaff

Director, CERES Institute for Children & Youth
Research Professor, Applied Human Development
Wheelock College of Education & Human Development
www.ceresinstitute.org



Changed Residential

Location

*Foster
System*

**DRUG
USE**

Loss of a
Parent

***Lack of Preparation
for High School***

**Suspended or
Expelled**

*ENDURED
ABUSE*

Most friends
dropped out

Regular Care
Giver

HOMELESS

**GANG
INVOLVEMENT**

NESS

Changed
Schools

***Gave Birth/
Fathered a Child***

**Major Mental
Health Issue**

“My mom could not cook herself, she could not bathe herself - she couldn’t do anything on her own, so I had to step up... I understand that my education is important, but I refuse to let my mom sit there and starve to death, and just...sit in her own filth. I’d rather...take care of my mom, as opposed to going to school.”

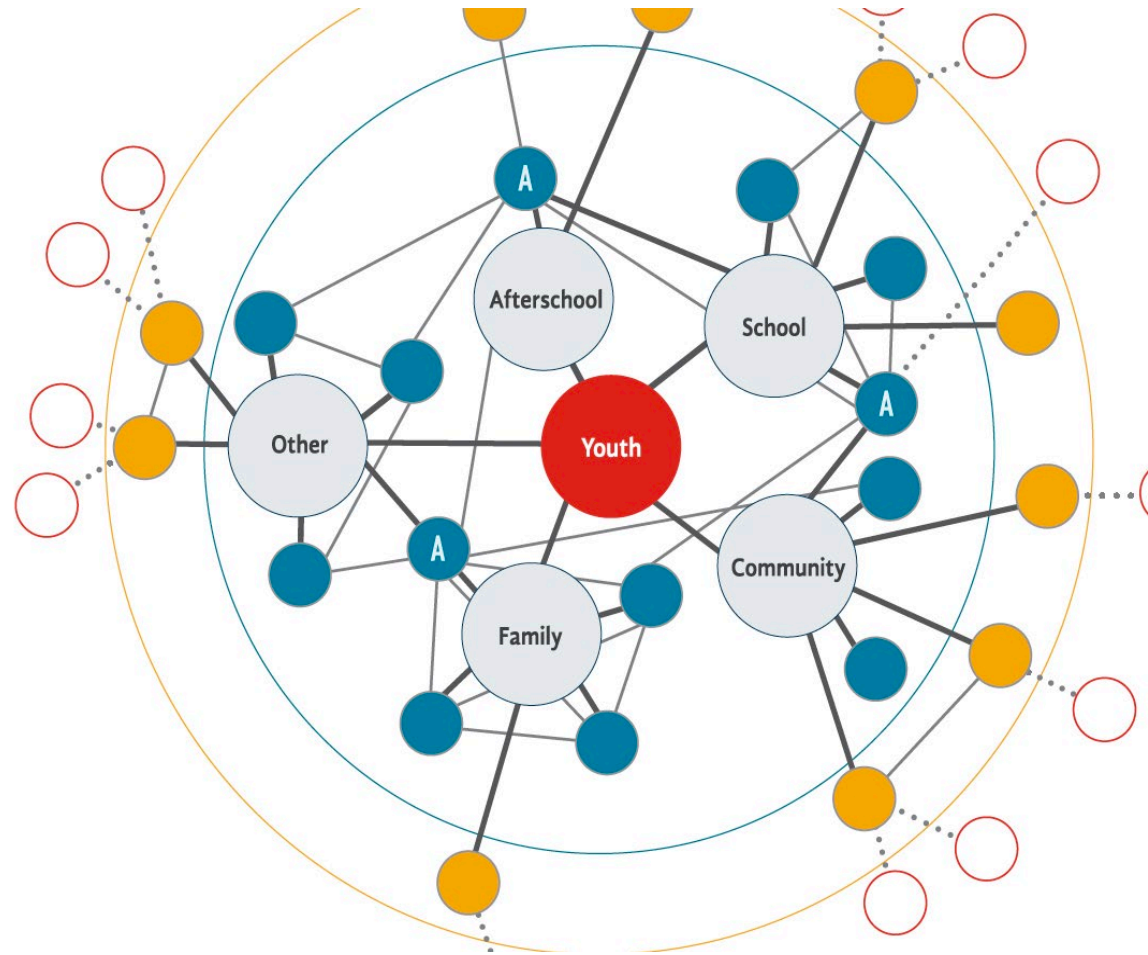
From *Dispelling Stereotypes of Young People who Leave School Without Graduating*.

“I used to steal from the back store. I used to steal beef patties and snacks to feed my brothers. My mom was drinking. I used to take charge. They shouldn’t have to suffer because of someone else.

From *Don’t Quite on Me: What Young People who Left School Say about the Power of Relationships*



A Web of Support refers to the **network of relationships** youth have with adults and peers across contexts in which **supports are provided** that help the young person advance in development **towards their goals**.



- Providing experiences that fit youth's lives and identified needs.
- Providing reliable, consistent support and connection opportunities.
- Offering meaningful, substantive skill-building experiences.
- Facilitating or providing access to comprehensive support services.
- Encouraging supportive relationships with adults and peers.

Flourishing on the Autism Spectrum

Catherine Caldwell-Harris

Associate Professor
Department of Psychological and Brain Sciences, CAS



Promoting and Protecting Mental Health as Flourishing

A Complementary Strategy for Improving National Mental Health

Corey L. M. Keyes
Emory University

Am Psychol. 2005 Oct; 60(7): 678-686.
doi: [10.1037/0003-066X.60.7.678](https://doi.org/10.1037/0003-066X.60.7.678)

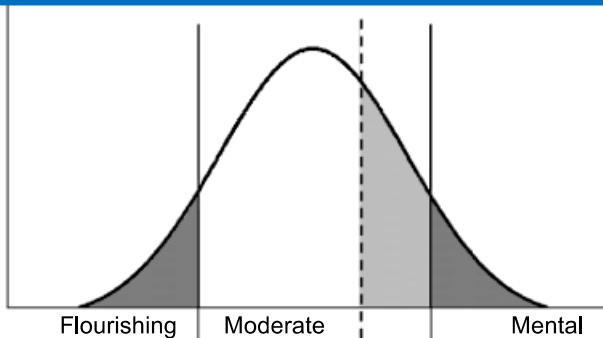
Positive Affect and the Complex Dynamics of Human Flourishing

Sara L. Fredrickson and Marcial F. Losada

J Happiness Stud (2016) 17:1351-1370
DOI 10.1007/s10902-015-9647-3

RESEARCH PAPER

What Factors are Associated with Flourishing? Results from a Large Representative National Sample



BOSTON
UNIVERSITY

The Level and Nature of Autistic Intelligence

Michelle Dawson,¹ Isabelle Soulières,^{1,2} Morton Ann Gernsbacher,³ and Laurent Mottron^{1,2}

frontiers in
HUMAN NEUROSCIENCE

ORIGINAL RESEARCH ARTICLE
published: 11 August 2014
doi: [10.3389/fnhum.2014.00615](https://doi.org/10.3389/fnhum.2014.00615)



Verbal creativity in autism: comprehension and generation
of metaphoric language in high-functioning autism

metaphor generation. The study points to unique verbal creativity in ASD.

Should Autism Spectrum Conditions Be Characterised in a More Positive Way in Our Modern World?

Barry Wright^{1,2*}, Penny Spikins³ and Hannah Pearson⁴

Autistic spectrum intelligence
is atypical, but also genuine,
general, and underestimated.

