Impact of Student Factors on Clinical Training Success

D. Billingsly, J. Georgeson, D. Gosselin, R. Meier, G. Musacchia, K. Pritchett

Participating Programs

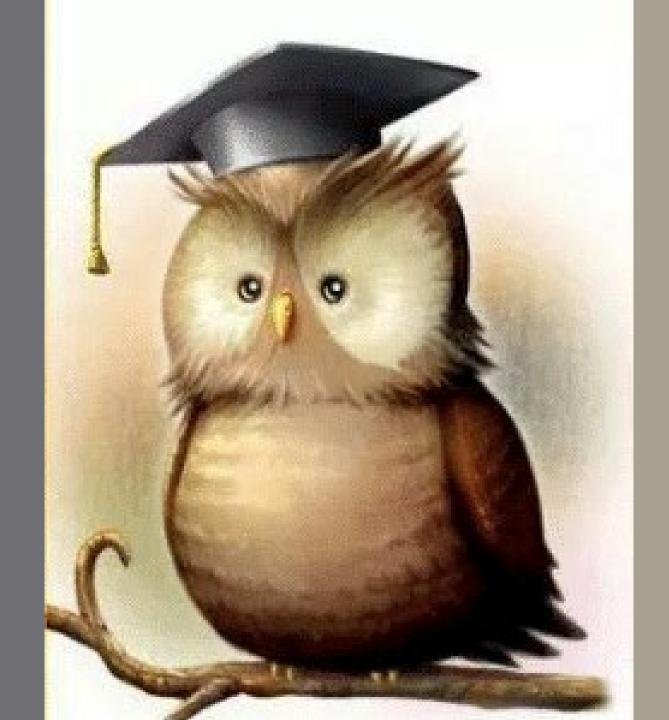
UNIVERSITY OF THE PACIFIC



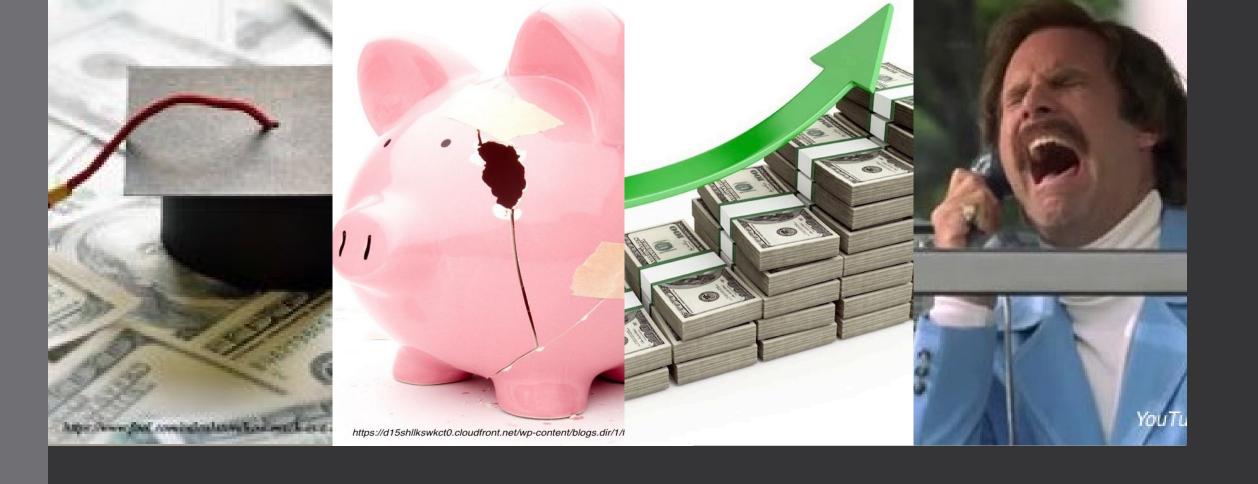




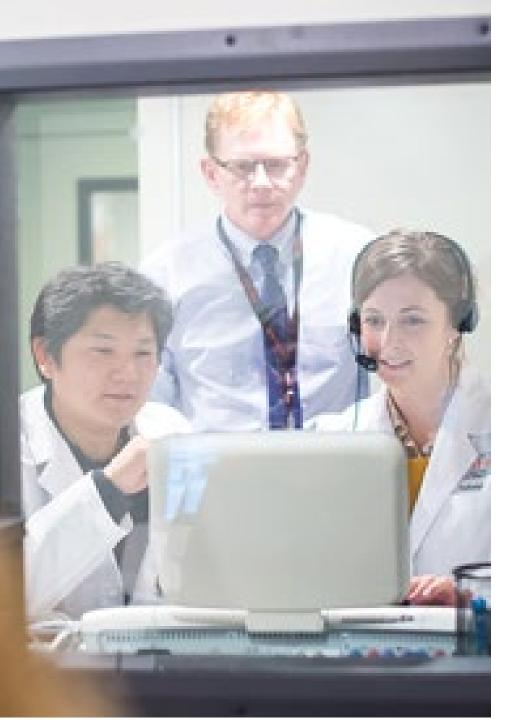
Purpose of the Study



Identifying Factors for Success



Student Pre-Application Considerations



Characteristics & Factors

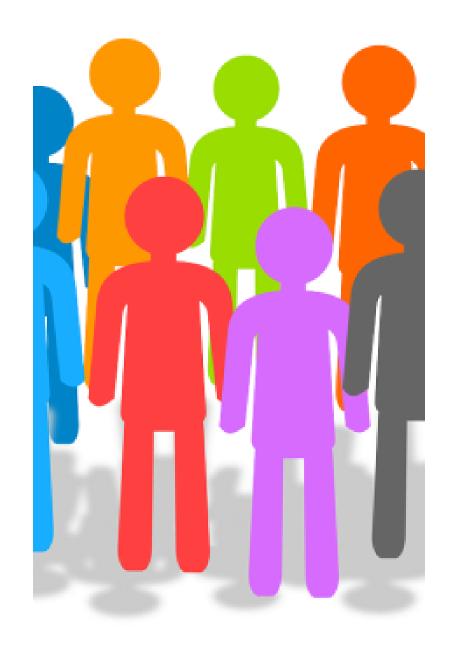
Student Characteristics

- High-performing undergrad/graduate students
- Diverse educational backgrounds
- Personality factors regarding control and receiving direction

