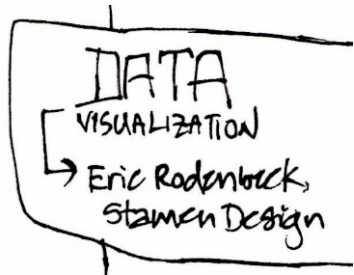
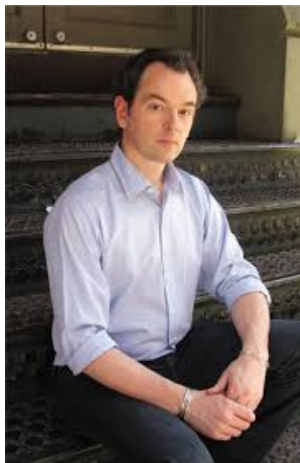


Finding the story in the data



[Data visualization](#)

Eric Rodenbeck



[Storytelling with data](#)

by Jonathan Corum of The New York Times

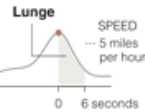
Start at 7:08 ---11:48

Lunge Feeding

Scientists tracking fin whales have created the first detailed model of how they feed. After gliding to depths of more than 600 feet in search of krill, a fin whale will repeatedly accelerate and open its mouth wide, engulfing about 20 pounds of krill and more than its own weight in water as it grinds to a halt.



START OF LUNGE
After accelerating into a school of krill, the whale opens its mouth.



2 SECONDS
Grooves in the blubber between the lower jaws begin to expand.



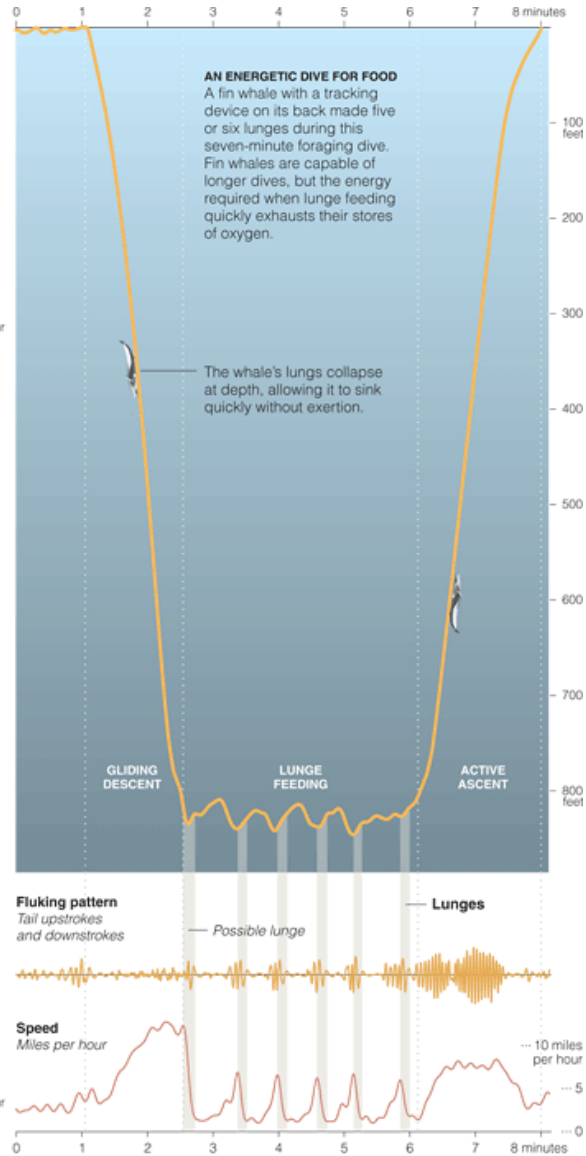
3 SECONDS
Now fully open, the mouth causes massive drag and deceleration.



