

Big Five Personality, Depression, and Anxiety: Tests of a social support mediation model in an LGBTQ+ college student sample

Kristian E. Robinson, Philip B. Gnilka, Amber Livingston, Amy Sarcinella, Autumn Randell, Kenneth Johnson, Erin Crane, & The Spit For Science Working Group



VCU

School of Education



INTRODUCTIONS



VCU School of Education



Session Agenda

- Background
- Methods
- Results
- Discussion & Implications
- Questions



VCU

School of Education



BACKGROUND



VCU

School of Education



LGBTQ+ Mental Health on College Campuses



VCU

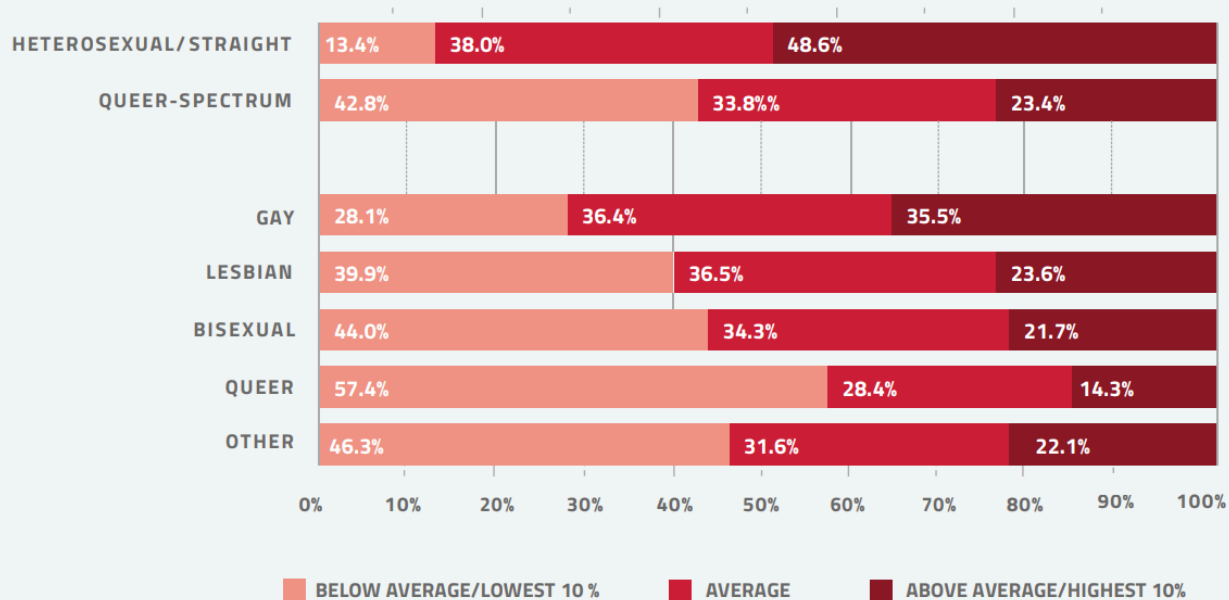
School of Education



LGBTQ+ College Student Wellbeing

FIGURE CIRP1

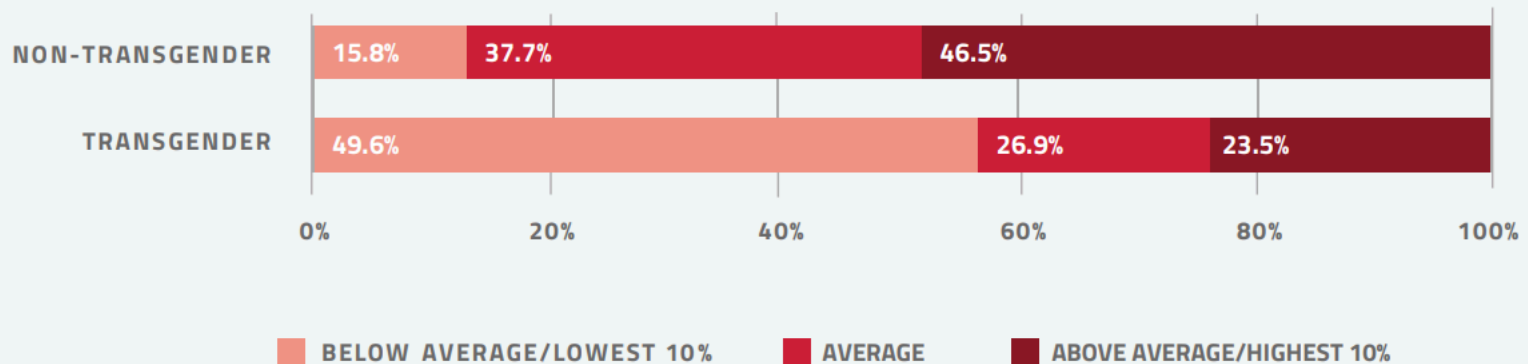
Self-Rated Emotional Health of Incoming Freshmen



LGBTQ+ College Student Wellbeing (cont'd)

