Institutional Natural Mentors:
Exploring Predictors and Outcomes Among Underrepresented Students

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INTRODUCTION

❑ *Underrepresented Students:*

❑ **First-generation students graduate at one-third the rate of students whose parents have college degrees (US Dept. of Edu, 2005)**

❑ **Less than 29% of low-income students graduate, compared to 73% of high-income students and 55% of middle-income students (US Dept. of Edu, 2005)**

❑ **Minority student graduation rates lag 16% to 25% points below the rates of European Americans (US Dept. of Edu., 2005)**

❑ *Natural Mentors:*

❑ **Predictors:**

❑ **Students who are extraverted have been reported to seek more social support (Sticker, Hittner, & Foster, 2010)**

❑ **Having secure attachment with parents has been linked to seeking social support (Myrick, Green & Crenshaw, 2013)**

❑ **Outcomes:**

❑ **Non-parental adult from a youth's pre-existing social network provides support and guidance (Cooper, et al., 2013).**

❑ **Relationship with university faculty has been linked to student success (McGann & Thompson, 2008)**

Hypotheses:

❑ **H1: Secure attachment style will predict students to seek institutional natural mentors**

❑ **H2: Extraversion will predict students to seek institutional natural mentors**

❑ **H3: Students who have more institutional natural mentors will have higher GPAs**

❑ **H4: Students who have more institutional natural mentors will show higher levels of school membership**

METHOD

Participants:
❑ **340 participants from a Southeastern University**
❑ **Male: 30.1% (n = 105), Female: 66.8% (n = 233)**
❑ **Age Range: 17 – 20 years old (M= 18.11, SD: .37)**
❑ **Ethnicities: 28.4% Black, 22.9% White, 19.5% Multiracial, 15.8% Asian, 9.7% Hispanic, .2% Native American**

Materials and Procedure:
❑ **Research assistants administered a self-reported questionnaire on iPads to participants. Study personnel explained that the goal of the study was to learn more about first year students and their journey through college. Participants were told that participation was anonymous and voluntary. Participants were surveyed at two times: once in their first fall semester (Wave1) and once in their first spring semester (Wave2).**

Measures:

❑ *Inventory of Parent and Peer Attachment (IPPA):*

❑ **(IPPA; Armsden and Greenberg, 1987) was developed specifically for use with adolescents to measure the degree of attachment security in the different relationships of mother, father and a selected peer. The Cronbach's alpha reliability was 0.88.**

❑ *Big Five Inventory (BFI):*

❑ **The BFI (John and Benet-Martinez,1998) is a 44-item assessment of five primary personality traits – Openness, Extraversion, Agreeableness, Conscientious-ness, and Neuroticism. For the current study only the Extraversion subscale was used. The Cronbach's alpha reliability was 0.89.**

❑ *Institutional Natural Mentors (INM):*

❑ **In order to measure the presence of an INM, participants were asked how they know their INM. Those participants who reported knowing their NM from the university were considered to have a INM.**

❑ *Grade Point Average (GPA):*

❑ **The participants GPA from the end of Spring semester was used .**

❑ *Psychological Sense of School Membership (PSSM):*

❑ **PSSM (Goodenow, 1993) was designed to measure three specific factors: belonging, rejection, and acceptance. The Cronbach's alpha reliability was 0.91.**

RESULTS

Logistic Regression Analysis of Institutional Natural Mentor

	B	SE	Exp (B)
Step 1: Control Variable			
SES	-.018	0.45	.982
White	-.471	.429	.624
Male	-.248	.350	.781
ACT/SAT	-.001	.001	.999
White*Male	-.981	1.149	.375
Pseudo R²	.03		
Model X²	6.76		
Step 2:			
Attachment	-.001	.344	.999
Extraversion	.569	.176	1.767***
Pseudo R²	.08		
Model X²	18.09*		

Regression Analysis of GPA

	B	SE	β
Step 1: Control Variable			
SES	-.037	0.14	-.232**
White	.390	.155	-.315*
Female	.042	.055	.037
ACT/SAT	.000	.000	.087
White*Female	.076	.114	.054
SES*Color	.051	.016	.431**
GPA Wave1	.639	.048	.612***
ΔR²	.426		
F Statistic	35.195		
Step 2:			
INM	.072	.056	.055
ΔR²	.428		
F Statistic	31.065		

Regression Analysis of GPA

	B	SE	β
Step 1: Control Variable			
SES	-.038	.014	-.232**
Color	-.412	.156	-.333**
Female	.048	.055	.043
ACT/SAT	.000	.000	.087
White*Female	.080	.116	.057
SES*Color	.052	.016	.446***
GPA Wave1	.633	.048	.610***
ΔR²	.429		
F Statistic	34.420		
Step 2:			
PSSM	.054	.034	.069
ΔR²	.431		
F Statistic	30.571		

Regression Analysis of PSSM

	B	SE	β
Step 1: Control Variable			
SES	.003	.016	.017
Color	-.183	.165	-.114
Male	-.060	.062	-.041
ACT/SAT	.000	.000	.031
White*Male	-.062	.133	-.022
SES*Color	.013	.018	.086
GPA Wave1	.155	.054	.116***
PSSM Wave 1	.793	.041	.735***
ΔR²	.576		
F Statistic	54.021		
Step 2:			
INM	.136	.063	.081*
ΔR²	.581		
F Statistic	49.680		

Type of INM

- Professor — 21%
- Coach/Club Leader — 7%
- Resident Advisor — 17%
- Dean/Advisor/Career Counselor — 44%
- TA/Grad Student — 4%
- Other Staff — 7%

DISCUSSION

Results suggest that personality factors may help explain why certain students have INM. Results also indicate that students who have relationships with INM may feel a greater sense of belonging at a university. However, attachment was not found to predict presence of INM nor was GPA predicted by presence of INM.

Limitations:

❑**Impacts of having an INM may not be detectable so soon.**

❑**Students may not develop relationships with INM so early on in college**

Implications:

❑**Intervention programs that focus on retention rates of underrepresented students may want create programs to help faculty take note of students who are introverted so that those students may potentially benefit from having a INM.**

Further Directions:

❑ **Continue to look at future waves of the data to examine the long term effects of having a INM**

❑ **Examine if there are factors that may mediate the relationship between presence of INM and GPA.**