(2011) Religious belief systems of persons with high functioning autism
 (2012) Understanding differences in neurotypical and autism spectrum special interests through internet forums.
 (under review) Adults with autism discuss foreign language learning

Current: Overview of online autism discussion forums

Current: Thematic analysis of autistic women's online discussion boards

Table 2.
 Common Themes Present in Each Forum

Reddit						Quora																				Wrong Planet				Twitter	
Forum	AA	ASA	AD	ASP	ASG	ASD	AU	AW	EA	AL	APM	AAC	AWA	WL	ANG	AS	RA	AP	AG	AD	AS	HF	ND	ID	AAI	WD	ADF	AGF	AGN		
Sensory issues	✓	✓	✓		✓	✓	✓	✓	✓					✓	✓				✓					✓	✓	✓		✓			
Social issues	✓	✓			✓	✓	✓	✓	✓	✓				✓	✓				✓				✓	✓	✓	✓		✓	✓		
Diagnosis	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓							✓	✓		✓			✓		✓			
Life advice	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓				
Comorbidities			✓		✓		✓		✓		✓	✓	✓						✓							✓					
Female presentation					✓			✓	✓	✓	✓	✓	✓						✓							✓					
Male presentation			✓				✓								✓																
Art abilities	✓																														
Special interests												✓	✓	✓	✓									✓	✓	✓					
Symptoms																				✓	✓	✓	✓	✓	✓	✓			✓		

Note. AA= r/autism; ASA= r/Ask Autism; AD= r/Autistic Adults; ASP= r/Asperger's; ASG= r/aspergirls; ASD= Autism Spectrum Disorders; AU= Autism; AW=Autism Awareness; EA= Exploring Autism; AL= Autistic Ladies; APM= Autistic People Matter; AAC=Adult Autism Community; AWA= Adults with Autism; WL= What is life like for an adult with autism; ANG= Autistic Nerds and Geeks; AS=Asperger Syndrome; RA= Relationships with People with Asperger's; AP= Asperger's; AG= Autism and girls; AD=Autism Diagnosis; AS= ASD to ASD; HF= High-Functioning Autism; ND=Neurodivergence; ID= In Depth Adult Life Discussion; AAI= Adult Autism Issues; WD= Women's Discussion; ADF= Adolescent Autism Forum; AGF=Autistic Girls Forum; AGN= Autistic Girls Network.

Student Collaborators

Katherine
Beitia



Tiffany
McGlowan



Online
Discussion
Forum for
Autistic
Women

Anyone else here struggle to handle a fulltime job? ...I can't handle working. It makes me feel pathetic and useless. I feel like I got stuck with only the difficult parts of autism and none of the good smart stuff with motivation for a special interest. How am I going to survive the next 50 years doing this?

...forced to be here and live and work with a disability I didn't ask for...Lol it's awful

How do you handle meltdowns at work?

I can't handle working either. It's almost like I have work PTSD. Not even full time. Even part time. Even two days a week.

Identify the parts making it hell ...look for jobs that reduce the hellish aspects and highlight what you can manage or even enjoy. ...niche-finding and niche-making...

My favorite jobs were working at casinos dealing cards because it was extremely structured and math all the time.

...ptsd and trauma. ...learned programming... My gaming app was featured by apple..

...21 year old daughter... exhaustion and dealing with people...she delivers parcels... She is relaxed and content...living authentically and that's what is important.

2017 survey, 1.5 hr long interview with 10 women, *Autism*,
The importance of critical life moments: An explorative study of successful
women with autism spectrum disorder.

- being an agent of change
- changed identity after diagnosis
- others believed in their capability
- mentor to others

Our four broad themes

Mitigate negative symptoms

Contributions to family

Achieve success via careers

Flourishing *because* of autism

- *Autism superpowers*
- *Special interests*
- *Less stereotypical female role engagement → career focus*

*Forum discussants flipped workplace
negatives to autism strengths*

Workplace studies

Forums

unemotional

logical

lack of 'big picture'

attention to detail

asocial, aloof

self-reliant

inflexible

does well with structure

not tactful

honest

steps out of line

favors truth

not a team player

nonconformist



Collective Flourishing among Refugees in Boston: A Social Ecology Approach

Nicolette Manglos-Weber

Assistant Professor of Religion & Society
School of Theology



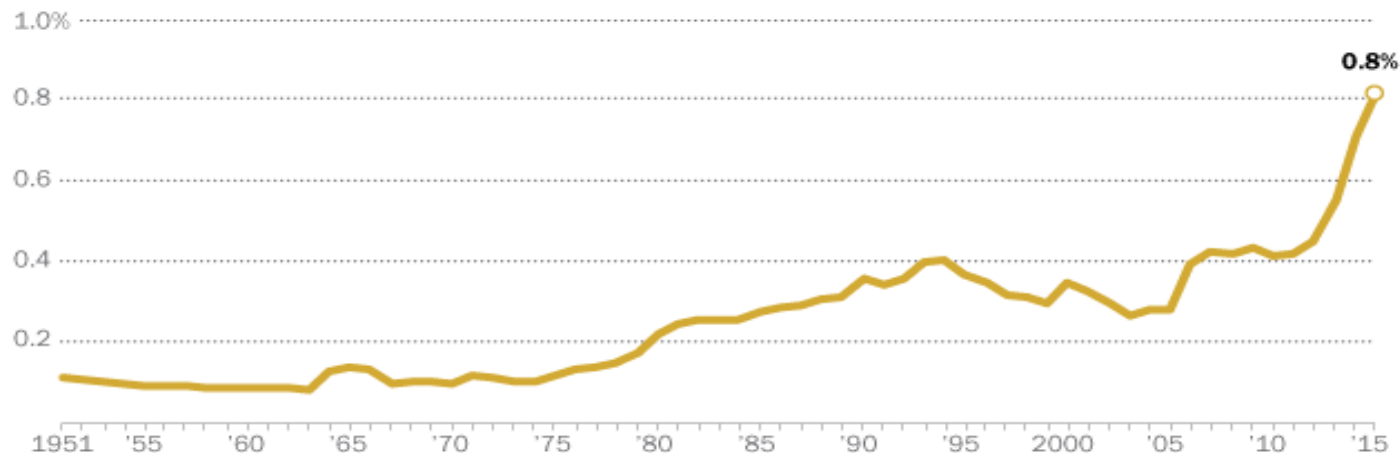
Boston University Office of Research



People seeking refugee/asylum: a growing, diverse, and global population living under long-term adversity