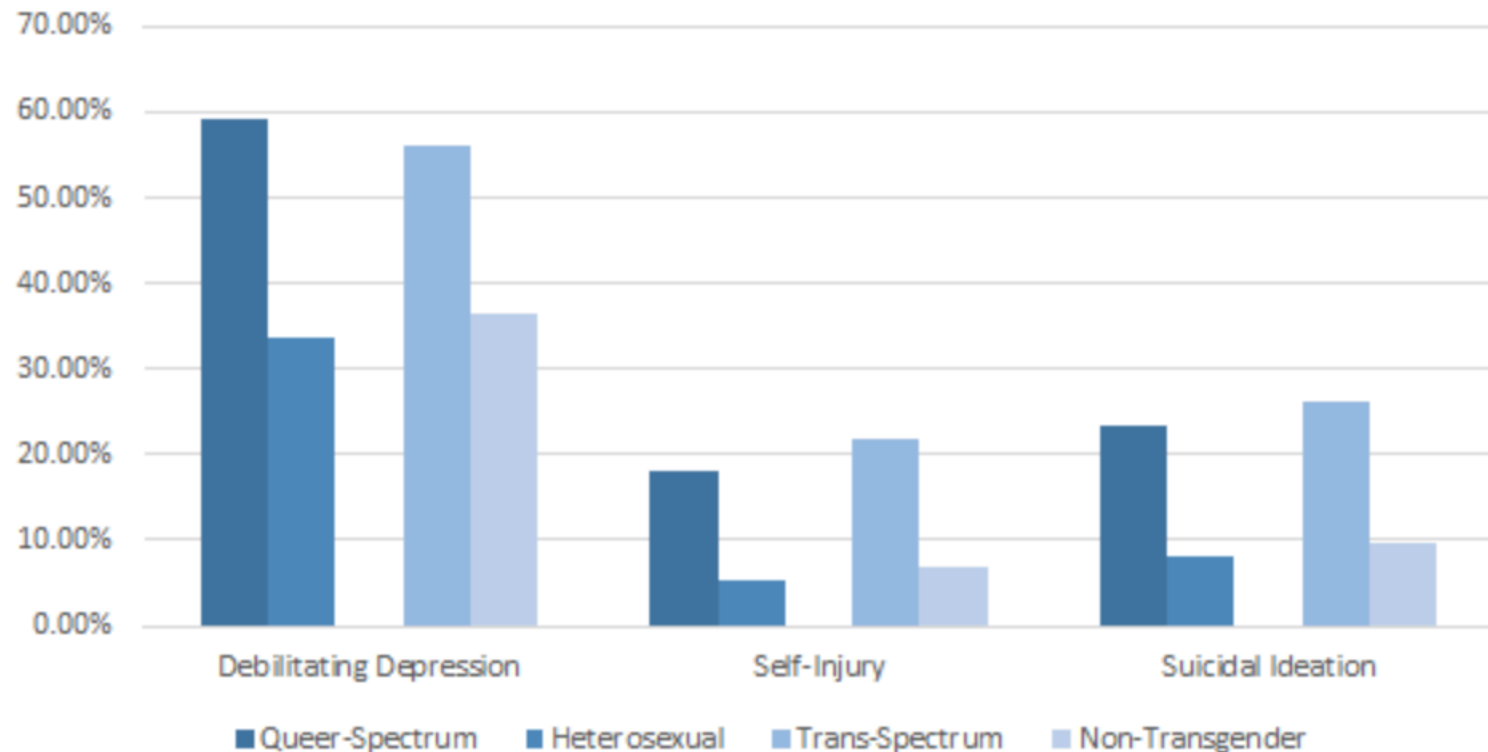
FIGURE CIRP 2

Self-Rated Emotional Health of Incoming Transgender
& Non-Transgender Freshmen



LGBTQ+ College Students & Depression

Spring 2016 ACHA-NCHA Mental Health Findings



LGBTQ+ College Students & Anxiety

- ACHA-NCHA found that Anxiety was identified as an academic impediment for
 - 39.1% of Queer-Spectrum students compared to 22.1% of Heterosexual students
 - 39.5% of Trans-Spectrum students compared to 23.8% of cisgender students

LGBTQ+ College Students & Social Support

Students Who Felt Isolated From Campus Life



Queer-Spectrum
Freshmen
— vs —
Heterosexual
Freshmen

15.3%



Trans-Spectrum
Freshmen
— vs —
Non-Transgender
Freshmen

16.4%

STUDENTS WHO FELT VERY LONELY IN THE LAST 12 MONTHS¹



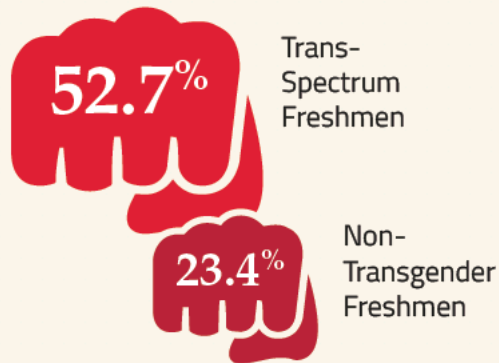
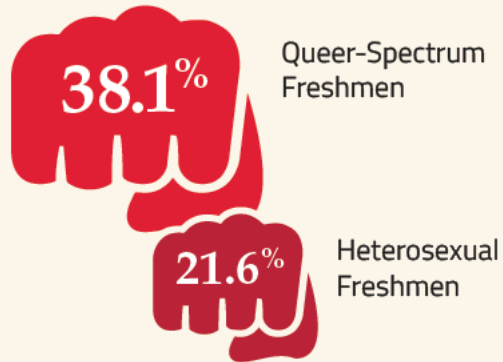
Queer-Spectrum Students