Clinical Education Factors

- Increased stress level of Doctoral/Graduate level program
- Lock-step curriculum
- Ability to receive/implement feedback

Participant Demographics



N = 42

Age:

21-41 (average: 24)

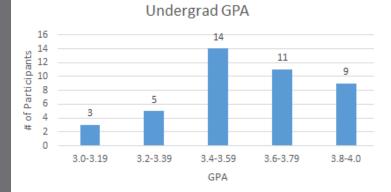
Race/Ethnicity: Caucasian, Black or African American and Asian

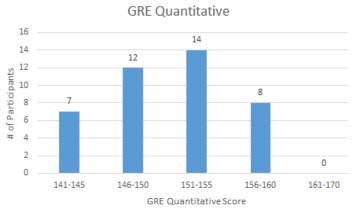
Gender:

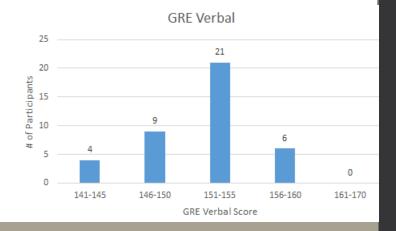
7 males; 35 females

Undergraduate Background: CSD, Social Sciences (Social Work, Education Psychology), Sciences (Biology, Chemistry, Physics), Audio Engineering, Political Sciences, Religion

Special Accommodations: 3/42 (accommodations not specified)







Undergraduate Performance

Assessment Scales

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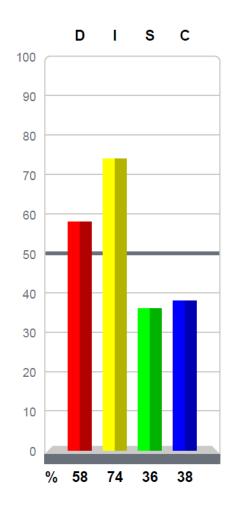
Assessment Scales

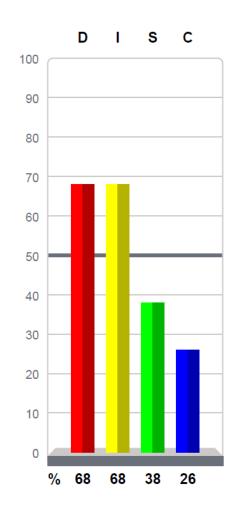
- TTI Success Insights® TriMetrix® HD
- NEO IPIP (Five Factors)
- Rotter's Locus of Control
- Toronto Empathy Questionnaire
- Perceived Stress Scale (PSS)
- Supervisory Relationship Questionnaire (Modified)
- Supervisory Relationship Measure (Modified)

Adapted Style

Graph I







TTI TriMetrix® HD

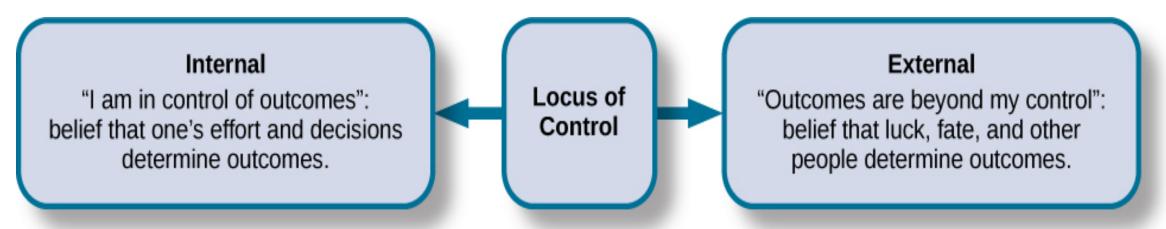
Report aiding in the understanding of an individual's talents in four distinct areas:

- Behaviors
- Motivators
- Acumen
- Competencies

NEO - IPIP

Dimension	Facets					
Openness to Experience	Fantasy	Aesthetics	Feelings	Actions	Ideas	Values
Conscientiousness	Competence	Order	Dutifulness	Achievement Striving	Self- Discipline	Deliberation
Extraversion	Warmth	Gregariousness	Assertiveness	Activity	Excitement Seeking	Positive Emotions
Agreeableness	Trust	Straight- forwardness	Altruism	Compliance	Modesty	Tender- Mindedness
Neuroticism	Worry	Anger	Discourage- ment	Self- Consciousness	Impulsivity	Vulnerability

Rotter's Locus of Control



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- Why is this important?
- 13 item questionnaire
 - Paired choices
 - Higher score = External Locus
 - Lower score = Internal Locus

Toronto Empathy Questionnaire

• Why is this important?

Studies by health professionals suggest that empathic engagement in patient care can lead to better patient compliance (e.g., DiMatteo et al., 1993); more accurate prognosis (Dubnicki, 1977), and increased patient satisfaction (Zachariae et al., 2003).