A record-high share of the world's population is displaced from their homes

% of world population that is forcibly displaced



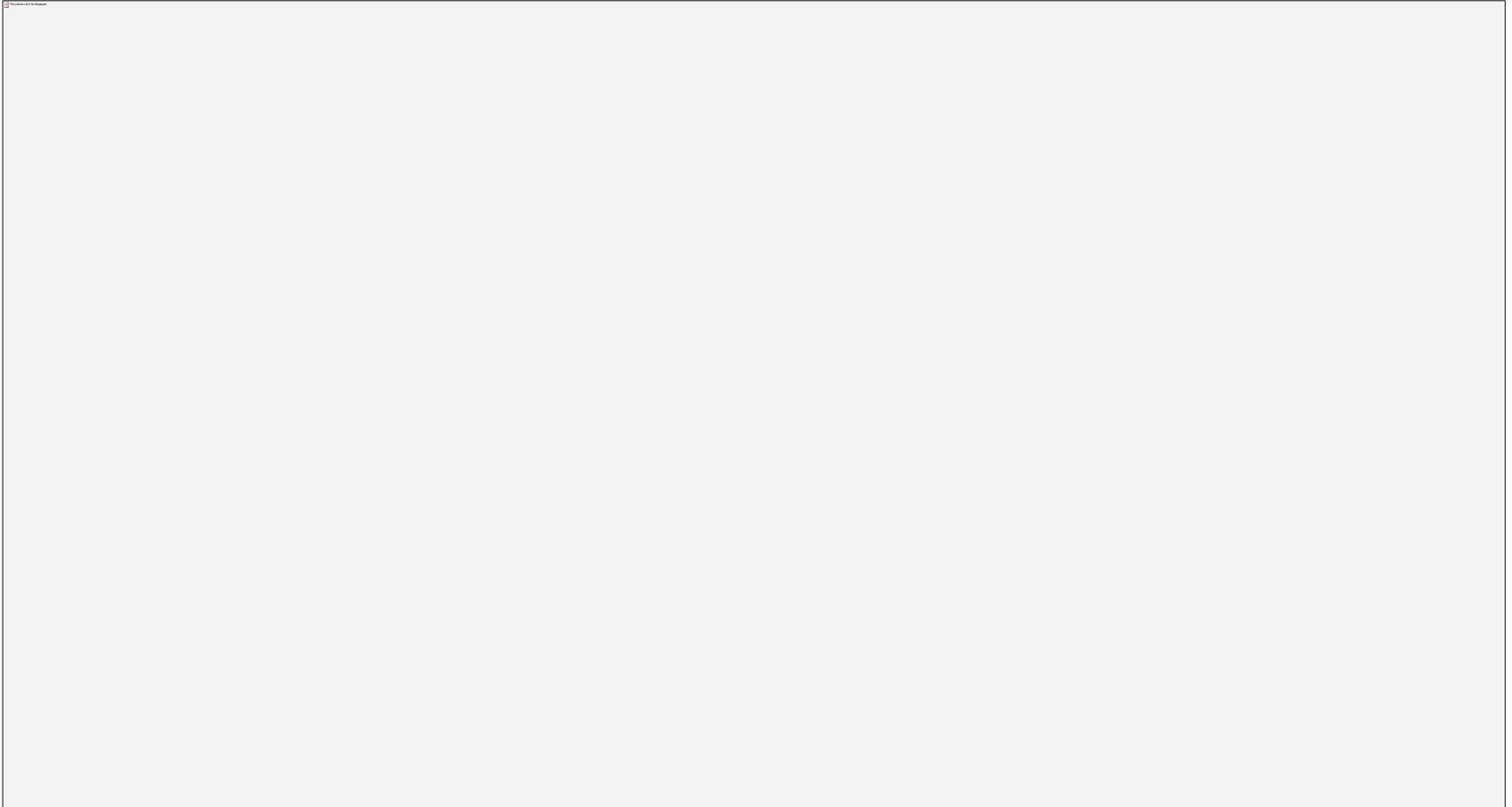
Note: Displaced includes internally displaced persons within their birth country, refugees and asylum seekers living in a different country who have yet to resettle permanently, and Palestinian refugees registered with the United Nations Relief and Works Agency (UNRWA) in Jordan, Lebanon and Syria.

Source: Pew Research Center analysis of United Nations data, accessed July 20, 2016.

PEW RESEARCH CENTER

The U.S. story:

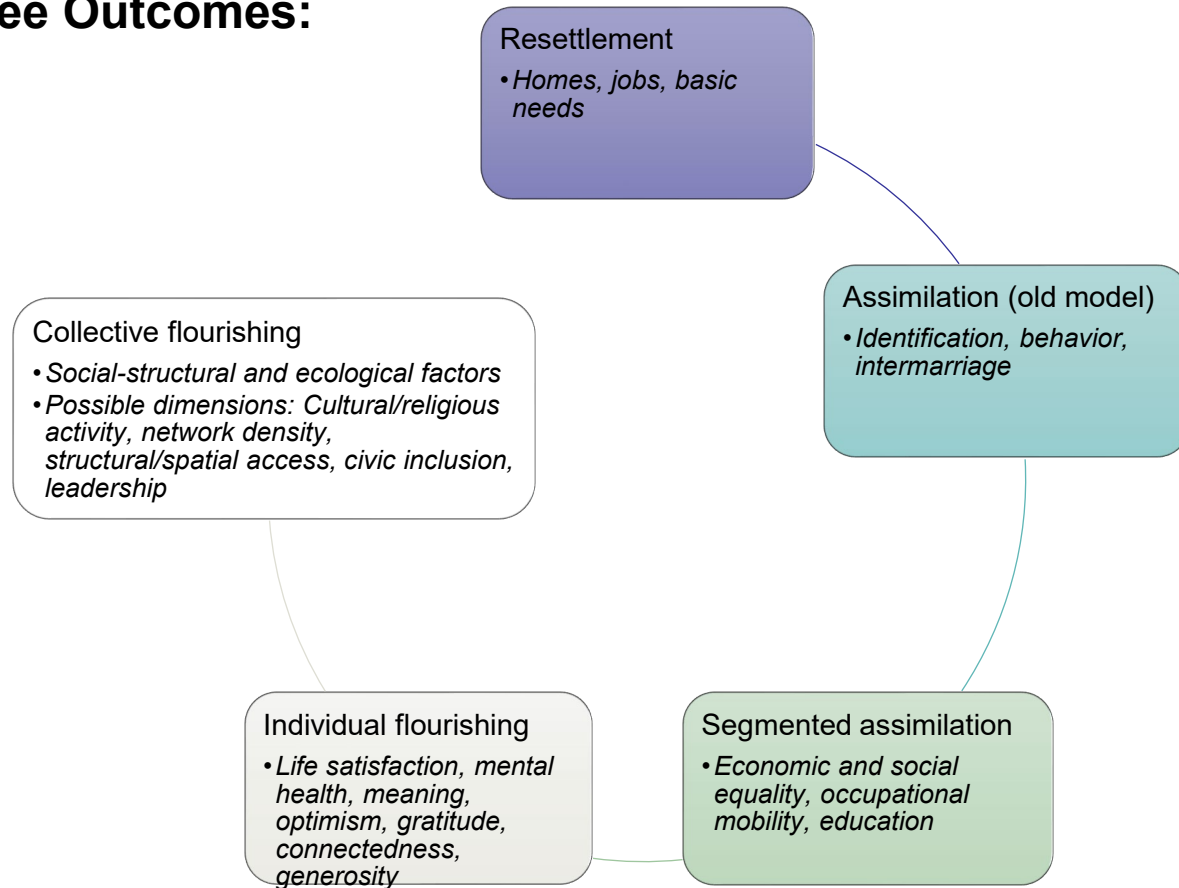
- *Refugees come from diverse social and political circumstances*
- *Refugee program increasingly restricted and politicized*
- *History of rapid fluctuations, lag in public awareness*



Project Goals:

1. *Offer rich and humanizing narratives of refugee flourishing*
2. *Promote and inform responsive refugee policy*
3. *Contribute to modeling collective flourishing under adverse conditions*

Reframing Refugee Outcomes:



Research Plan: Stage 1 (Emic Mapping)

- What are the most relevant dimensions of flourishing for refugees in Boston, at *both* individual and collective levels?
 - *A flourishing model sensitive to context and unit of analysis*
- What does the social ecology of refugee life in Boston look like?
 - *Residential clusters, community centers, religious congregations, places of business, other*
- Largest/most recent representative groups in Boston:
 - *Afghanis, Congolese, Haitians, Somalis, Syrians, Iraqis, Bhutanese, Burmese*
 - *Strategic comparisons: race, religion, language, social class, spatial location*

Utilizing a Community-based Participatory Research Approach to Study Well-being in Women Living with Cancer