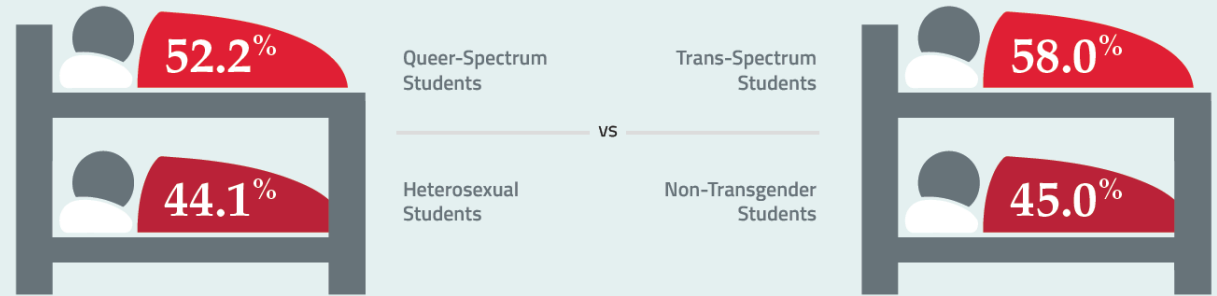
Trans-Spectrum Students



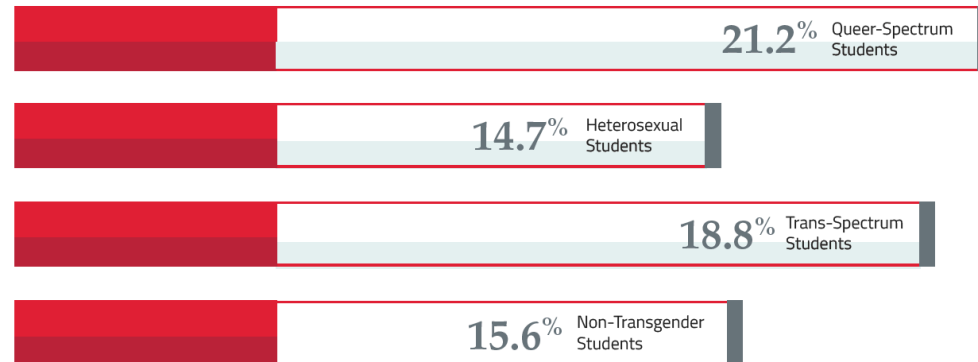
STUDENTS FEELING UNSAFE AFTER THEIR FIRST YEAR ON CAMPUS* 5



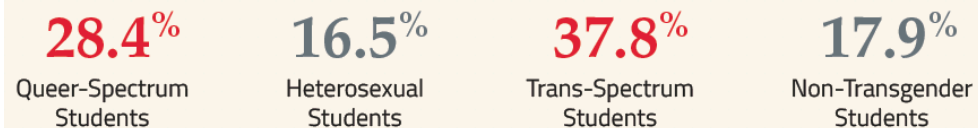
STUDENTS REPORTING THEY HAD DIFFICULTY GETTING ALONG WITH THEIR ROOMMATE* 5



CIGARETTE SMOKING IN THE LAST 30 DAYS 1



STUDENTS WHO CONSIDERED DROPPING OUT 6



Social Support

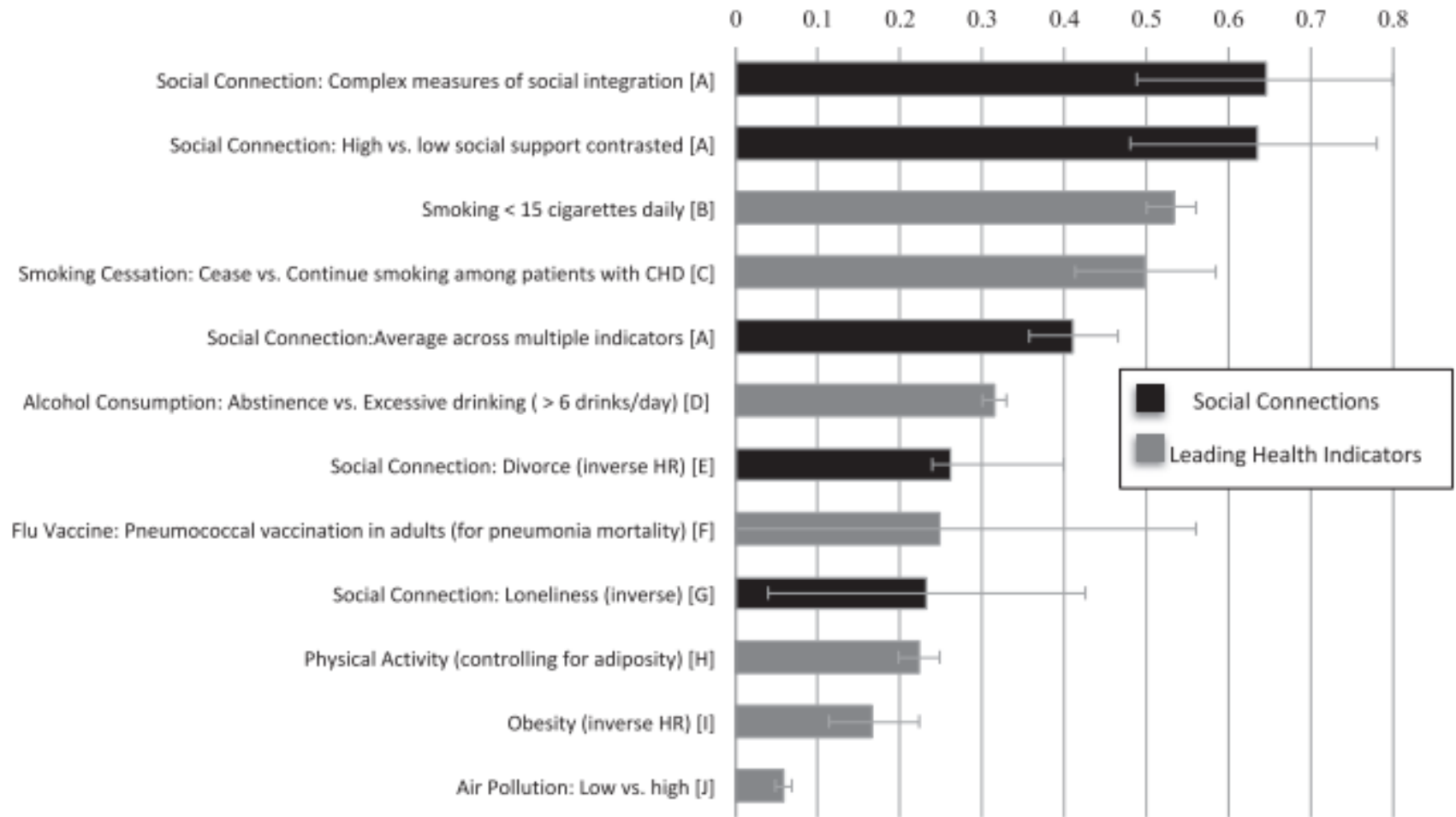


VCU

School of Education



The Importance of Social Connection



Source: Holt-Lunstad, Robles, & Sbarra (2017)

Rich Social Connections

- Increases happiness, life satisfaction, increases life span, significantly lowers your chances of getting sick, and has been shown to slow the progress of certain cancers (the slower growing types not the aggressive types).
- In other words, a meaningful and rich social life is one of the biggest predictors of who will be stressed and who will not.
- Smoking takes approx. 6 years off your life; so does having a rich social life

Social Connection is...