4 SECONDS
The closing mouth continues to drag as the whale pushes forward.



6 SECONDS
The whale starts to filter out the krill and prepare for another lunge.



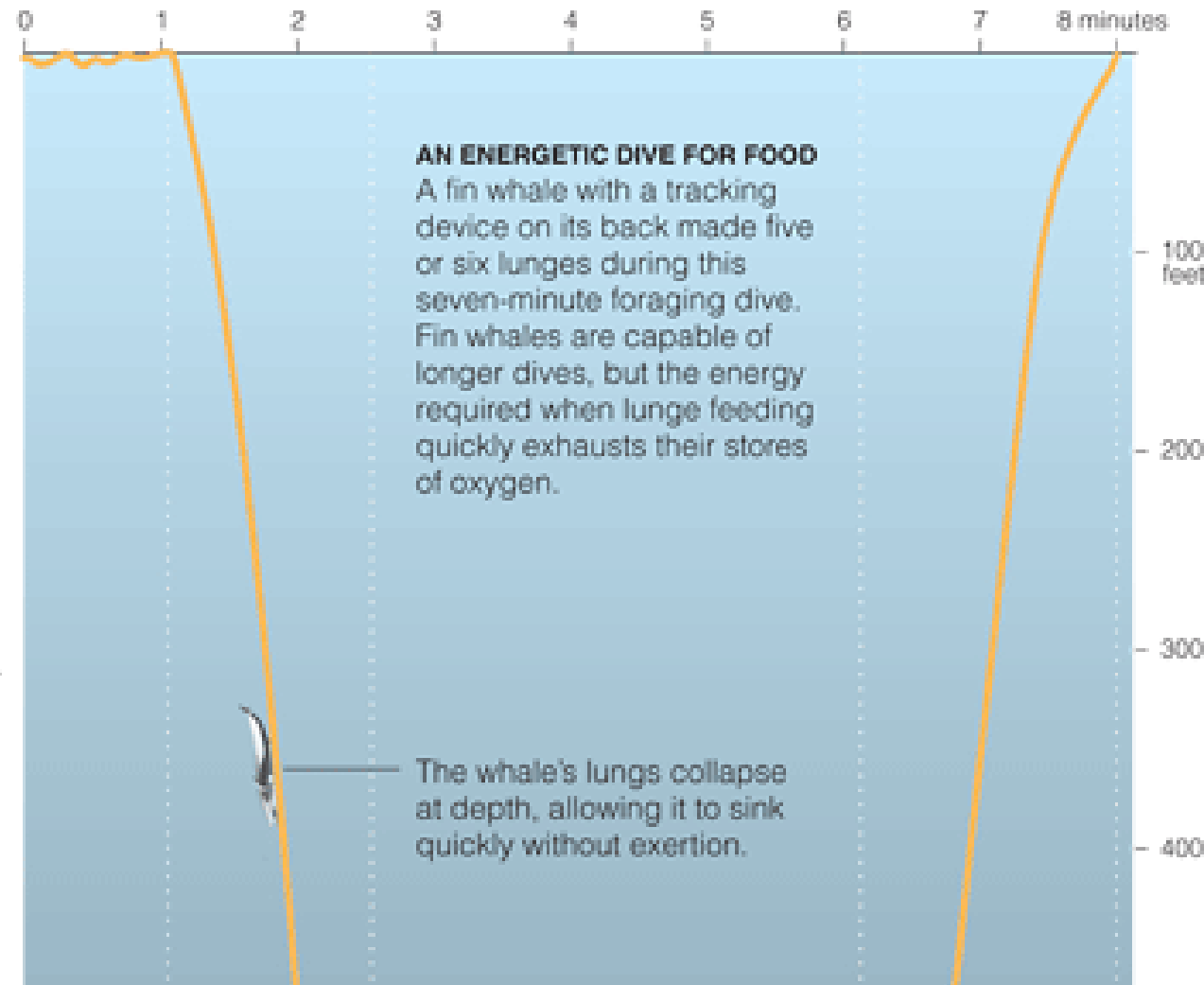
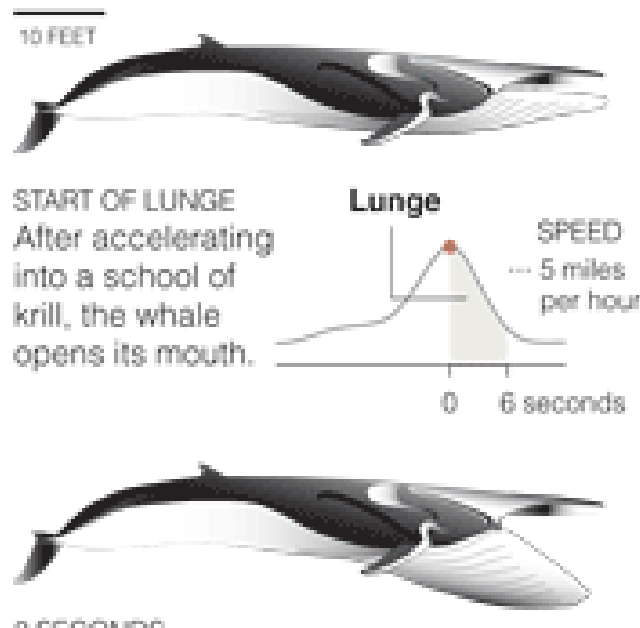
Sources: Jeremy A. Goldbogen; Nicholas D. Pyenson;
Journal of Experimental Biology; Marine Ecology Progress Series