Brenda Phillips

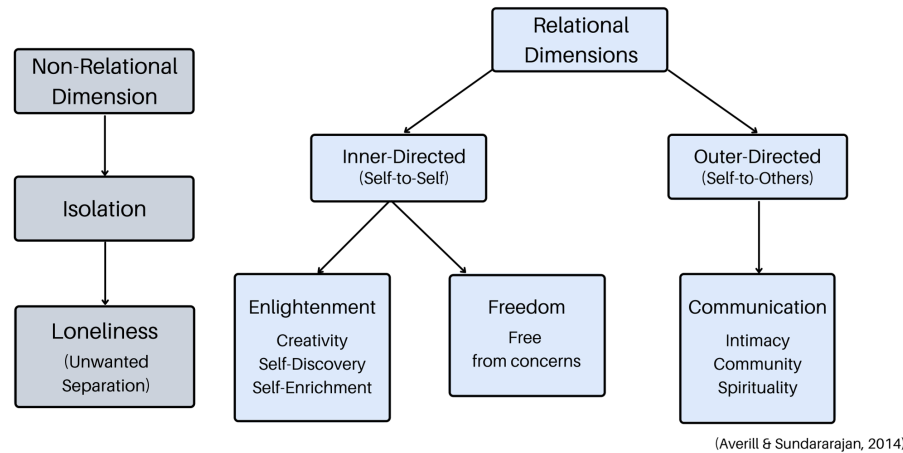
Senior Lecturer

Department of Psychological & Brain Sciences, CAS

BU Lab for Contemplative Studies



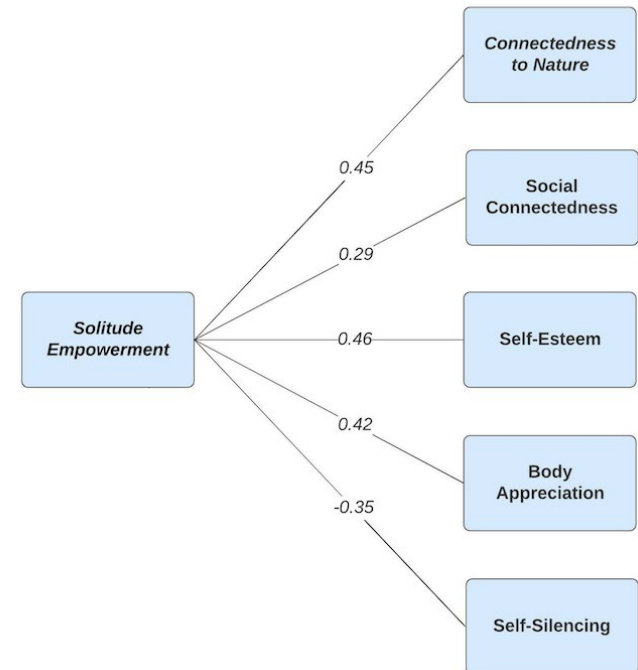
Cognitive Structure of Solitude



Primary Reasons

“Sometimes I spend so much time noticing and monitoring others that being alone gives me space to notice and check in with myself. I can be alone with my own energy and give myself the things that I need.” (30-year-old)

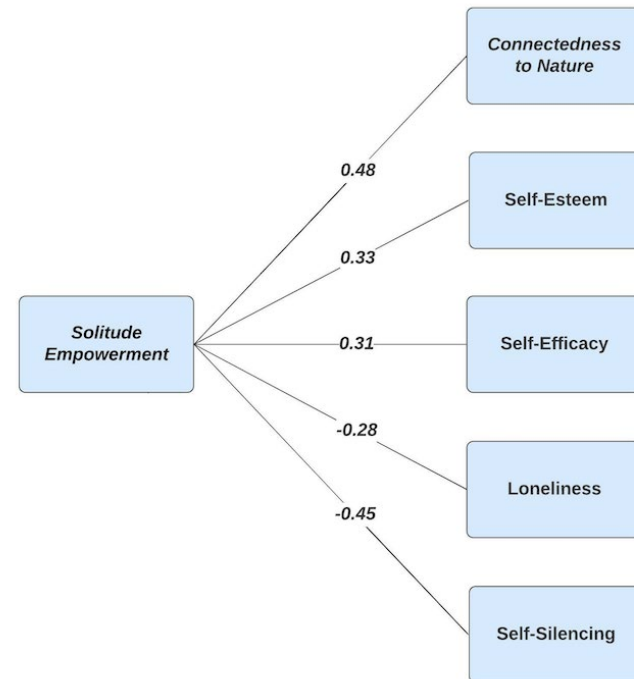
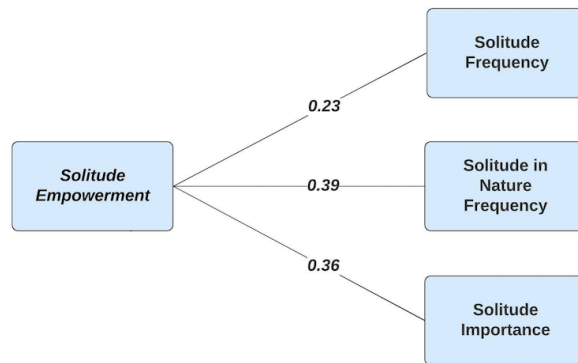
“To regroup, to take in the outside world, to heal my soul, to recover from the stress of dealing with others and today's political and environmental climate.” (68-year-old)



(Phillips, 2020)



“Sometimes I need a minute to myself. It’s usually to spare my family from seeing me upset or crying. I’ve not been honest with my children about the severity of my diagnosis. Truth is no one knows how long I have left and I don’t think it’s fair to burden my children with knowing that my cancer is not curable.” (age 52)



Assessing Black Women's Needs



Interview Themes

- Conceptualizations of Community
- Social Connection & Disconnection
- Religious & Spiritual Practices
- Social Justice & Advocacy
- Access to Nature
- Nature as a Facilitator of Well-being
- Generational Concerns
- Community Resources

Challenges & Goals

- Address health disparities
- Identify 'sacrifice' zones in Boston
- Develop place-based/nature-based initiatives that allow for the integration of spiritual and psychological practices
- Increase access and awareness of community resources specifically for women of color

Thank you to the members of BU Lab for Contemplative Studies
& the College of Arts & Sciences (CAS)



Mariam Bashiru

Laxmi Behara

Billie Cooper

Lara Gardiner

Madeline Kramer

Katie Novak

Emily Parkington

Kesha Perkins

Lucia Pintor-Hoffman

Dani Plana Trajtenberg

Jami Schillo

Mental Healthcare, Virtue, and Human Flourishing

Steven J. Sandage, Ph.D., LP
ssandage@bu.edu

Albert & Jessie Danielsen Professor of Psychology of Religion and Theology
Boston University School of Theology &
Albert & Jessie Danielsen Institute



Mental Healthcare, Virtue, and Human Flourishing

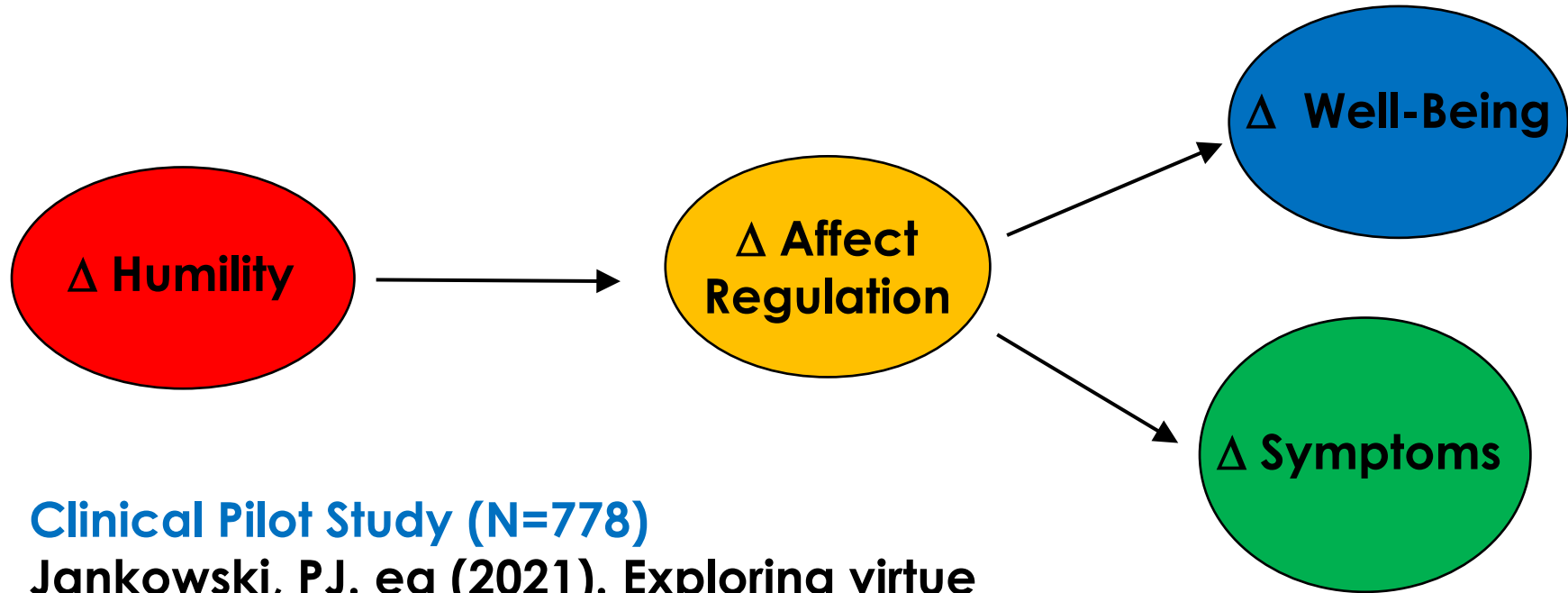
- Co-PIs: Steven Sandage (BU) & Jesse Owen (U. Denver)
- Multi-Site Grant Project funded by John Templeton Foundation (#61603)
 - **Danielsen Institute (BU)**
 - **Center for Anxiety & Related Disorders (BU):**
 - Todd Farchione & David Barlow
 - **McLean Hospital/Harvard Medical School:**
 - Mary Zanarini
 - **University of Denver – Relationships and Psychotherapy Lab**
- Psychotherapy is effective in reducing psychiatric symptoms (medical model). *But can psychotherapy help cultivate more meaningful, socially connected, and generative lives?*
- Key Hypothesis: **Growth in relational virtues (gratitude, cultural/general humility, forgiveness) predicts improved eudaimonic flourishing and symptom reduction mediated by improved affect regulation.**