- Connections to others via the existence of relationships and their roles
 - Marital status, social networks, social integration, living alone, social isolation
- A sense of connection that results from actual or perceived support or inclusion
 - Received support, perceptions of social support, perceived loneliness
- The sense of connection to others that is based on positive and negative qualities
 - Marital quality, relationship strain, social inclusion/exclusion

Does social media help?

- Probably not
- What we are talking about are actual face-to-face interactions
- Highly connected people use social media to arrange more face-to-face connections (i.e., it can help)
- Unconnected people who use social media seem to get significantly worse (i.e., social comparison)

Advice?

- Make it a priority to build in genuine human contact into everyday
- Create a network of relationships in your life. Cultivate and prioritize this network as you would work, eating, and exercise.
- Adjust your screen time (e.g., no dinner time with everyone on the phone, meaningful talk with significant other/friends with NO electronics)

Introverts too?

- Reflective, cerebral, bookish, unassuming, sensitive, thoughtful, serious, contemplative, calm, modest, solitude seeking, shy, risk-averse
- About 25% of the population is introverted
- Yes, face-to-face contact is needed to be happy/healthy. Example, expressive social activities where you talk about your own inner world (exactly the type of stuff introverts avoid like the plague) is what seems to be important to do
- Extroverts: Give introverts the ability to control the time, place, and duration of their social contact. A gentle nudge here and there is likely to be helpful.

To Sum It Up

- Human beings are happier and healthier if we satisfy our universal need for meaningful and intimate human contact.
- Life is simply more enjoyable and the scary parts of life more manageable.
- Make it a priority in your life to find and maintain meaningful important relationships in your life.

Looking at Personality

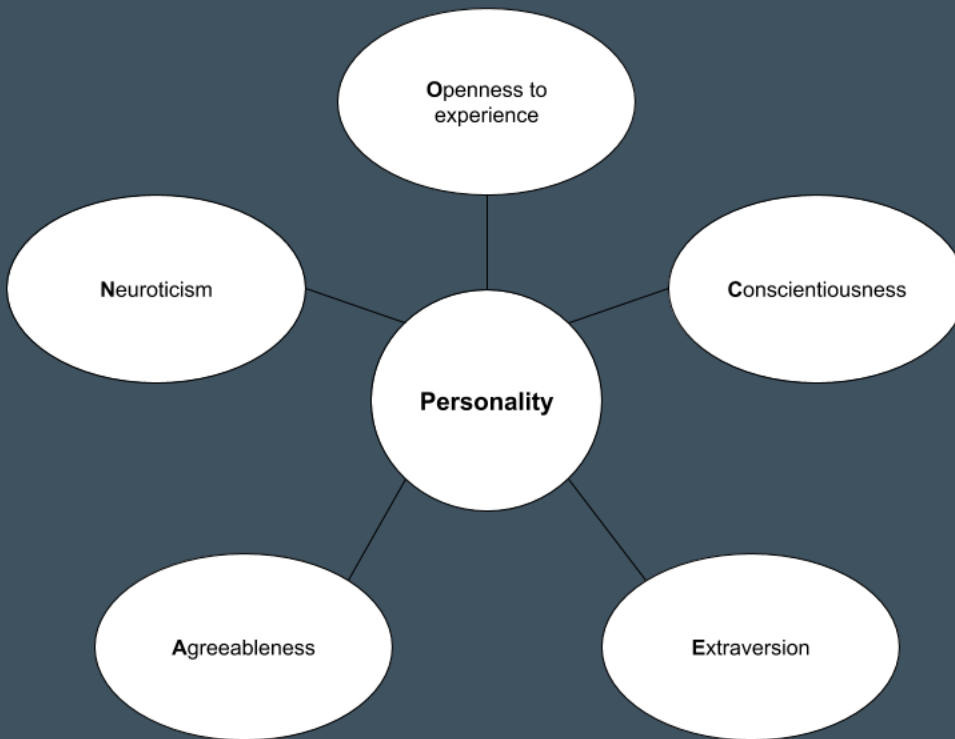


VCU

School of Education



Five Factor Model “Big Five” of Personality



- Adopts Trait Theory – individuals can be characterized in terms of relatively enduring, cross-situationally consistent patterns that can be quantitatively assessed

Openness to Experience

- High Scores
 - Imaginative
 - Creative
 - Original
 - Prefers Variety
 - Curious
 - Liberal
- Low Scores:
 - Down-to-earth
 - Uncreative
 - Conventional
 - Conservative
 - Uninterested

Conscientiousness

- High Scores
 - Hard-Working
 - Well Organized
 - Punctual
 - Ambitious
 - Persevering
 - Goal-Driven
- Low Scores:
 - Negligent
 - Lazy
 - Disorganized
 - Late
 - Aimless
 - Quitting

Extraversion

- High Scores
 - Affectionate
 - Joiner
 - Talkative
 - Fun Loving
 - Active
 - Passionate
- Low Scores:
 - Reserved
 - Quiet
 - Passive







Agreeableness

- High Scores
 - Soft-hearted
 - Trusting
 - Generous
 - Acquiescent
 - Lenient
- Low Scores:
 - Suspicious
 - Stingy
 - Antagonistic
 - Critical
 - Irritable

Neuroticism

- High Scores
 - Anxious
 - Temperamental
 - Self-Pitying
 - Conscious
 - Emotional
- Low Scores:
 - Calm
 - Even-Tempered
 - Self-Satisfied
 - Comfortable
 - Unemotional

Big Five and Mental Health

- Factors for Depression:
 -  Neuroticism
 -  Extraversion
 -  Conscientiousness
- Factors for Anxiety:
 -  Neuroticism
- Factors for Perceived Social Support:
 -  Extraversion
 -  Neuroticism

Gaps in the Research



VCU

School of Education



Moving forward with the research...