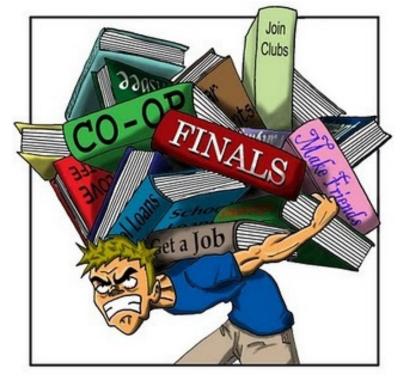
- 16 item questionnaire
 - 4-point scale
 - Five options
 - Higher score = More empathetic
 - Scores below 45 indicate below-average levels of empathy

Empathy - being aware of and sharing another person's feelings, experiences, and emotions.

Perceived Stress Scale

Completed every term

- Why is this important?
- 10 item questionnaire
 - 4-point scale
 - Five options
 - Higher score = More perceived stress



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Supervisory Relationship Questionnaire (Modified)

Completed every term

- Why is this important?
- 10 Item Questionnaire
 - 7-point scale
 - Higher score = Better supervisory relationship perceived by student



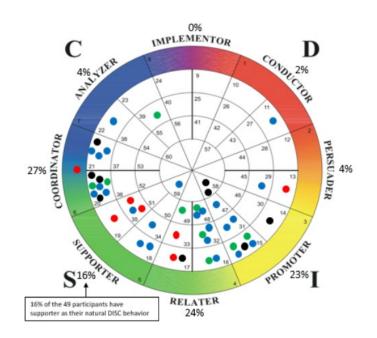
Supervisory Relationship Measure (Modified)

Completed every term

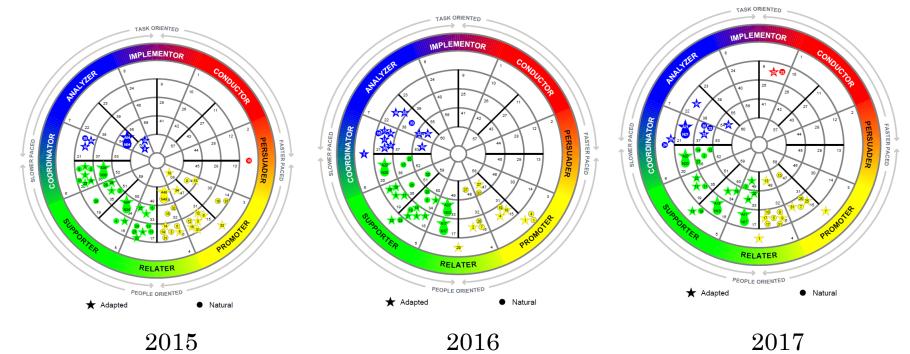
- Why is this important?
- 10 Item Questionnaire
 - 7-point scale
 - Higher score = Better supervisory relationship perceived by preceptor

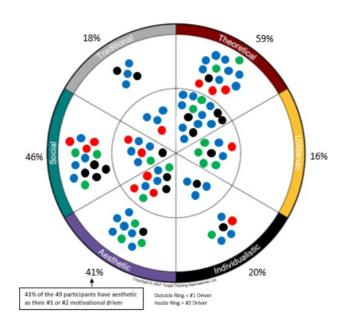
Incoming Student Information

Intake Report on Scales

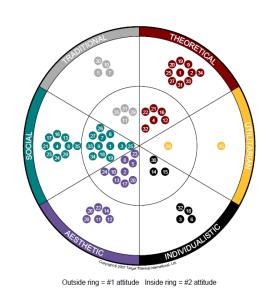


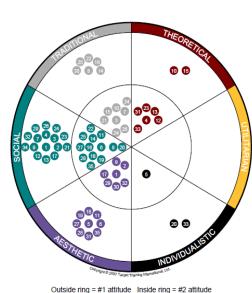
Success Wheel Speech Language Pathology (UNL) vs. Audiology (4 Programs)

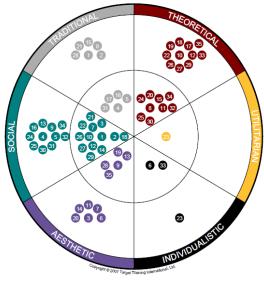




Motivators Speech Language Pathology (UNL) vs. Audiology (4 Programs)



