Developing Academic Identity
Insights from the Michigan Doctoral Experience Study

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The Self-Determination Continuum
Conceptual Model

Pre-Doctoral  →  Post-Doctoral

Advisor Characteristics
Faculty and Peer Community
Academic and Social Experiences
Psychological Needs Satisfaction

Motivation Type

Disciplinary Affects, Behaviors, & Cognitions

Disciplinary Identity

Program
Institution
Discipline

Financial Resources
Mental and Physical Well-being
Role Commitments
Social Identities
60% of the 2017 cohort responded to both the Wave 1 & 2 surveys; N=598 students.
1. Upon entering their doctoral programs, what are students’ levels of **well-being**, career and educational **expectations**, and academic **self-beliefs**? 

   Do these traits vary by discipline type?

2. How do well-being levels, expectations, and self-beliefs **change during the first year** of doctoral study? 

   Do these changes vary by discipline type?
Mental Health

Mean Mental Health Self-Rating in 2017, by Discipline

Excellent

Very good

Good

Fair

Poor

Biological & Health Sci
Physical Sci. & Engineering
Social Sciences
Humanities & the Arts

Mean Mental Health Self-Rating, by Year

Measured at third week of fall term
Stress Intensity

Perceived Stress Scale (PSS-4, Cohen) by Discipline Type and Year

Mean PSS Score in 2017, by Discipline

- Biological & Health Sci: 2.5
- Physical Sci. & Engineering: 2.0
- Social Sciences: 3.0
- Humanities & the Arts: 2.5

Mean PSS Score, by Year

- 2017: 2.49
- 2018: 2.63
Career Plans
Self-beliefs and motivation

Self-Efficacy Index

High 5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0

Low

2017 2018
3.90
3.57

Motivation Index

High 5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0

Low

2017 2018
4.19 4.05

Knowledge Index

High 5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0

Low

2017 2018
3.01 3.17
Disciplinary Identity

Mean Identity Index in 2017, by Discipline Type

- Biological & Health Sci: Strong
- Physical Sci. & Engineering: Weak
- Social Sciences: Strong
- Humanities & the Arts: Weak

Mean Identity Index, by Year

- 2017: 3.68
- 2018: 3.37
Exploratory Findings

On average, Ph.D. students at UM enter their programs with:

- Good – very good mental health
- High self-efficacy
- High intrinsic motivation
- High levels of disciplinary identity

The first year of Ph.D. study is associated with:

- Small but significant declines in all of the aforementioned constructs
- Becoming less certain about plans to pursue tenure-track positions

One area of improvement from Year 1 to Year 2: perceptions of possessing disciplinary knowledge
Next Steps

Formal testing of our conceptual model and examining sources of variation in constructs
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Histogram of year 1 self-perceived disciplinary knowledge factor scores
Next Steps

Extending study of disciplinary identity development into early career and beyond
Next Steps

Partnering with faculty to better understand the graduate student experience
Follow our Progress

Michigan Doctoral Experience Study website: https://rackham.umich.edu/mdes

Results Dashboard:

Demographics of First Year Doctoral Students

- **Gender Identity**
  - Woman: 44%
  - Man: 53%
  - Genderqueer/Gender non-binary: 1%

- **Identifies as Part of LGBTQ+ Community**
  - Yes: 11%
  - Not Indicated: 2%
  - No: 87%

Religion/Belief System

- Percentages reflect total number of responses

Racial/Ethnic Background

- Percentages reflect total number of responses
Questions & Suggestions