- How do the Big Five personality traits interact with social support as a mediator for depression and anxiety among LGBTQ+ populations??

METHODS



VCU School of Education



Spit For Science (S4S)



- Longitudinal study of genetic and environmental influences on emotional health and substance use among college students
- ~70% voluntary participation of 1st year undergraduate students over 4 years

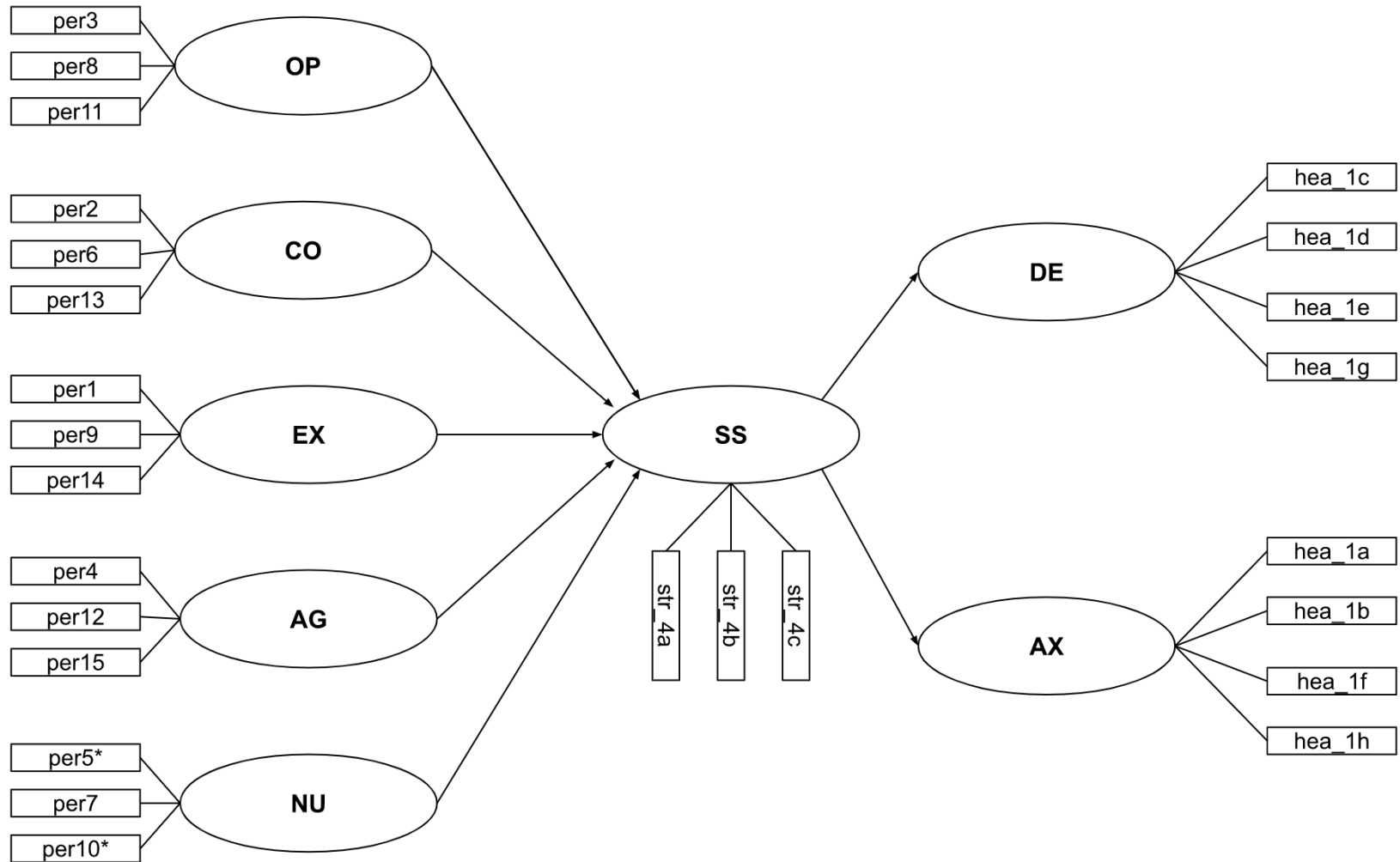
Study Population (n=1152)

- Sexual Orientation
 - 68% Bisexual
 - 31.1% Homosexual
 - 0.4% Questioning
 - 0.3% Queer
 - 0.2% Asexual
- Gender Identity
 - 67.9% Female
 - 32.1% Male
- Race & Ethnicity:
 - 59.1% White
 - 14.5% Black/AA
 - 11.1% Asian
 - 7.9% Bi-/Multi-Racial
 - 6.2% Hispanic/Latino
 - 0.6% Hawaiian/PI
 - 0.5% American Indian

Measures

- Big Five Personality
 - 15-item survey – 3 questions per factor, 1 to 5 Likert Scale
 - Ex. “tends to be quiet” → Extraversion
- Perceived Social Support
 - 3 items from the Medical Outcome Survey, 1 to 4 Likert Scale
 - Ex. “How often was someone available to get together with you for relaxation?”
- Depression & Anxiety
 - 4 items each from the Symptoms Checklist 90, 1 to 5 Likert Scale
 - Ex. ““Feeling fearful.” → Anxiety; “Feeling hopeless about the future.” → Depression

Hypothetical Model



RESULTS



VCU

School of Education



We adopted Hu and Bentler's (1999) guidelines for assessing acceptable model fit, $CFI \geq 0.95$, $SRMR \leq 0.08$, and $RMSEA \leq 0.06$. In cases where the CFI value was below the suggested threshold, we then used Hu and Bentler's (1999) recommendation to simultaneously evaluate SRMR and RMSEA, with $RMSEA \leq 0.06$ and $SRMR \leq 0.10$.