JONATHAN CORUM/THE NEW YORK TIMES.
WHALE ILLUSTRATIONS BY NICHOLAS D. PYENSON

The New York Times
December 11, 2007

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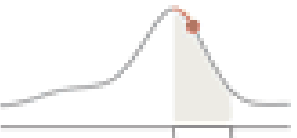
opens its mouth.



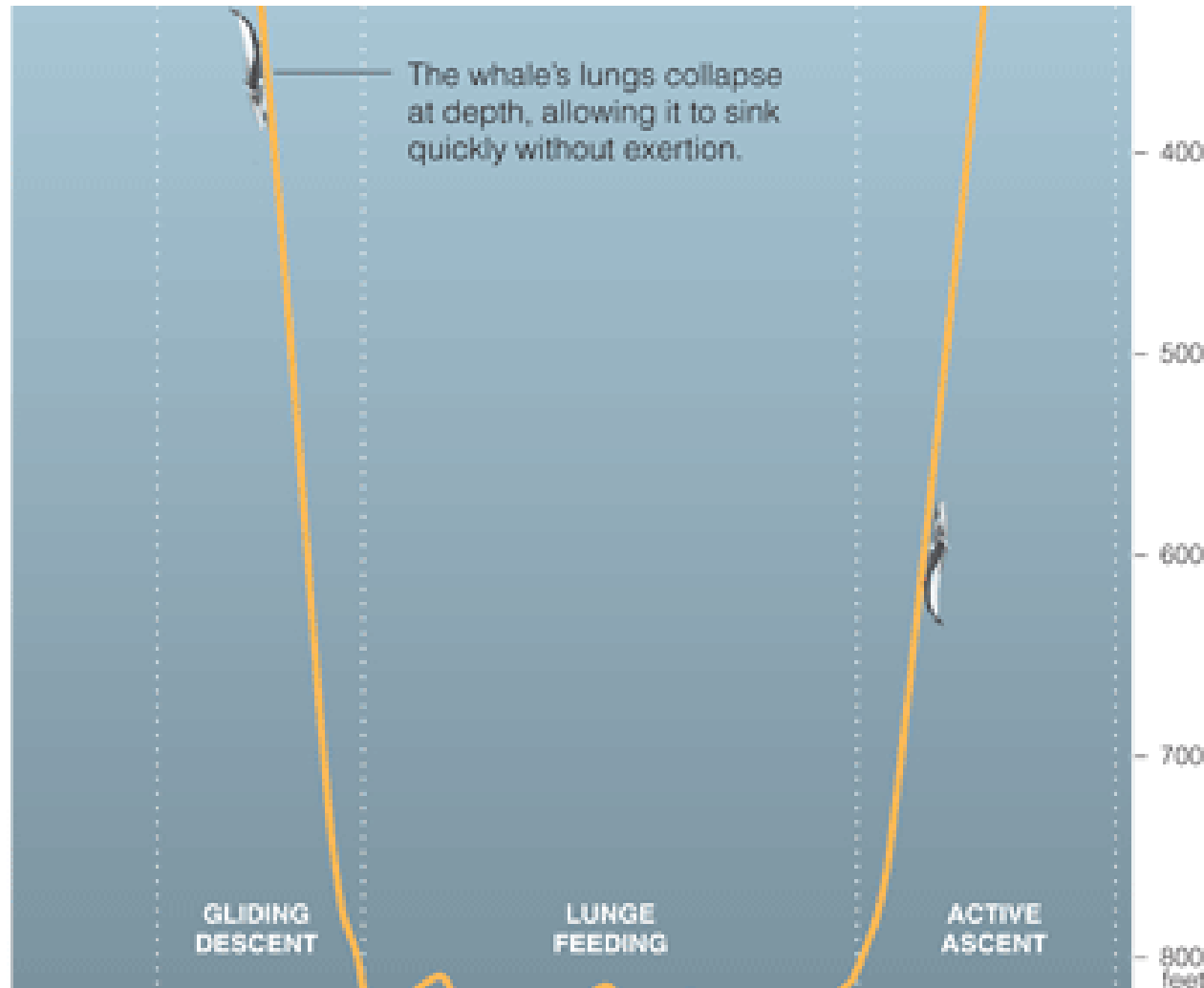
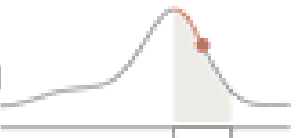
0 6 seconds