Therapist Perspectives on Flourishing in Psychotherapy: A Focus Group Study (Freetly Porter ea, 2021)



- **8 focus groups across 4 clinical sites**
- **N = 56 clinicians and trainees**
- **Sample themes:**
 - **Flourishing involves active engagement, meaning-making, and personal values**
 - **Need to understand differing sociocultural definitions and systemic barriers**
 - **Can emerge from or amidst suffering and stressors**
 - **Might be more profoundly facilitated in long-term treatment**
 - **Therapists need humility and self-awareness**
 - **Clinical and training environments can help or hurt flourishing in psychotherapy**

Patient Changes in Humility during Danielsen Psychotherapy

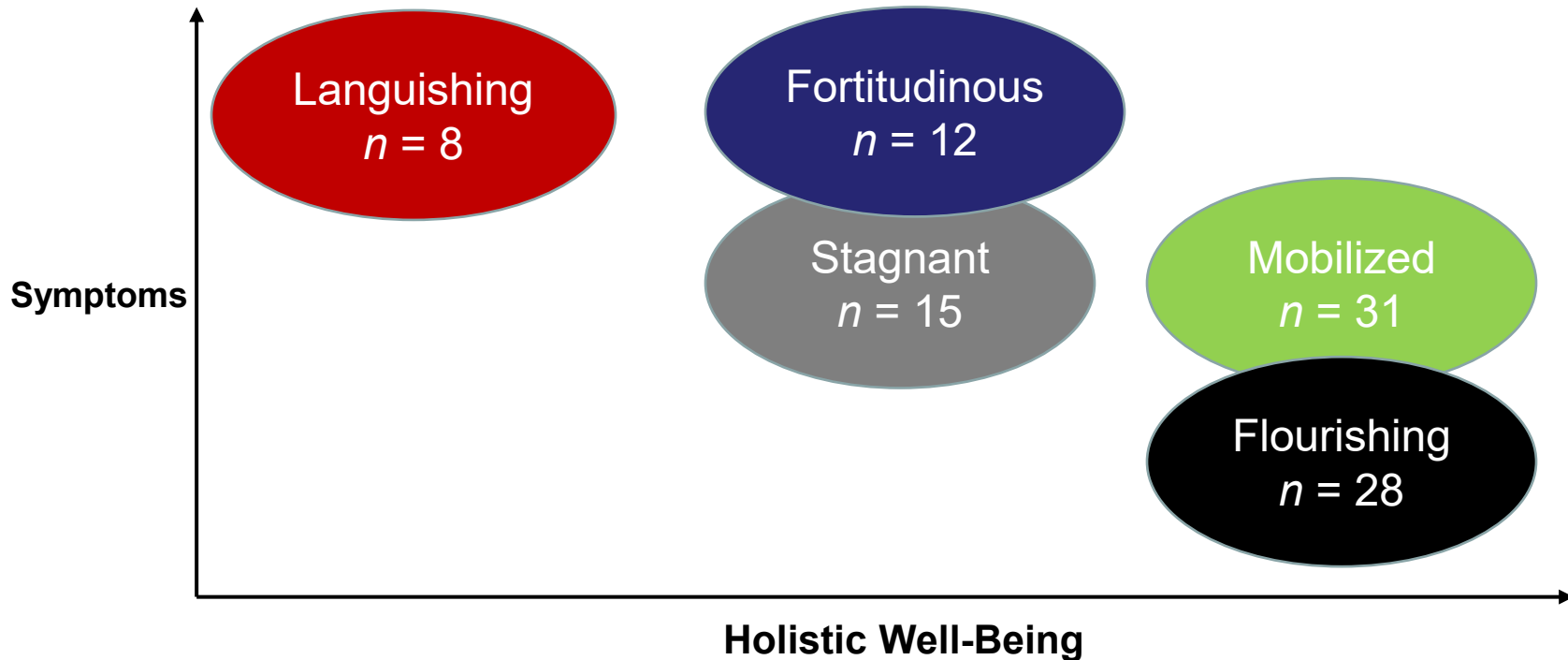


Clinical Pilot Study (N=778)

Jankowski, P.J. ea (2021). Exploring virtue ethics in psychodynamic psychotherapy: Latent changes in humility, affect regulation, symptoms, and well-being. *Counselling and Psychotherapy Research*, 21, 983-991.

Danielsen Institute Patients – Latent Profile Analysis

May/June 2020 (N=94 adults; Crabtree ea, 2021)



Based on Jankowski ea 2021 w/ emerging adults

- **Some social privilege effects**
- **Now tracking longitudinally**

“It’s just one more thing”: Kidney Disease Patients in Disenfranchised Urban Communities Fighting COVID-19

November 3, 2021

Merav Shohet, PhD

Boston University, College of Arts & Sciences
Department of Anthropology
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Insa Schmidt, MD, MPH

Boston University School of Medicine
Boston Medical Center, Section of Nephrology
ischmidt@bu.edu