Model Fit Statistics:

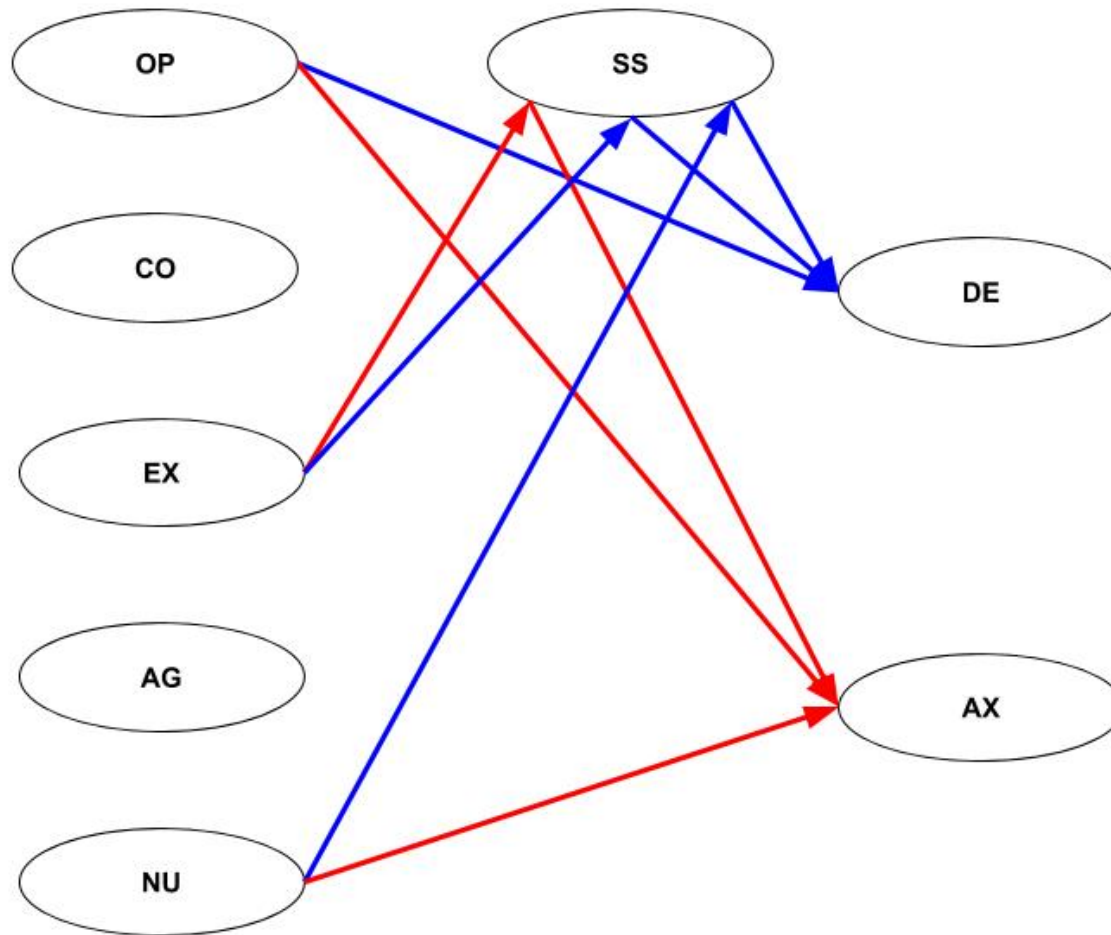
$\chi^2(269, N = 1,152) = 817.32, p < .001$

$CFI = .93$

$SRMR = .049$













$RMSEA = .042, 90\% CI [.039, .045]$

The Observed Model












In other words

- Pathways to Depression:

-  Neuroticism →  Depression
-  Neuroticism →  Perceived Social Support →  Depression
-  Extraversion →  Depression
-  Extraversion →  Perceived Social Support →  Depression
-  Openness to Experience →  Depression

- Pathways to Anxiety:

-  Neuroticism →  Anxiety
-  Extraversion →  Anxiety
-  Extraversion →  Perceived Social Support →  Anxiety
-  Openness to Experience →  Anxiety

