

Data Point

The Office of Institutional
Research and Assessment

October 2020, vol. 3

Does Similarity Foster Success?

Blase E. Masini, Ph.D.

Introduction

When students enter a classroom, they are greeted by a professor who may or may not look like them. Age, gender and race/ethnicity are external characteristics we are presented with whenever we meet someone. To the degree that we are similar in these characteristics, we can often feel an affinity to the person.

Common definitions of affinity are "a spontaneous or natural liking or sympathy for someone or something" or "a similarity of characteristics suggesting a relationship."

Why is affinity important in the classroom? Such a natural liking or even the suggestion of a relationship might lead to academic success. Research in elementary schools supports the notion that student-teacher racial affinity fosters academic success, such as student motivation and fewer absences (Rasheed, et al., 2020). A study in higher education showed that retention and degree completion was associated with first quarter instruction by professors of the same race/ethnicity (Fairlie, et al., 2014). This paper focuses on racial/ethnic student-professor affinity among NEIU freshmen in relationship to first to second year retention, first semester and first year average credit hours earned, and first semester and first year average GPA.



Methodology

Looking across multiple cohorts of new freshmen, three groups were formed:

- **High Affinity Minority:** Black and Latinx freshmen whose professors were of the same race/ethnicity as them 75% or more of the time during their first semester at NEIU.
- **No Affinity Minority:** None of the first semester professors of Black and Latinx freshmen were of the same race/ethnicity as them.
- **High Affinity White:** White freshmen whose professors were also white 75% or more of the time their first semester at NEIU

Chi square analyses were done to test for an associate between retention and group affiliation. Independent t-tests were conducted to test for between-group differences in average hours earned and average GPA.

To reduce the possibility that students in these groups would differ in demographics, they were matched one by one on gender; the two minority groups were also matched on race/ethnicity. To reduce the possibility that students in the groups would differ in college preparedness, all three groups were matched on high school GPA and ACT comprehensive test scores when available. And to increase the power of the statistical tests, two No Affinity Minority students were matched for every one High Affinity Minority and High Affinity White student.

The characteristics of the three groups are illustrated in the table to the right.

The matching process was partially successful. There were no significant differences in gender, race/ethnicity, and high school GPA between the three groups. Significant differences did appear on ACT scores. Given that high school GPA is more predictive of college success than ACT (Allensworth & Clark, 2020), it is fair to say that the three groups entered NEIU at similar levels of college preparedness.

Results

High Affinity Minority vs. High Affinity White

There were no significant differences between High Affinity Minority students and High Affinity White students in standard student success measures: First year to second year retention, first term GPA and credits earned, and first year GPA and credits earned. Results are displayed on the next page.

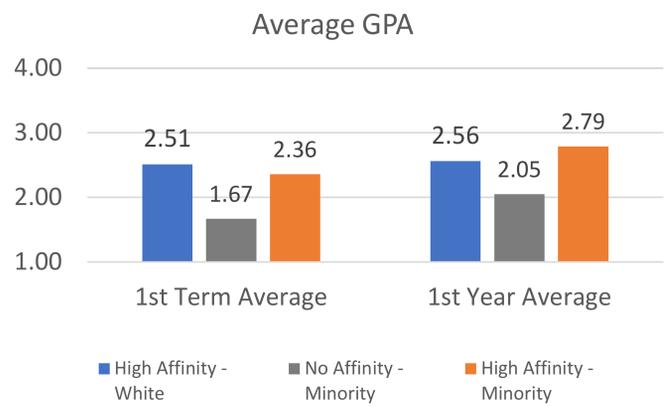
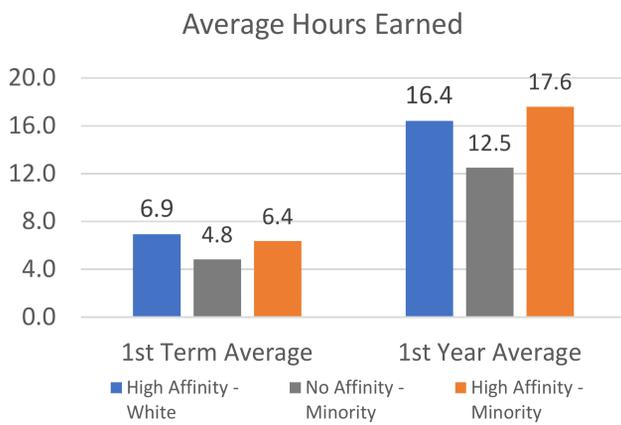
High Affinity vs. No Affinity

Both High Affinity Minority students and High Affinity White students outperformed the No Affinity Minority students across all student success measures. Results are displayed on the next page.

Sample Characteristics			
	High Affinity White N=66	No Affinity Minority (N=132)	High Affinity Minority (N=66)
	%	%	%
Race/Ethnicity			
Black	0.0	81.8	81.8
Latinx	0.0	18.2	18.2
White	100.0	0.0	0.0
Gender			
Female	63.6	63.6	63.6
Male	36.4	36.4	36.4
Admission Type			
BAIS/UWW Freshmen	1.5	0.0	4.5
CICS Freshmen	0.0	0.8	62.1
El Centro Freshmen	0.0	5.3	15.2
Freshmen-Wentworth Scholars	13.6	18.2	0.0
Project Success Freshmen	13.6	8.3	3.0
Proyecto Pal Freshmen	1.5	0.8	1.5
Regular Freshmen	69.7	66.7	13.6
Average High School GPA	2.55	2.55	2.56
Average ACT Comprehensive test score*	18.4	16.8	14.7