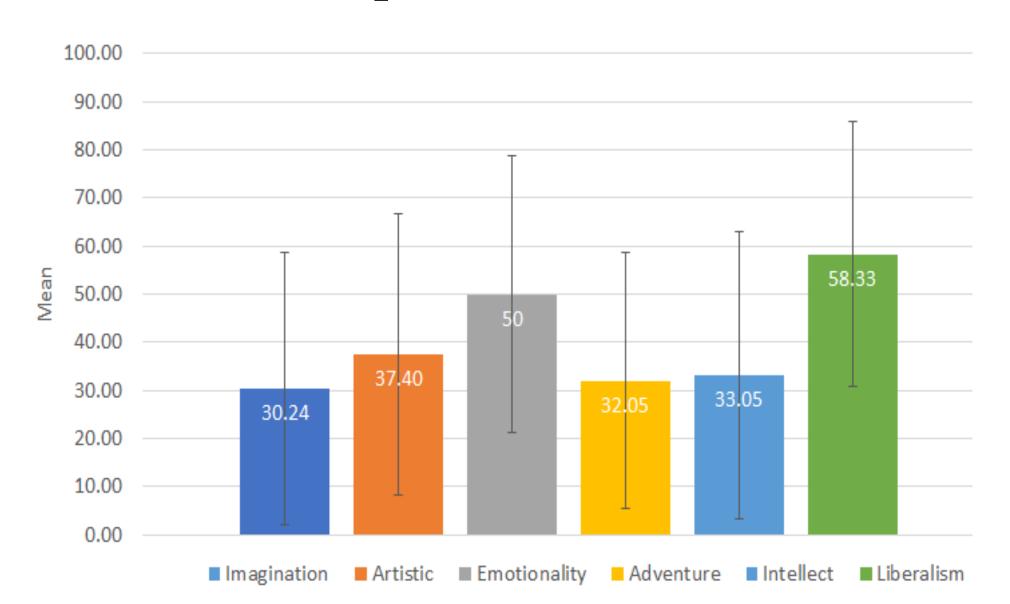




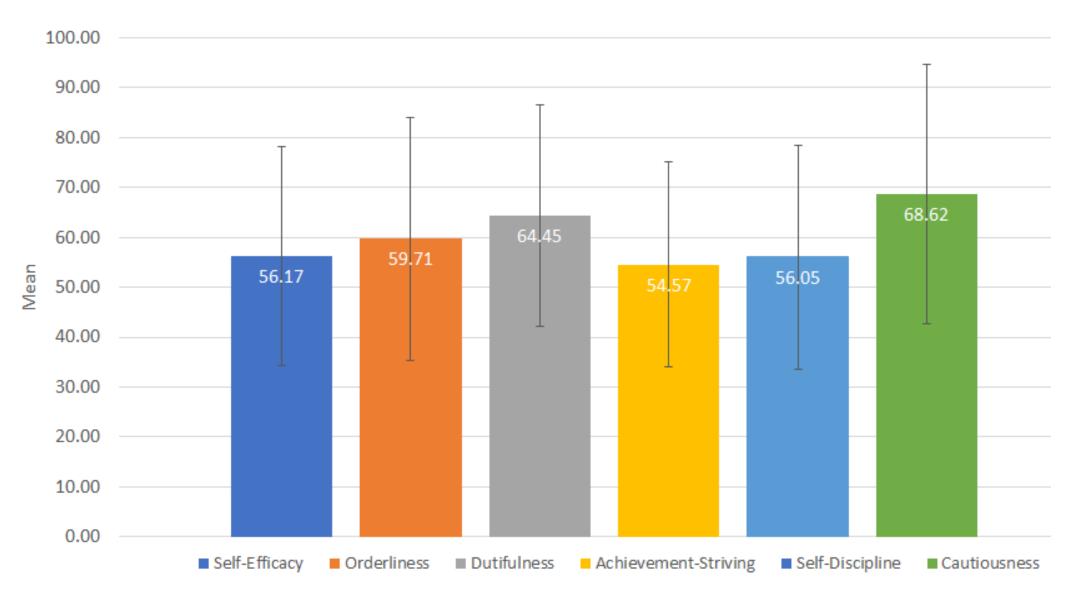
Outside ring = #1 attitude Inside ring = #2 attitude