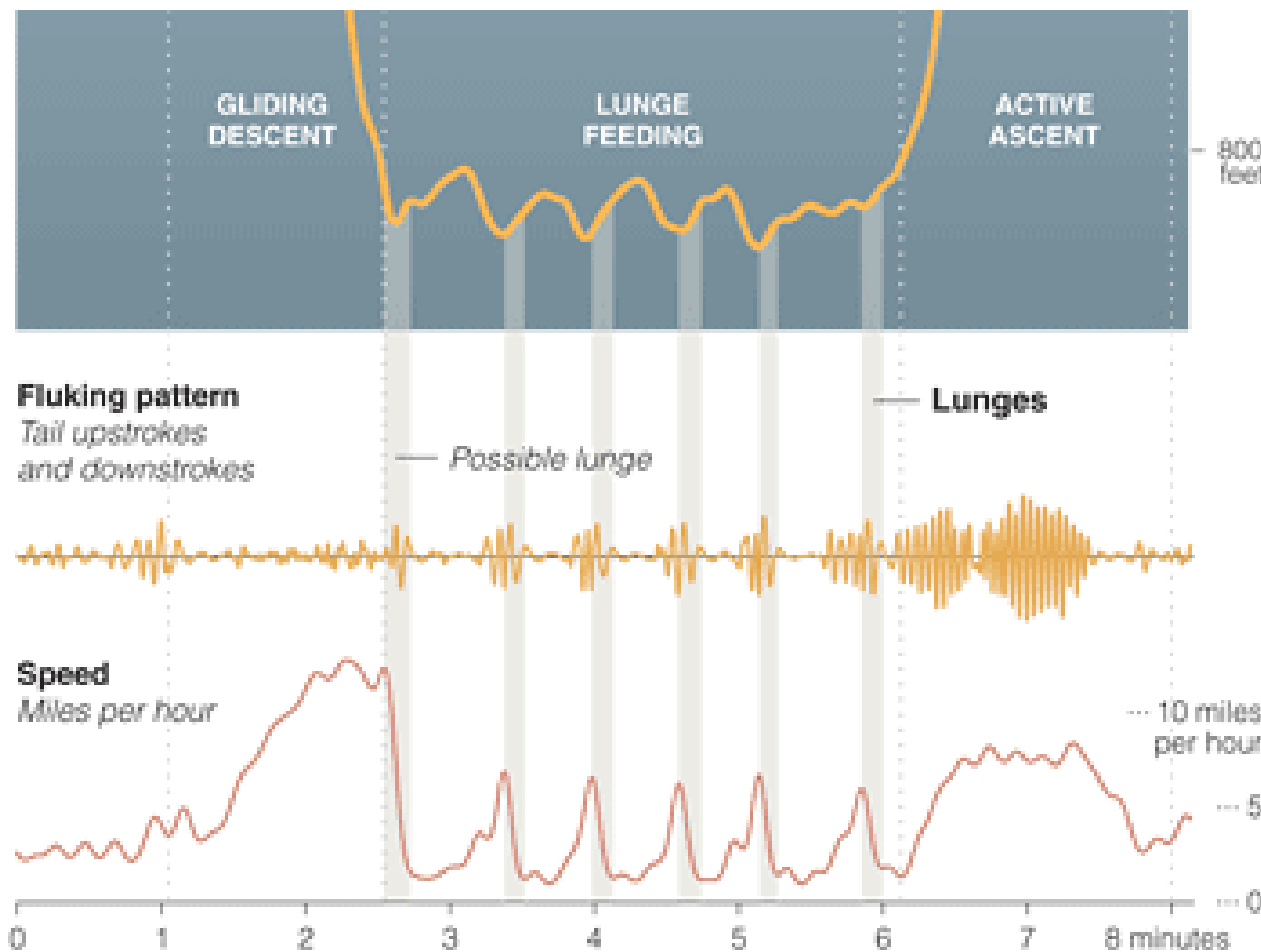
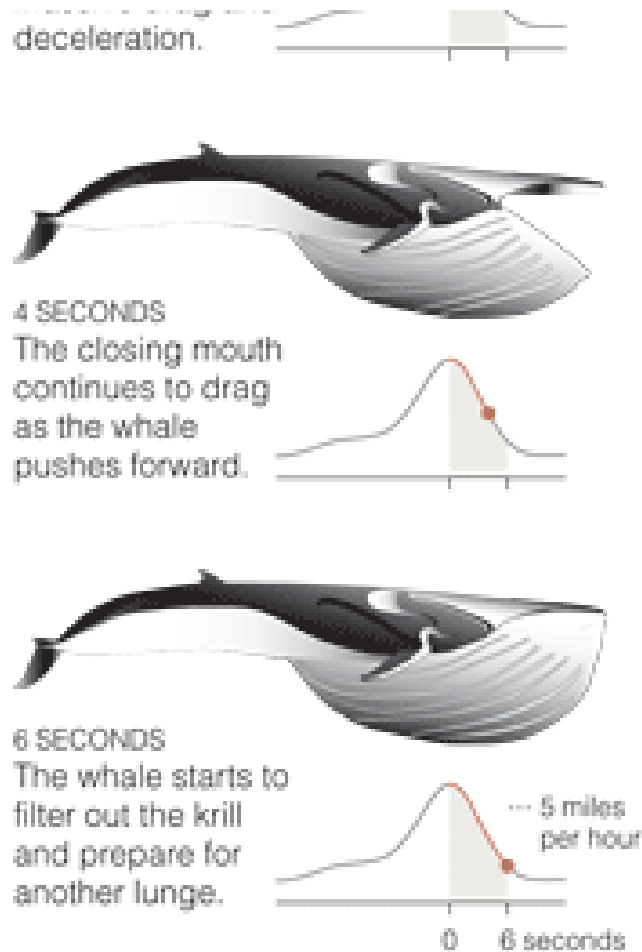