* All groups differ significantly from each other

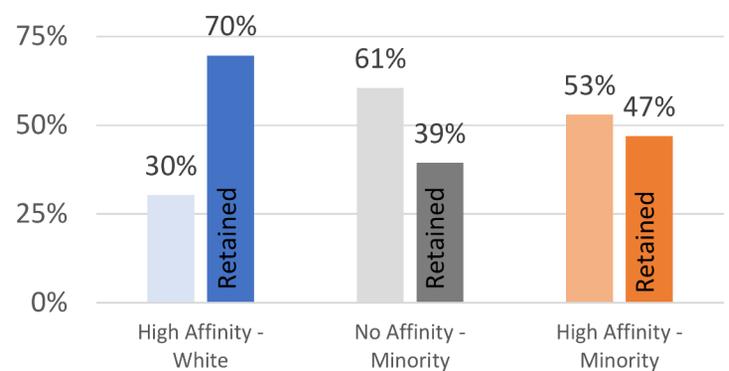




Discussion

The results of this research show a clear relationship between student-professor racial affinity and college success. As with all educational and social science research in the field, the results are correlational, not causal. One strategy to strengthen the possibility of causal effects is to eliminate competing explanations or hypotheses. For example, if the High Affinity Minority group were made up largely of females, one could argue that the effect is gender, not affinity, as females typically outperform males. Matching on gender eliminated this explanation. Likewise with college preparedness: The fact that the three groups did not differ on average high school GPA eliminates, to some degree, the likelihood that one group was better prepared for college than another.

First Year to Second Year Retention



One particularly glaring confound, or competing explanation for the differences in college success, is that the High Affinity Minority students were largely admitted through one of two NEIU support programs, the Carruther's Center for Inner City Studies (CCICS) and El Centro. Is the effect due to racial affinity or due to the focused attention entering students received through these programs? Untangling this is, by and large, impossible and not necessary. These programs, by their very structure, build in racial/ethnic affinity. So whether or not the success of the High Affinity Minority students was due to racial affinity with professors or the support received in the program is irrelevant.

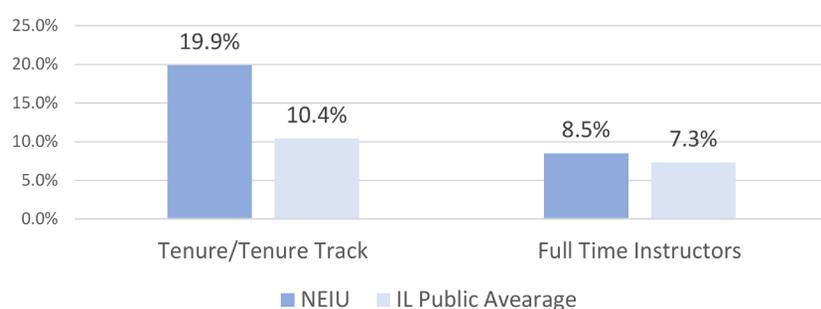
That said, the structure of these data did provide an opportunity to test this competing hypothesis. The No Affinity Minority group is made up of 88 (66.7%) regular freshmen not participating in a support program. The remaining 44 (33.3%) are from support programs. If differences in college success were largely due to participation in a support program, and not due to affinity (as all students in these sub-groups have no racial affinity with their professors), these two groups would be expected to differ significantly, when in fact, in only one of six outcomes did they differ. This finding adds support to the notion that student-teacher racial affinity contributes to college success.

Conclusion

How do we wrestle with these findings? Some researchers have said simply that achievement gaps in higher education could be lessened by hiring more minority instructors (Fairlie, et al., 2014). While noble, such proclamations are not helpful in the face of budget challenges and hiring freezes. What else can we take from this?

We know that incoming freshmen are largely taught by non-tenured instructors. The chart below shows that a small percentage of our full-time instructors are Black or Latinx, a pattern that carries across the state.

Percent of Black and Latinx Instructional Staff:
NEIU and Illinois Public Average



Source: IPEDS

But NEIU has a much higher percentage of minority tenured faculty. In fact, the chart shows that we far outpace the average for all other Illinois public universities. So might it be to the benefit of our students to have our minority faculty teaching our freshmen? Might this be a productive conversation among chairs and faculty to boost student-professor racial affinity at the onset of our students' careers at Northeastern?

Creating racial affinity the first year is a worthwhile goal. Having racial affinity with one or more professors in the first semester could have an impact on retention and success. It could also serve as a bridge to transition our incoming minority students—many of whom come from high schools where they are largely taught by teachers of the same race/ethnicity as themselves—to a more multicultural body of faculty and instructors. This change could be implemented immediately while we tackle the bigger issue of diversifying our faculty and instructors.

References:

Allensworth, E. M., and Clark, K. (2020). High School GPAs and ACT Scores as Predictors of College Completion: Examining Assumptions About Consistency Across High Schools. Published online in Educational Research, January 27.

Fairlie, R.W., Hoffmann, F, and Oreopoulos, P. (2014). A Community College Instructor Like Me: Race and Ethnicity Interactions in the Classroom. *American Economic Review* 104(8):2567-91.

Rasheed, D. S., Doyle, S. L., Brown, J. L., and Jennings, P. A. (2020). The Effect of Teacher-Child Race/Ethnicity Matching and Classroom Diversity on Children's Socioemotional and Academic Skills. *Child Development* 91(3):e597-e618.