2015 2016 2017

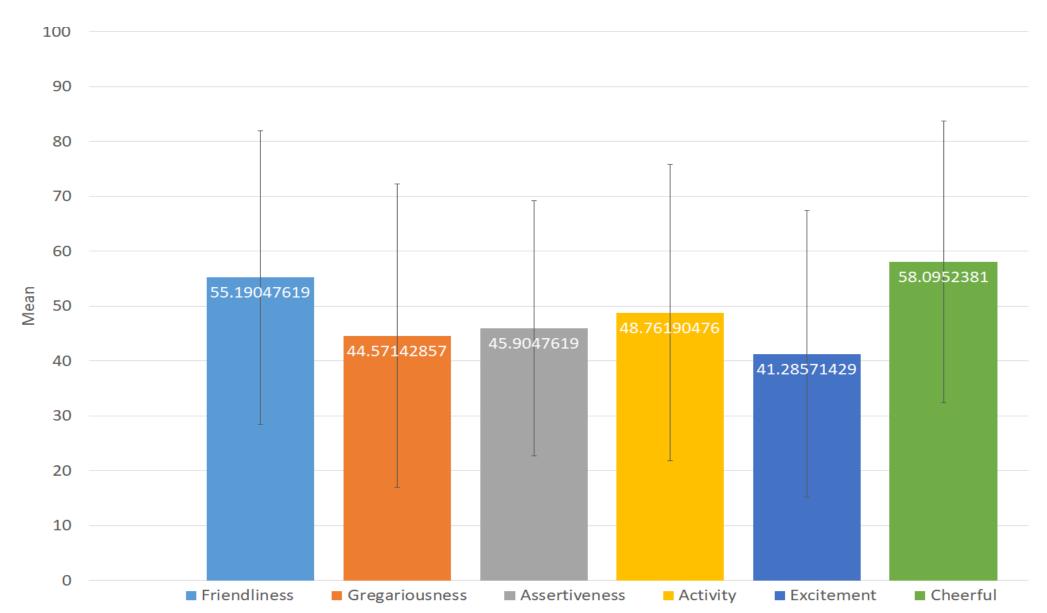
NEO IPIP: Openness Elements



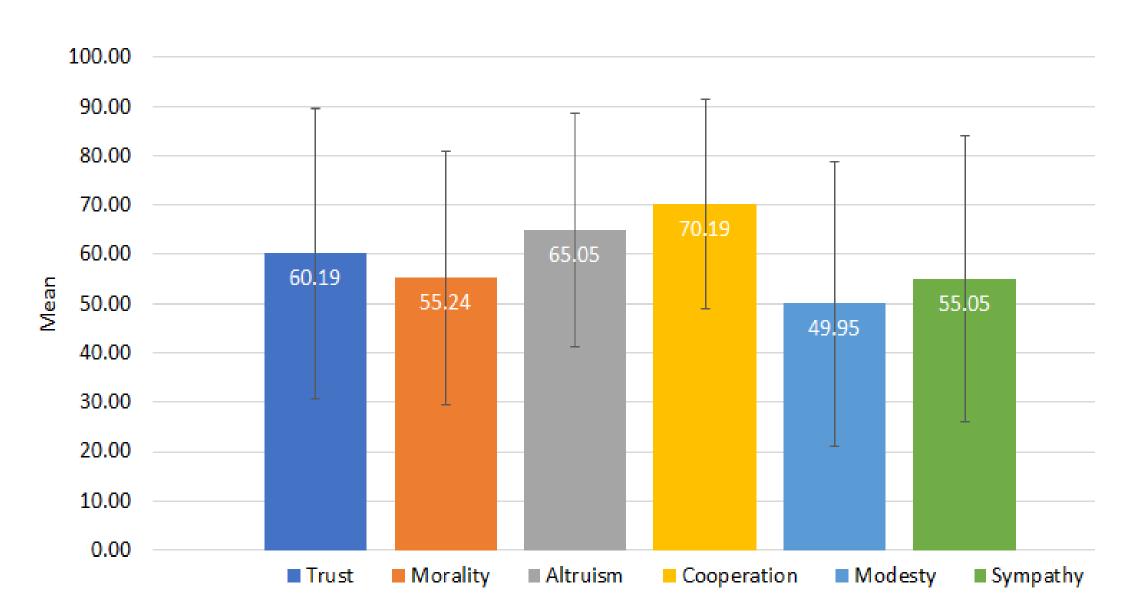
NEO IPIP: Conscientiousness Elements



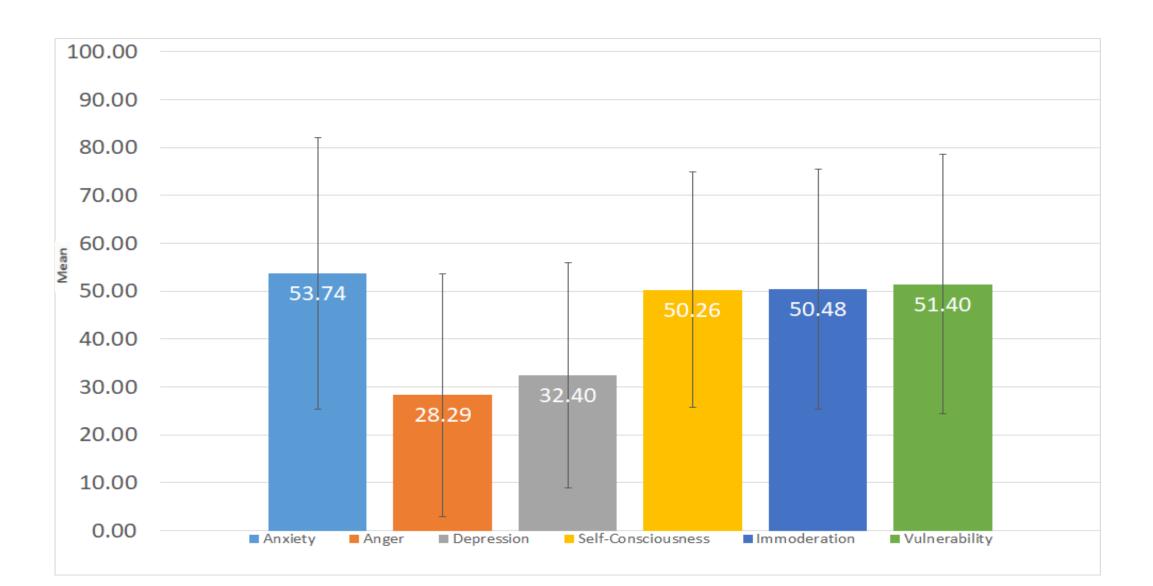
NEO IPIP: Extraversion Elements

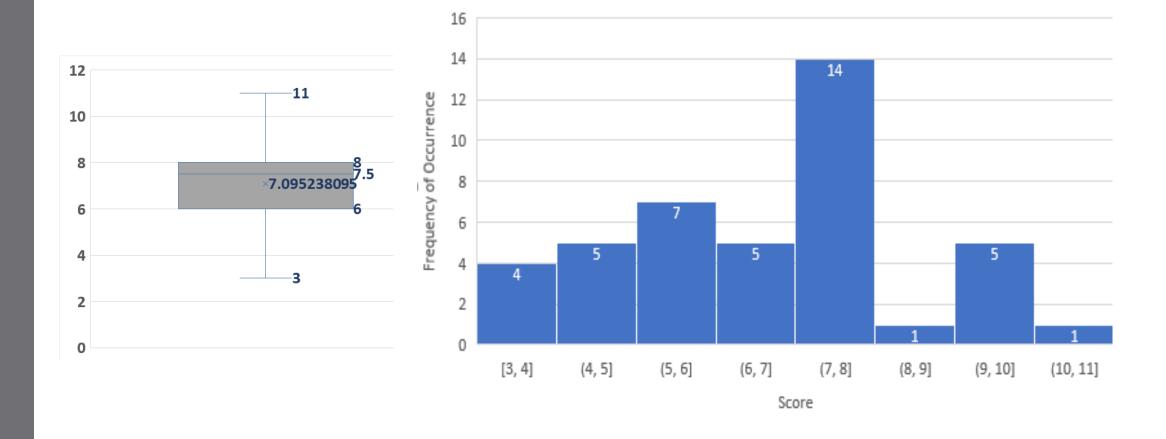


NEO IPIP: Agreeableness Elements