2 SECONDS
Grooves in the
blubber between
the lower jaws
begin to expand.



3 SECONDS
Now fully open,
the mouth causes
massive drag and
deceleration.

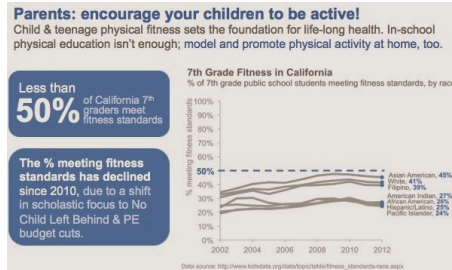




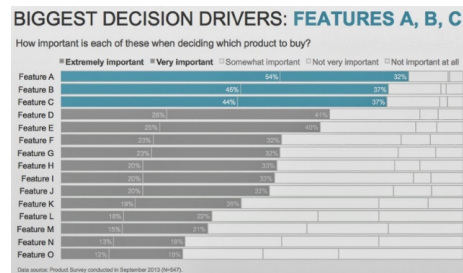
Sources: Jeremy A. Goldbogen; Nicholas D. Pyenson;
Journal of Experimental Biology; Marine Ecology Progress Series

JONATHAN CORUM/THE NEW YORK TIMES;
WHALE ILLUSTRATIONS BY NICHOLAS D. PYENSON

Finding the story in the data

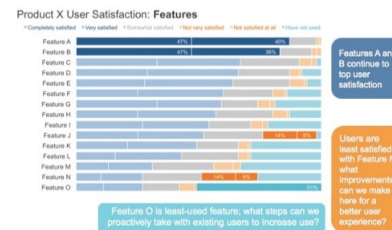


Emphasizing one story de-emphasizes another
Cole Nussbaumer



Show the right amount of detail

User satisfaction varies greatly by feature

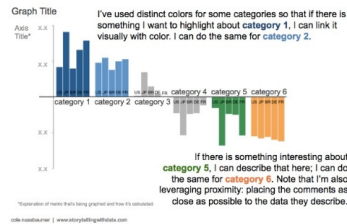


Choose the order of the data carefully

Finding the story in the data