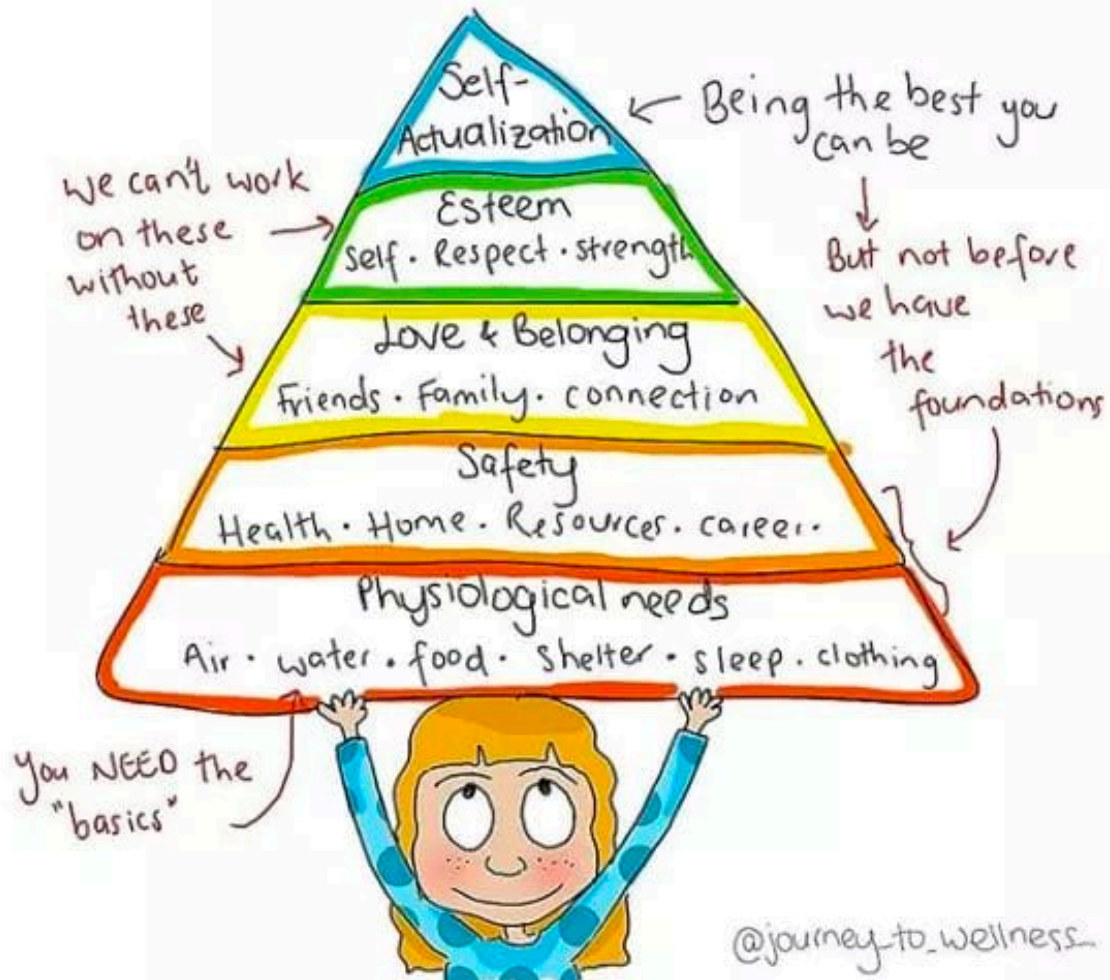
DISCUSSION & IMPLICATIONS



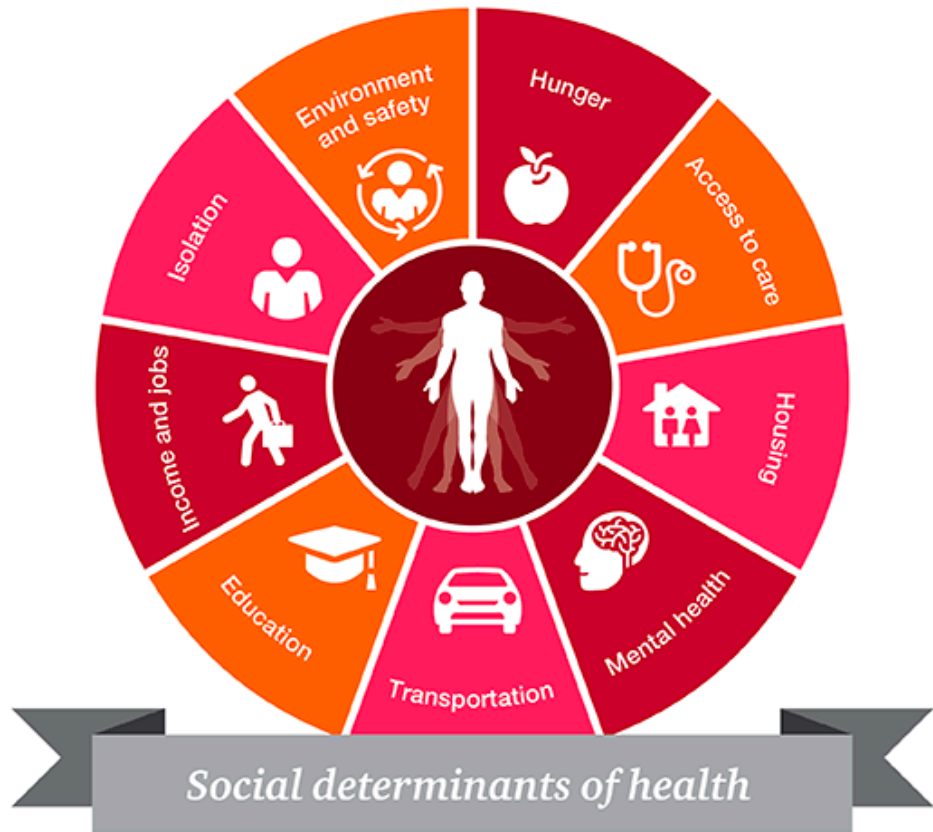
Limitations

- Sample size was limited to LGBTQ → very little observations made on individuals who were not cis-gender
- Self-Reported
- Cross sectional study

MASLOW'S Hierarchy of Needs



Assessing for SDOH



- Poverty & Employment
- Food Security
- Stable Living Conditions
- Experiences of Violence in the Home
- Perceptions of Discrimination and Equity
- Enrollment in Higher Education