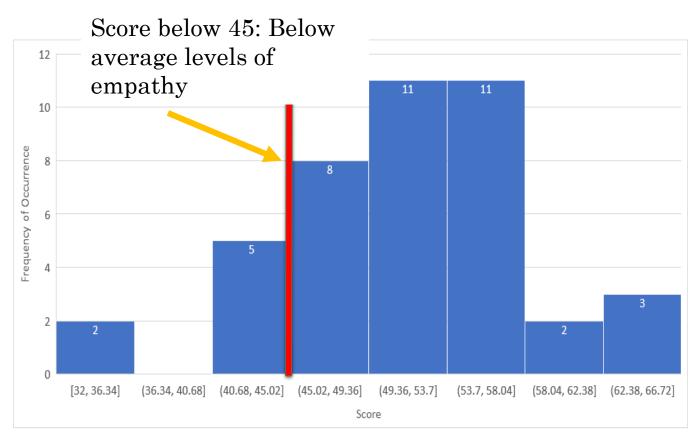
NEO IPIP: Neuroticism Elements

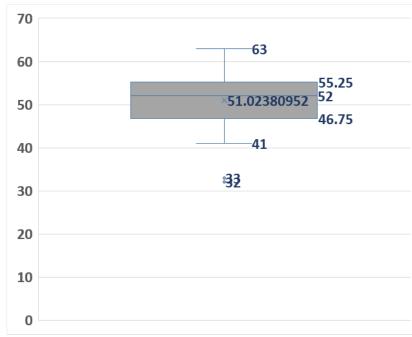


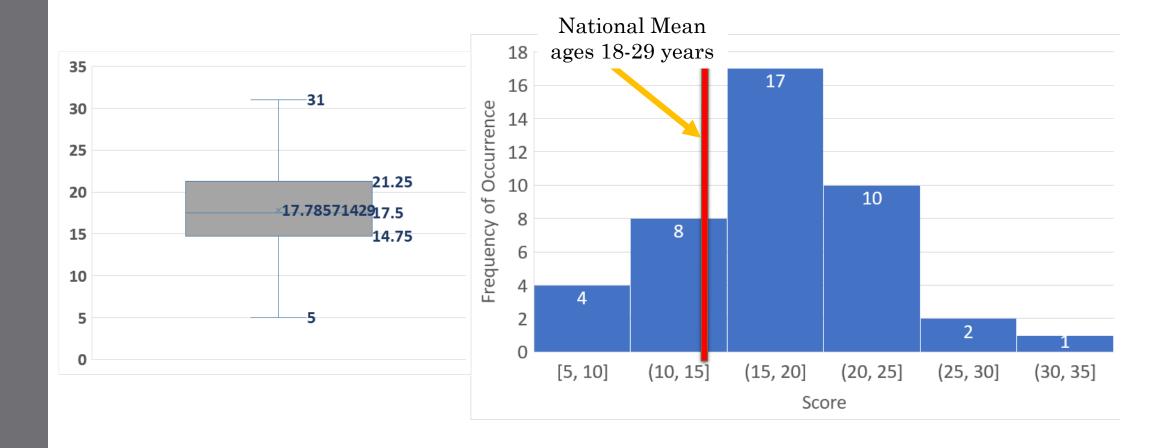


Rotter's Locus of Control

Toronto Empathy Questionnaire



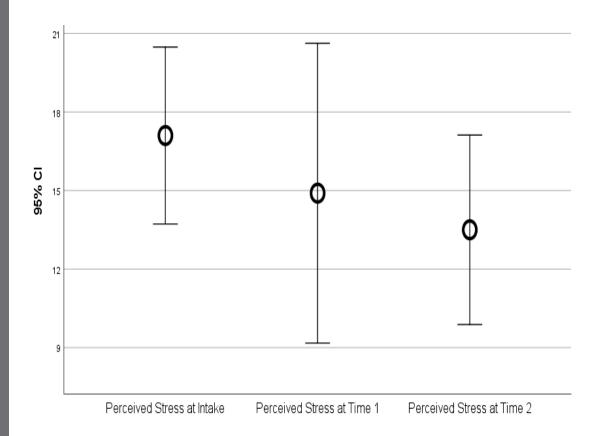


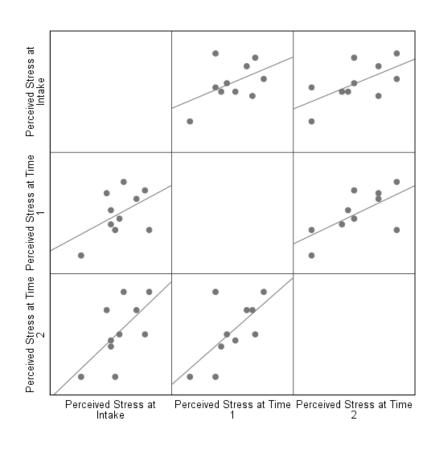


Perceived Stress Scale