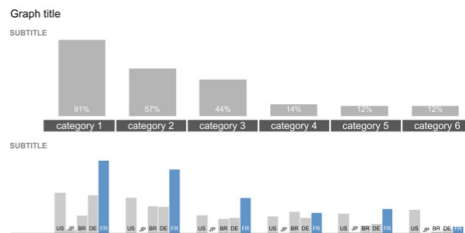


This space will describe my main takeaway



Group data to tell a story

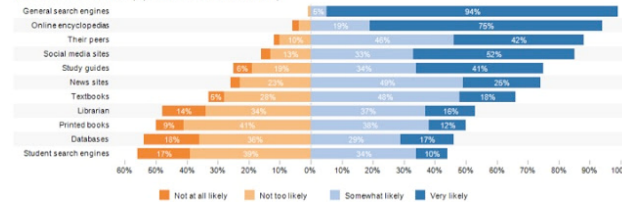
Let's focus on France (use this space to describe why)



More on groups

Research tools teachers say their students are most likely to use

The internet is much more popular than resources at the library.



Source: The Pew Research Center's Internet & American Life Project Online Survey of Teachers, March 7 to April 23, 2012, n=2,462 middle and high school teachers.

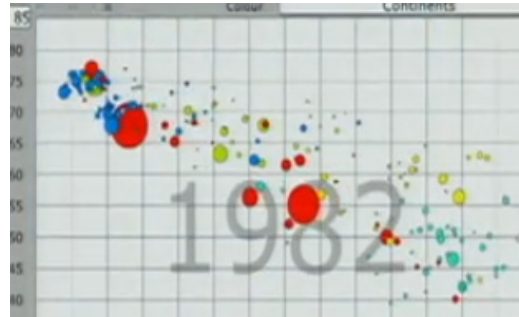
Several submissions

Finding the story in the data



[The beauty of data visualization](#)

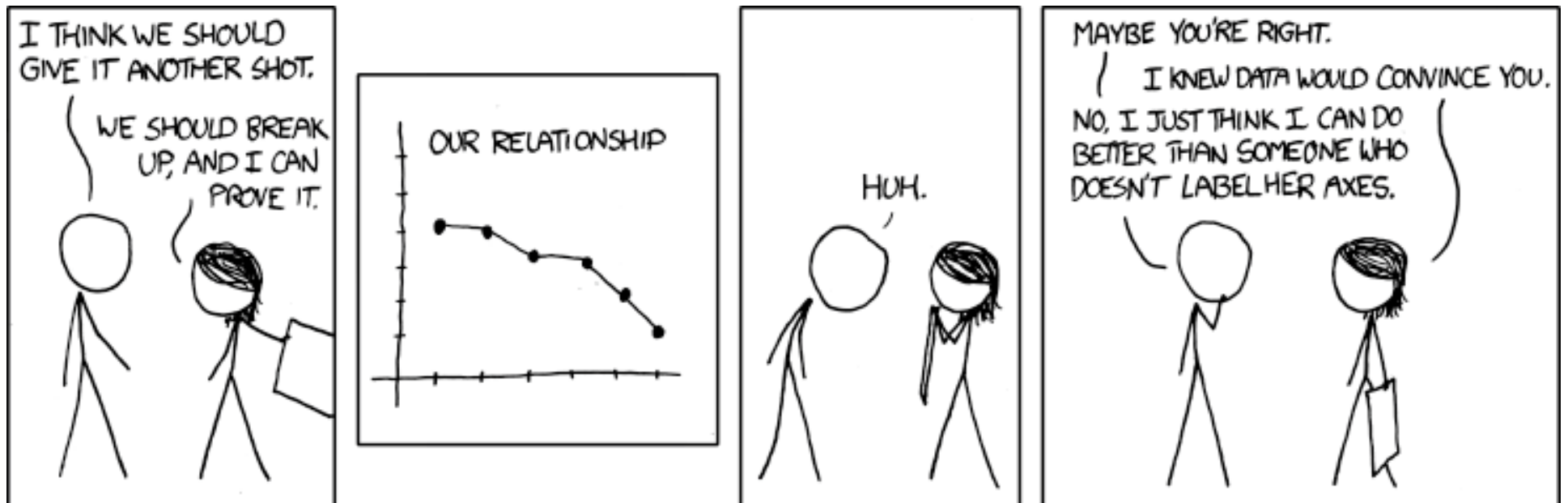
David McCandless
first 5 minutes



[World fertility and life expectancy](#)