Structural Inequalities & Health Inequities

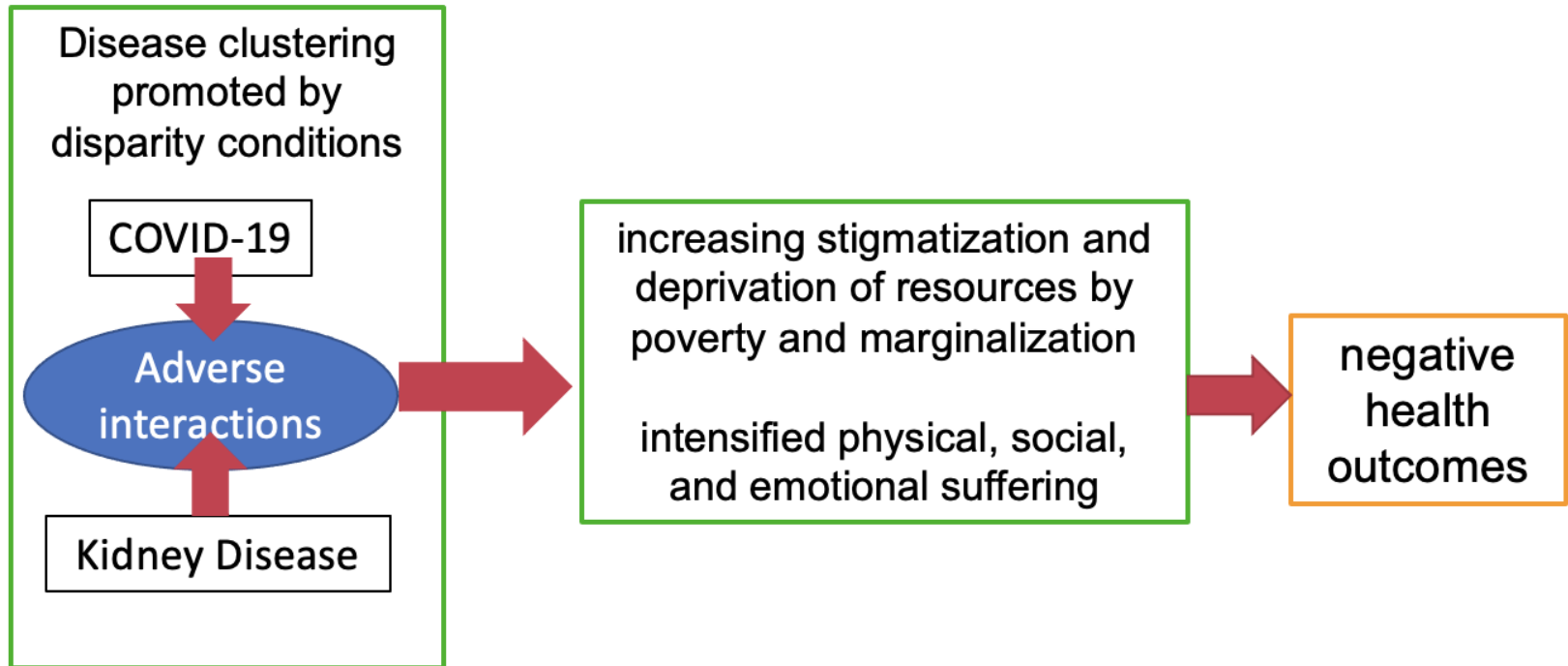
Poor, urban people of color,
suffering chronic illness:
most hard-hit by COVID-19

- In the US overall, Black/
African Americans = 12% of
population, but 34% of
COVID-related deaths (CDC
2020; Holmes et al. 2020; Mahajan & Larkins-
Pettigrew 2020)

BMC patient population with
advanced kidney disease (n=497)



Understanding Extreme Adversity: **SYNDEMICS**



Model of stigma syndemics. Modified from Singer et al. (The Lancet, 2017)

Kidney Disease Stigmas

- Difficulties getting recognized: **invisible suffering**
- Difficulties holding a steady full-time job, severe **economic hardship**
- **“Lifestyle”: (Self-)Blame**
- **Dependence on caregivers** (kin/friends/hired caregivers, healthcare professionals...)
- **Racial stigmatization**
- COVID-19-related anxieties vs. **“just one more thing”**

Flourishing Realities

- Church community ... faith in God ... individual prayer
- Socially dense family & friendship networks ... and dialysis community
- “It’s just one more thing”: empathy & stoic attitude
 - “Others have it worse”
 - Healthcare professionals “are dealing with a lot”

Future Directions

- Interview clinician and family caregivers
- Development & validation of a survey instrument → link to health outcomes
 - Stigma & psychosocial consequences

Acknowledgements

- Social Science Research Council COVID-19 Rapid Response Grant
 - With Wenner-Gren Foundation
- Boston Medical Center Innovation Stimulus Pilot in Renal Program ('INSPIRE')
- American Philosophical Society
- BU Research & Start-Up Funds

Can Hospitality Improve the Experience of Healthcare?

Makarand Mody

Associate Professor and Director of Research
School of Hospitality Administration



Restorative Servicescapes in Healthcare

- Environmental psychology: attention restoration theory (ART) and Ulrich's psychophysiological stress reduction framework allude to the “**restorative potential of spaces**”
- The concept of **servicescape** from the marketing literature (Bitner, 1992): “pay for performance” in healthcare and patient as customer

Table 3
 Part-Worth Utility Scores for Each Attribute Level.

Attributes and Levels	Part-Worth Score ^a
Spa Services	
Spa-Quality Bath Amenities (Towels, Soaps/Shampoos, Bathrobe)	94.16
In-Room Spa/Salon Services	0
Food and Beverage Services	
Kitchenette (Coffee-maker and Refrigerator)	30.78
On-Demand Room Service	0
Wall Décor	
Artwork	38.03
Colorful Walls	0
Luxury Bed Linens	
Yes	90.54
No	0
Interior Design 1	
Designer-Inspired Furniture	0
Hi-End Material Finishes	231.79
Technology 3	
Hi-Resolution Flat-Screen TV	48.89
Smart-Room Technology (Patient Health-Tracking and Entertainment Tablet)	0
Hospitality Services 2	
Concierge Services	0
Hospitality-Certified Healthcare Staff	295.17
Aroma/Fragrance	
Yes	7.24
No	0
Mood Lighting	
Yes	63.38
No	0

Note: ^aRescaled values.
 Values in bold indicate the preferred level within each attribute.

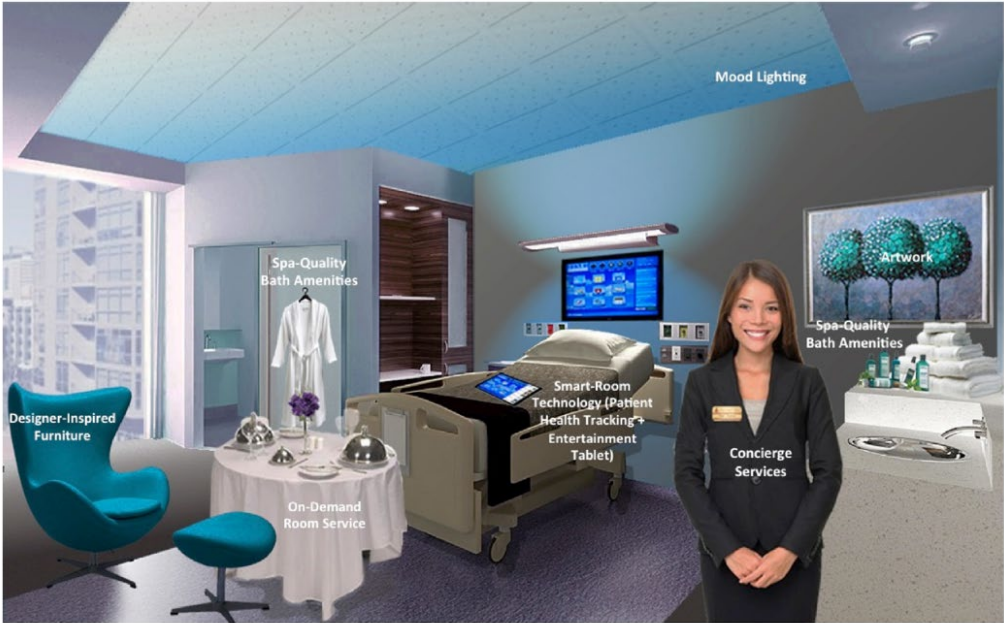


Fig. 2. Sample Scenario.