Early Outcomes

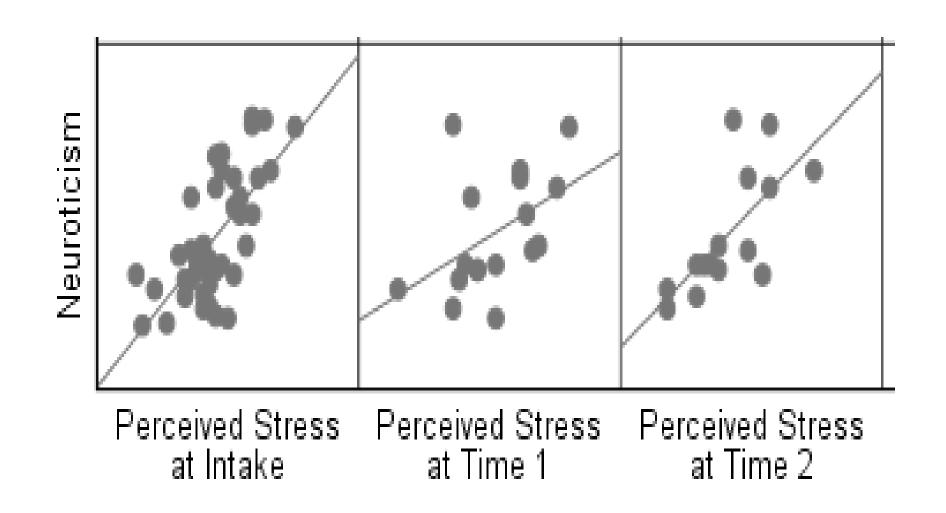
Is anything predictive of success vs. struggle?



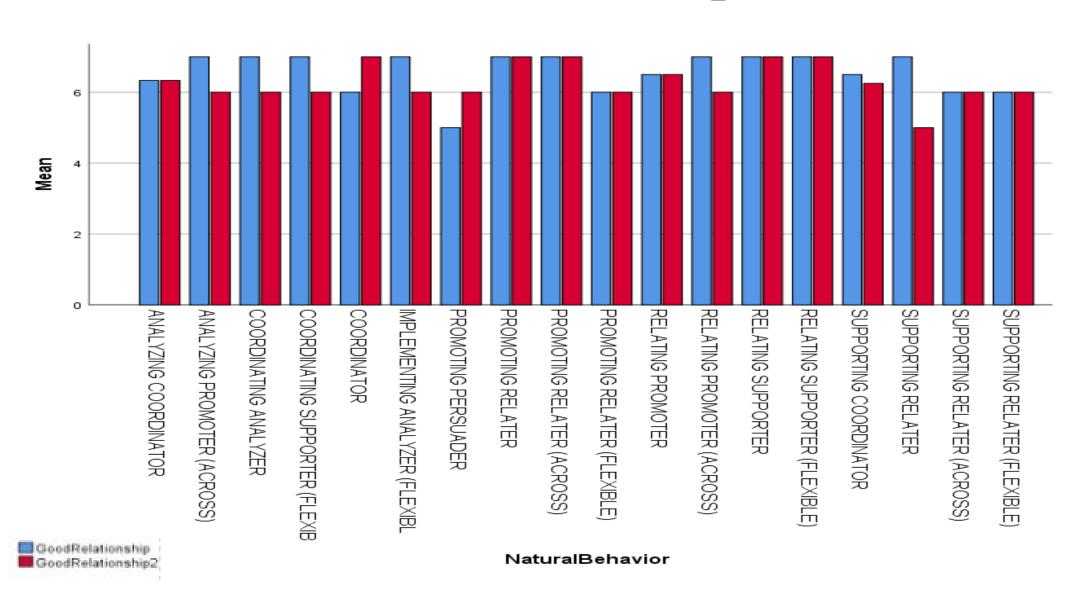


Stress Over Time

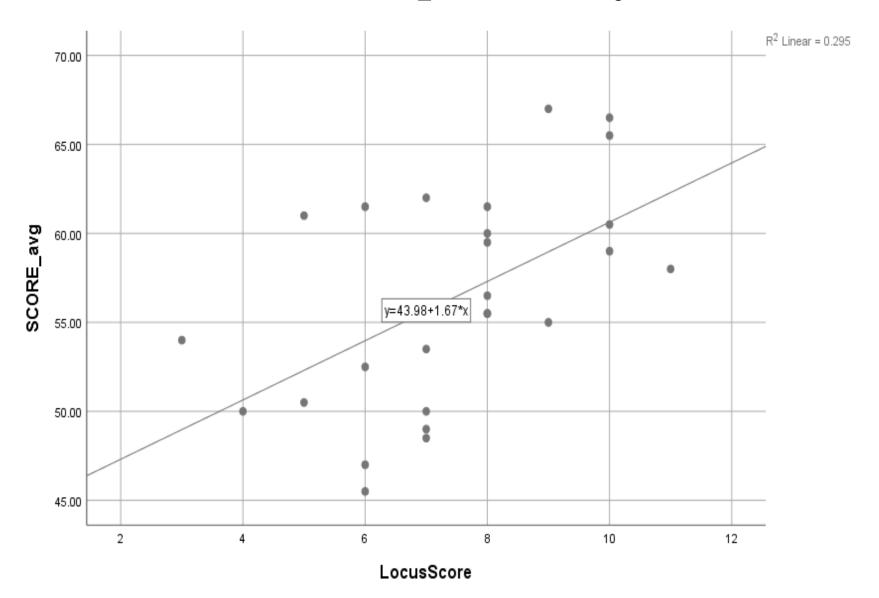
What Does Affect Stress Levels?



What *Does NOT* Affect Supervision?



What *Does* Affect Supervisory Relationship?