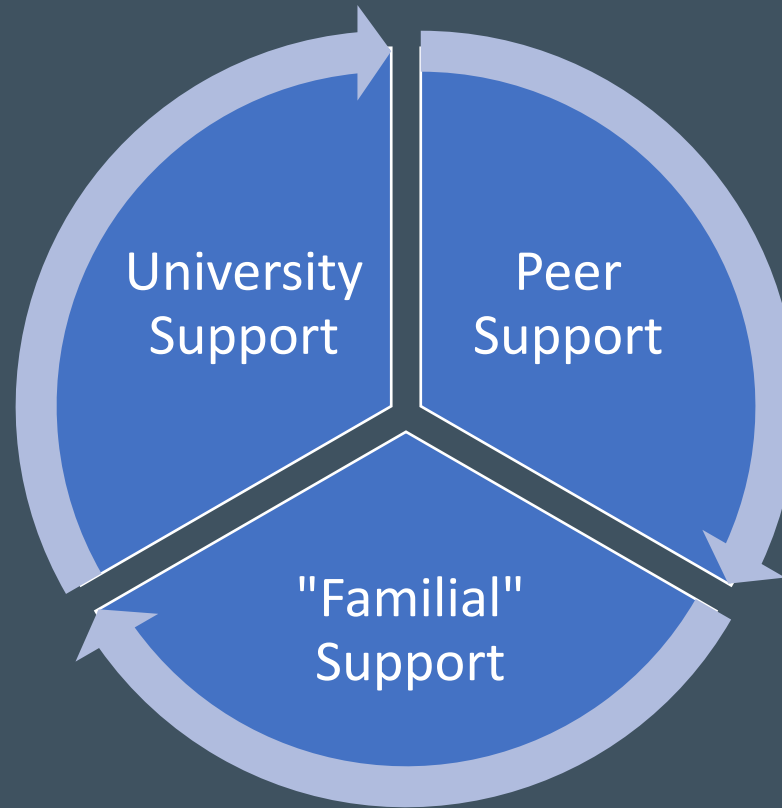


Promoting Safety for LGBTQ+ Students

- Safe Zone/Space Training is just the first step
- Radiate Allyship:
 - Self
 - Office
 - Department
 - University
 - Community



The Importance of Social Support



Focusing on Perceived Social Support

If perceived social support is a mediating factor between personality and depression/anxiety, how might we focus on this construct in session with clients?

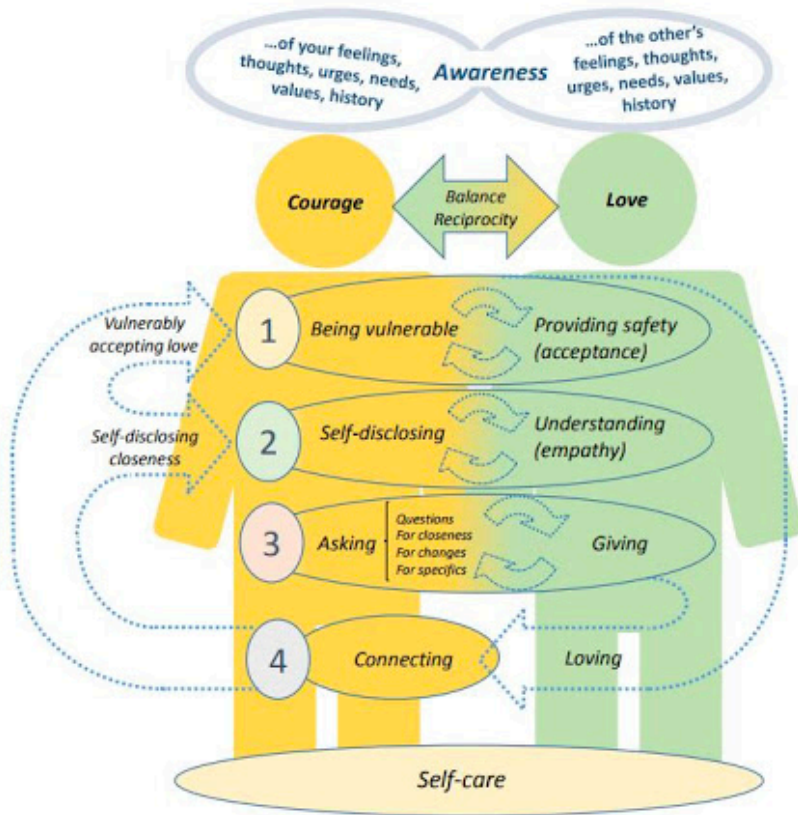
Exploring Culturally Embedded Notions of LGBTQ+ Relationships



- Exploring with clients:
 - What messages did you receive about how you should engage in relationships based on your identity?
 - How do these messages influence how you develop relationships as an LGBTQ+ person?
 - How do you define healthy relationships?



Attacking Pathways to Lowered Social Support



- Using Functional Analytic Psychotherapy to leverage the therapeutic relationship to address issues of:

- Concealment
- Expressions of shame
- Avoidance of discussions regarding vulnerability
- Avoiding topics that might elicit judgement or rejection



Acknowledgements

Spit for Science has been supported by Virginia Commonwealth University, P20 AA017828, R37AA011408, K02AA018755, P50 AA022537, and K01AA024152 from the National Institute on Alcohol Abuse and Alcoholism, and UL1RR031990 from the National Center for Research Resources and National Institutes of Health Roadmap for Medical Research. This research was also supported by the National Institute on Drug Abuse of the National Institutes of Health under Award Number U54DA036105 and the Center for Tobacco Products of the U.S. Food and Drug Administration. The content is solely the responsibility of the authors and does not necessarily represent the views of the NIH or the FDA. Data from this study are available to qualified researchers via dbGaP (phs001754.v2.p1). We would like to thank the Spit for Science participants for making this study a success, as well as the many University faculty, students, and staff who contributed to the design and implementation of the project.



Questions?

Kristian E. Robinson, MS, NCC – robinsonk10@vcu.edu

Philip B. Gnilka, Ph.D., LPC, NCC, CCMHC - pbgnilka@vcu.edu



VCU

School of Education