Figure 3.
Graphical
representation of
SEM results

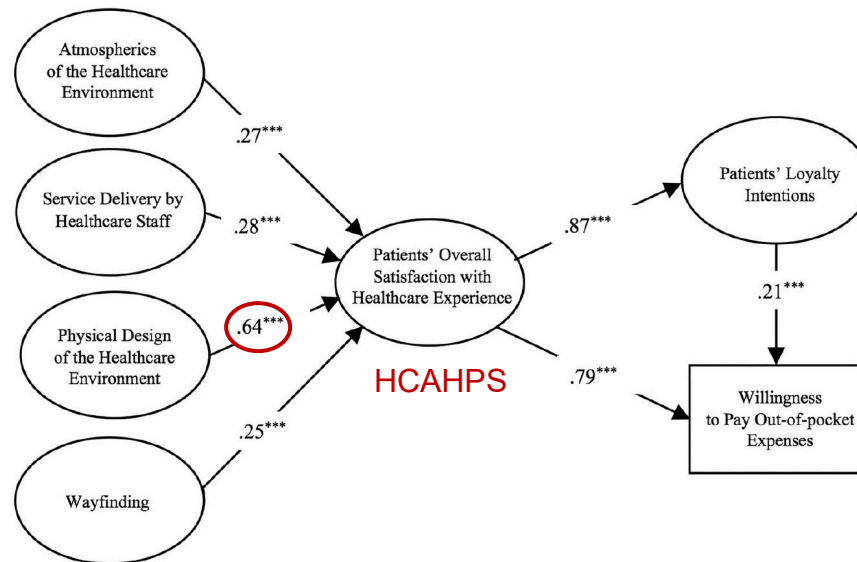
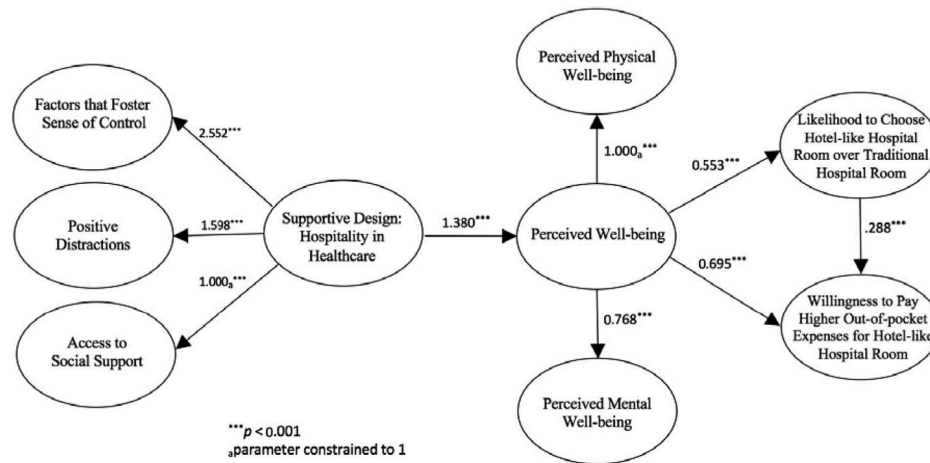


Figure 2. Structural model results.

What does this mean?

- Hospitality-informed design can enhance well-being not just for the patient but also caregivers, families, and healthcare workers
- The roots for both hospitality and hospital (Latin root ***hospes***) lie in “caring for strangers”

The Opinion Pages

ROOM *for* DEBATE

Hospitals That Feel Like Hotels

How does having uniformed valets, spas and 24-hour room service affect health care for those who can't afford?

[Read More »](#)

DEBATERS



Sure, We Could Be More Consumer-Centric

HAIDER WARRAICH, FELLOW IN CARDIOLOGY



Skip the Fancy Towels, and Hire More Nurses

ALEXANDRA ROBBINS, AUTHOR, "THE NURSES"



Care for Those Who Can Afford It Helps Care for Those Who Can't

DANA GOLDMAN, UNIVERSITY OF SOUTHERN CALIFORNIA



Luxury Care Limits Care for the Less Affluent

NADEREH POURAT, U.C.L.A. CENTER FOR HEALTH POLICY RESEARCH

**“Being Real” at Work:
A Developmental Process for New Employees
in Hospitality**

Taylor Peyton

Assistant Professor
School of Hospitality Administration

Collaborators:

Emily Hill¹, Abdifatah Ali²,
Rio Frohoff³, & Mark G. Ehrhart¹

¹University of Central Florida,

²University of Minnesota,

³Pepperdine University



It's not
easy being

GREEN



Authenticity and Self

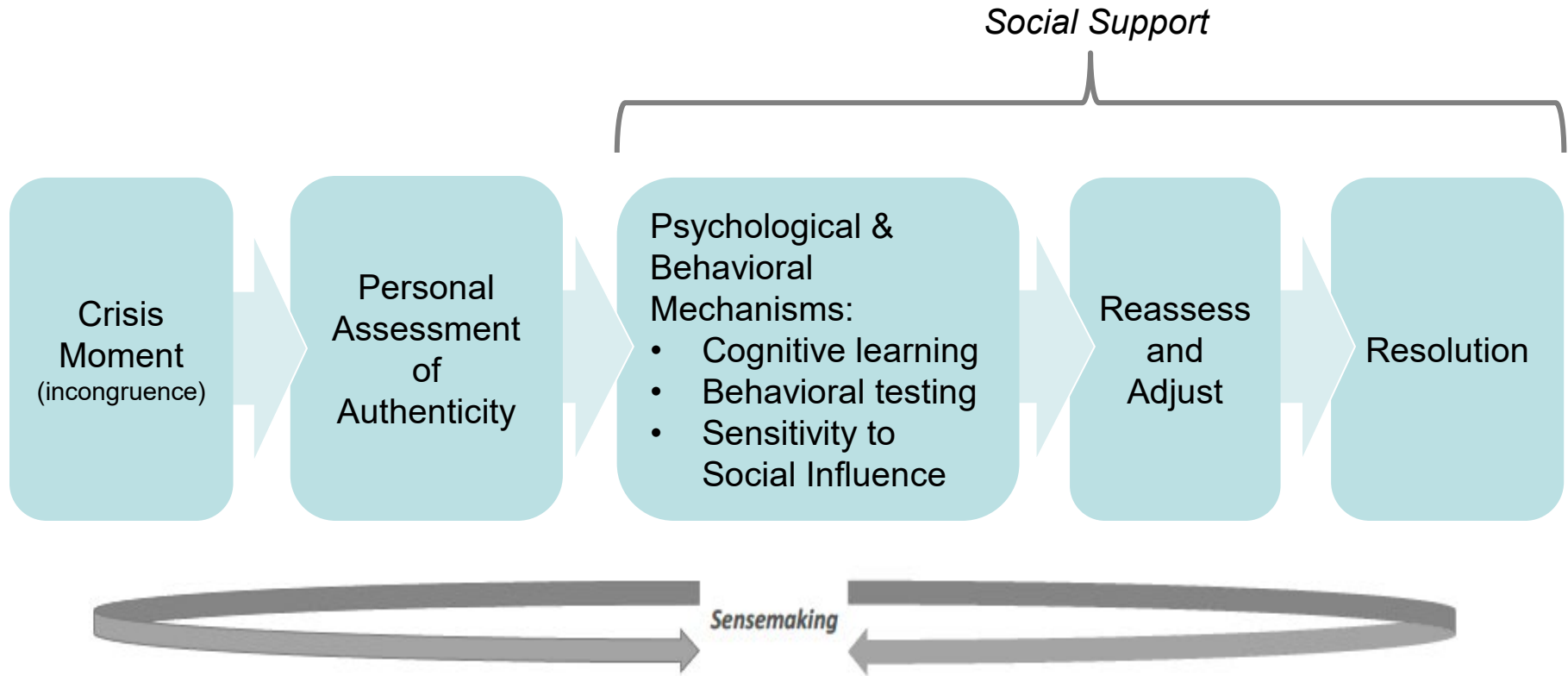
- “The unobstructed operation of one’s true, or core, self in one’s daily enterprise” (Kernis, 2003)
- People as actors on stage (Goffman, 1959)
- Multiple selves?
- How to be authentic at work?
- Research Gap: **How** personal authenticity develops in the work context, for early-career employees

Research Question

*How do new employees
resolve feelings of inauthenticity,
such that they come to express
a more authentic version of themselves at work?*



Developmental Process Model for Authenticity



Potential Moderators:

- Tolerance for vulnerability
- Motivation "to be authentic"
- Confidence in job tasks
- Power distance
- Models for authenticity

“Against Progress: Intellectual Property and Fundamental Values in the Internet Age”

Jessica Silbey

Professor of Law and Yanakakis Law Faculty Scholar
School of Law



To promote the Progress of Science and the
useful Arts by securing for limited Times to
Authors and Inventors the Exclusive Right to
their respective Writings and Discoveries.

