Achievement Goal Orientation of Incoming MLS Students

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MLSP 6905 Capstone Project Presentation

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Project Research Questions

- Is there a typical Achievement Goal Orientation for MLS students?

- Is there any relationship between a student's demographics and their Achievement Goal Orientation?

- This study was approved by the Institutional Review Board (STUDY00014151)

Literature Review/Background

- Achievement goal theory first developed by Dweck, Nicholls, and Ames between 1986 and 1992
  - Based off of studies of academic motivation
  - Trichotomous categorization, then expanded to 2x2 method

- Avoidance type goals detrimental to achieving success

Materials and Methods

- Survey incoming MLS students
  - Used data from 2017-2019

- Aggregation and deidentification of data
  - Excel

- Statistical Analysis
  - SPSS® Statistics Software (IBM)

Medical Laboratory Sciences

Student Demographics				
Demographic	**2017**	**2018**	**2019**	**Combined**
Gender				
Female	64	29	33	126
Male	31	15	12	58
Age Grouping				
18-25	70	35	38	143
25-30	16	5	3	24
31-40	7	4	5	16
41-50	2	0	0	2
English First Language?				
Yes	64	35	38	137
No	31	9	8	48
Cumulative GPA				
2.5-3.0	10	4	4	18
3.0-3.5	51	23	24	98
3.5-4.0	34	17	18	69
Ethnicity				
Asian/Pacific Islander	24	7	9	40
Black/African American	12	5	1	18
White	54	31	35	120
Hispanic	1	0	0	1
More Than One	4	1	0	5

Results

t-test of Gender and English First Language vs. Achievement Goal Orientation				
	PAP	**MAV**	**MAP**	**PAV**
Gender				
• **2017**	NS	NS	NS	NS
• **2018**	NS	NS	.041	NS
• **2019**	NS	NS	.002	NS
• **Combined**	NS	NS	.004	NS
English First Language				
• **2017**	.037	NS	NS	NS
• **2018**	.015	NS	NS	NS
• **2019**	NS	NS	NS	NS
• **Combined**	.002	NS	.001	.001

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Results

ANOVA of Achievement Goal Scores and Demographic Factors				
	PAP	**MAV**	**MAP**	**PAV**
Ethnicity				
• **2017**	NS	NS	.026	.026
• **2018**	NS	NS	NS	NS
• **2019**	NS	NS	NS	NS
• **Combined**	NS	.040	.009	.024
Age				
• **2017**	NS	NS	NS	NS
• **2018**	NS	NS	NS	NS
• **2019**	NS	NS	NS	NS
• **Combined**	NS	NS	NS	NS
GPA				
• **2017**	NS	NS	NS	NS
• **2018**	NS	NS	NS	NS
• **2019**	NS	NS	NS	.001
• **Combined**	NS	.024	NS	.001

Discussion

- Age is the only non-significant variable
- Females more inclined to be mastery approach oriented compared to males
  - Possible influence from gender stereotypes
- Was English their first language and ethnicity also significant factors
  - Similar – if English isn't first language, likely non-American ethnic background
  - Different cultures, different beliefs and upbringings
- GPA final significant factor
- Avoidance-type oriented students have GPAs typically in the middle (3.0-3.5)
  - Possibly linked to personality/academic experience

Limitations and Expansions

- Limitations
  - Limited to UMN students
  - Bias from viewing survey as assignment and self-reporting
  - Students only surveyed once
  - Only incoming MLS students surveyed
  - Data is anonymized
- Further Research
  - More cohorts from different universities
  - Add more variables like personalities
  - Pre- and post-program survey

References

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Questions?