Attrition

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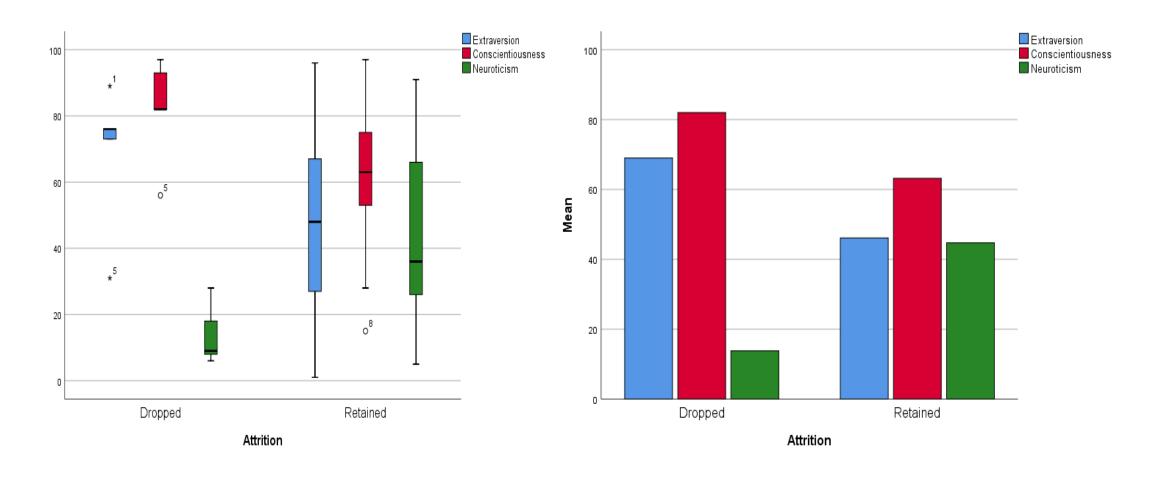
The rate of attrition of participating students from all causes in this cohort is 11.9% after the first year, combined across the four programs.

What *Does NOT* Predict Attrition?

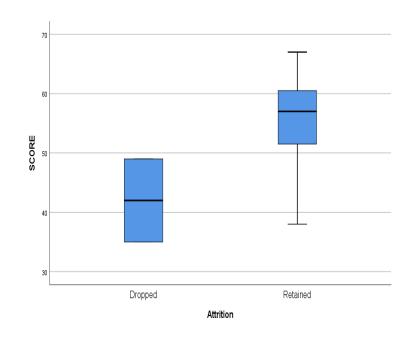
Empathy
Stress
Locus of Control

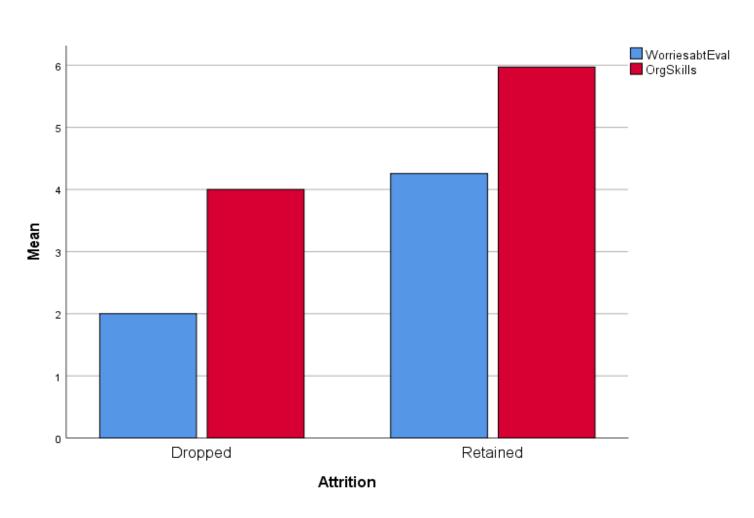
What Might Predict Attrition?

Personality Extremes



Supervisor Ratings





Can We Predict Retention?



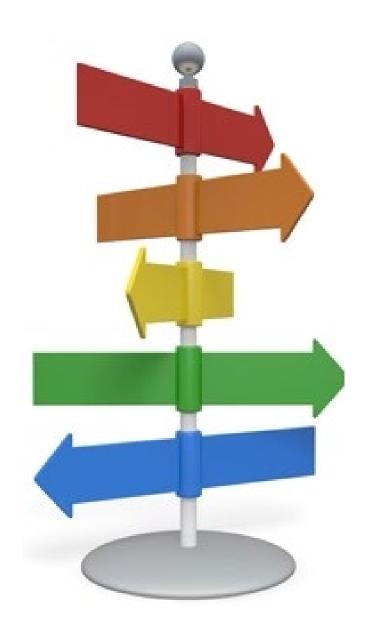
Implications & Future Directions

Implications

- Participating AUD students appear to have similar overall communication behavior traits to a sample of SLP students.
- In these limited samples, AUD students appear to be more likely than SLP students to have utilitarian motivators.
- AUD student stress appears to decline over the first year and is related to overall neuroticism.
- Currently available data do not show a direct relationship between undergraduate success markers and retention after the first year in the doctoral program.
- Preceptors appear to rate students impartially to most personality characteristics.



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Future Directions

Greatest need = more data
(longitudinally + more cohorts)

Possible prediction algorithm

Possible experimental approaches in remediation relative to risk factors

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- David Gosselin, Ph.D., of University of Nebraska-Lincoln has enabled the use of the TTI assessment instrumentation and has provided extremely valuable guidance in its interpretation to the rest of the research team, as well as training in its use to the students.
- Kristy Weissling, SLP.D., CCC-A, of University of Nebraska-Lincoln provided her experience with the TTI assessment and allowed use of the speech-language pathology student data.

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.to be continued.