(U.S. Const. Art. 1, Sec. 8, cl. 8)

About 10,600,000 results (0.66 seconds)

Images for monkey selfie



“Hollywood Circuit” Court Issues En Banc Decision in Garcia v. Google: No Copyright Protection for Fleeting Dramatic Performance

Posted on May 18th, 2015 by David Kluff

On May 18, 2015, the Ninth Circuit sitting *en banc* vacated its prior decision in *Garcia v. Google*. The prior decision, authored by Judge Alex Kozinski, controversially held that an actress had standing to issue a DMCA takedown notice to YouTube because she had a



ion dissolves a previously issued
of film authorship for copyright purposes.

YouTube

Innocence of Muslims - Muhammad Movie - FULL HD

DarthF3TT



Subscribe

11 videos



new forms of “Progress” for IP

equality, privacy, distributive justice
and institutional resiliency

Flourish or impoverish?

American attitudes on AI's potential effects

James Katz

Feld Professor of Emerging Media

College of Communication

With thanks to Dr. Kate Mays



AI → (flourishing) economically and socially?

- By 2025, 85 MM jobs replaced by AI
... but 97 MM new jobs created *
- 2021 global spending on AI & cognitive systems = \$57 B **
- Greater public safety, better health, governmental efficiency, physical assistance
- Could enrich lives via entertainment, creativity, behavioral prompts

* World Economic Forum <https://dataprot.net/statistics/ai-statistics/>

** IDC estimates <https://dataprot.net/statistics/ai-statistics/>



TECHTANK

Machines learn that D writes the rules regulation

Mark MacCarthy and Kenneth P

- Domin
- Excess

AI Weekly: EU facial recognition ban highlights need for U.S. legislation



Kyle Wiggers
@Kyle_L_Wiggers

October 8, 2021



Representative sample = 1,150 conducted spring '21

- AI's role in economy

Agree versus Disagree

- Better, more meaningful jobs (40% v 26%)
- More efficient economy (37% v 28%)
- Damage overall economic picture (66% v 9%)
- Bigger role in managing people's lives (59% v 28%)
- Worsen social inequality (58% v 13%)
- Despite some benefits, overall public assessment negative

AI roles in people's lives

Comfortable v Uncomfortable

- Uncomfortable with political leadership, co-worker, or therapist roles
- Evenly divided: Personal assistant (e.g., 34% v 35%)
- Backdrop of public opinion can strongly affect the trajectory of AI → thereby affect human flourishing

Thank you!

**ONLY RECONNECT:
from Anthro- to Zoomorphism and Back
(Or, In Praise of Crabs, Cockroaches, “Killer Whales,”
... and Granny Tales)**

Parker Shipton

Professor, Department of Anthropology

Professor, Center for African Studies

Affiliate, Center for Innovation in Social Science

Boston University



1. Humans are still a young species. Other familiar animal types have endured many times longer.
2. Traditional origin stories, designs, and rites of many “foraging” (gathering, hunting, fishing) peoples suggest that animals got here first, that we humans diverged from them, and that we owe them respect and compassion.
3. Our bodies share more in common with those of other animals – genetically, neurologically, hormonally, responsively -- than most humans (even many evolutionists) suppose. So do phases of our life cycles.
4. Without other animals, we cannot long live (or communicate, or even think?), despite presumptions of natural (or divinely-ordained) superiority or of civilizations’ progress. Several lines of inquiry point to similar conclusions.
5. But zoomorphic metaphor, among ostensibly “civilized” people, tends to caricature and demean other animals -- and by dehumanizing, often imperils human out-groups. Such idiom has repeatedly fueled genocides.
6. Our technological discoveries and inventions are too often, too easily perverted to destructive purposes or effects.
7. By driving many species to extinction, in times and places beyond our usual awareness, we threaten ourselves too.
8. But we can teach ourselves and each other to limit these harms, enhancing chances of mutual survival.
9. Triangulation between “remote” (often abused, ignored) cultures and societies is one way to learn.



A Few Uses and Functions of (Other) Animals for Humans:

Corporeal (food, dress, sometimes shelter). **Hunting-gathering related** (tracking, luring, fetching, hauling...). **Agricultural:** Habitat conditioning (soil loosening, fertilizing), plant cross-pollination, plowing, pumping, carrying; “pest” elimination. **Communicational:** (e,g, carrier pigeons). **Musical** (horns, flutes, bows, keys). **Detective** (sensing bombs, drugs). **Educational** (story figures, human surrogates). **Emotional** (companionship, guiding, therapy). **Social:** totems (clans, lineages, companies), mascots (for teams, schools). **Political** (ruler regalia; symbols for flags, emblems. **Recreational** (cock- dog-, etc. -fights, races; zoos, circuses). **Personal-ostentatious** (headdresses, cloaks, trophies). **Aesthetic, ornamental, and inspirational** (painting, sculpture). **Religious and occult:** for prophecy (bone/dice tossing), sacrifice, symbolizing of spirits, deities. **Other symbolic:** hawks, doves. **Ceremonial** (dance masks, parade attire). **Hygienic** (carrion sterilization). **Rescue** (as by dogs, even dolphins). **Scientific and medical** (experimentation, ingredients, sensing diseases). **Military** (detection, pursuit, terror, torture, poison, portage). **Artisanal and industrial** (tying, gluing, lubricating, etc.). **Commercial:** branding (car, truck, boat, coats, drinks); ads (dogs, tigers, camels). And countless combinations (ceremonial feasts, urban cartoons...).

But How Do We Speak of Them? How Fairly and Respectfully?

Terms of abuse for humans: Chicken, hog, cow, crab... rat, snake, shark....vermin, rodent, pest, parasite....

On this and other continents, use of such idiom has contributed to genocidal holocausts.



Isms and Schisms: The Fractal Continuum of Othering (and Bothering)

selfism-> familism -> clannism-> tribalism-> racism-> speciesism

If sometimes differing in association (gender, religion, class) and expression, these discriminations are also continuous, both conceptually and biologically. They appear to activate some of the same parts of the brain (e.g. hippocampus [memory], amygdala [fear, anxiety, aggression], sometimes insula [disgust]), and complex circuitry connecting these and other parts.

Can We Do Better... and Last Longer, Like Older Creatures?

Why not? We can use now what *is* more distinctly human (esp. using frontal cortex): self-modulation... ethnographic learning... translation and re-translation... willful cultural self-reform... multi-species acquaintance and nurturance... orality, literacy, cybercy... broadcasting, long-distance learning... long-term information storage and retrieval... scaled resource re-allocation... rule-making, changing, monitoring, enforcing... subliminal persuasion... cognitive behavioral therapy... and return to our start: *grandmother tales and teachings*.

Orca design by
the late Gerald
“Jake” Jones
(Port Gamble
S’Klallam, Coast
Salish, Pacific
Northwest)



UPCOMING EVENTS

Learn more & RSVP: bu.edu/research/events
Topic ideas & feedback: bu.edu/research/topic-ideas

RESEARCH ON TAP

Data Science for Racial Equity
Tuesday, November 30, 2021 | 4-6 pm

RESEARCH HOW-TO

Finding Funding in Education: Meet the
Spencer Foundation
Monday, November 8, 2021 | 3-4 pm

Strategic Communications: Pitching and
Writing Workshop with *The Conversation*
Wednesday, November 17, 2021 | 3-4:15 pm