Hans Rosling
first 5 minutes

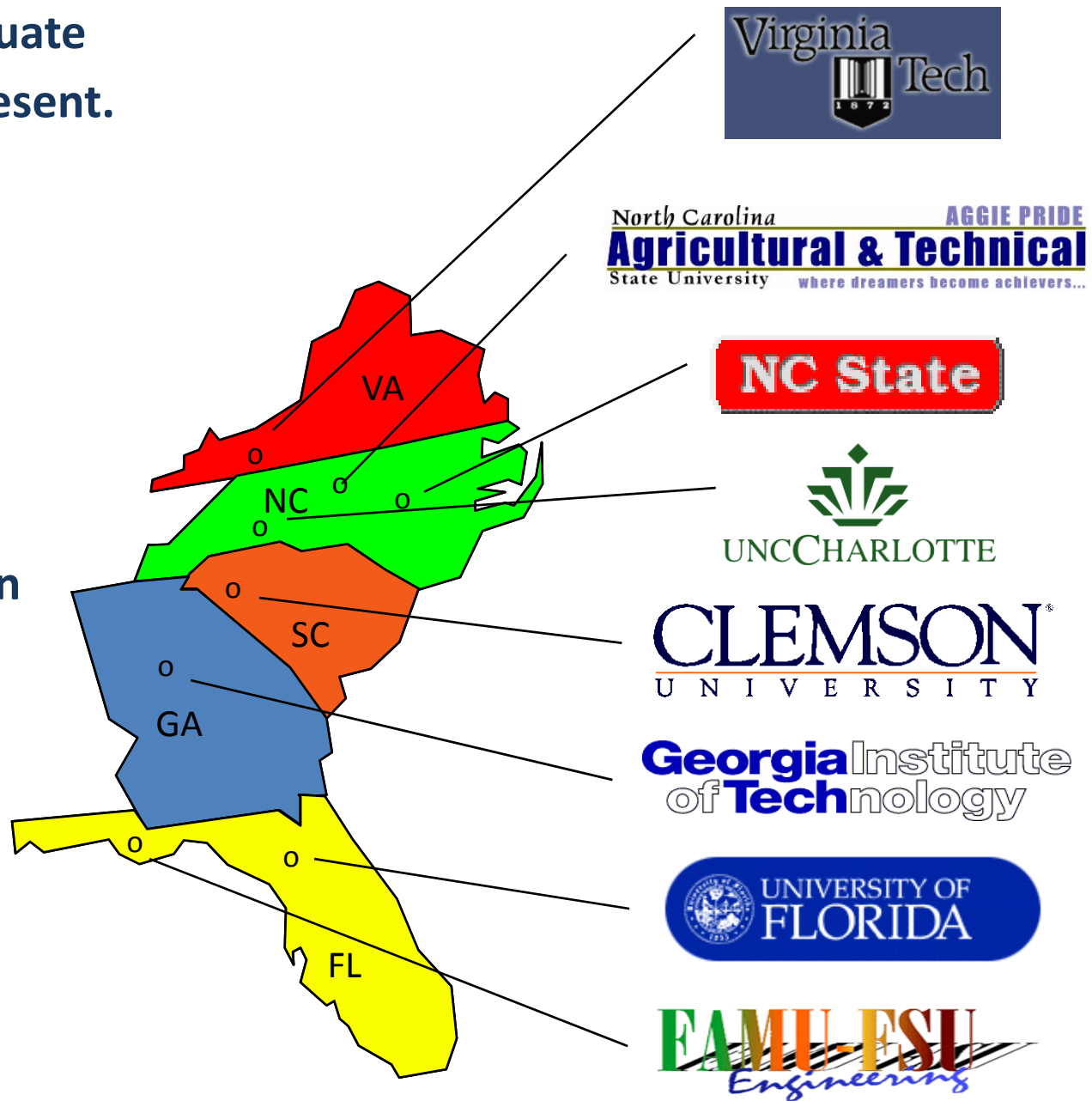
Explaining an unfamiliar design to an audience



857,001 undergraduate students, 1987– present.

135,860 enrolled in engineering

71,277 received a bachelor's degree in engineering.



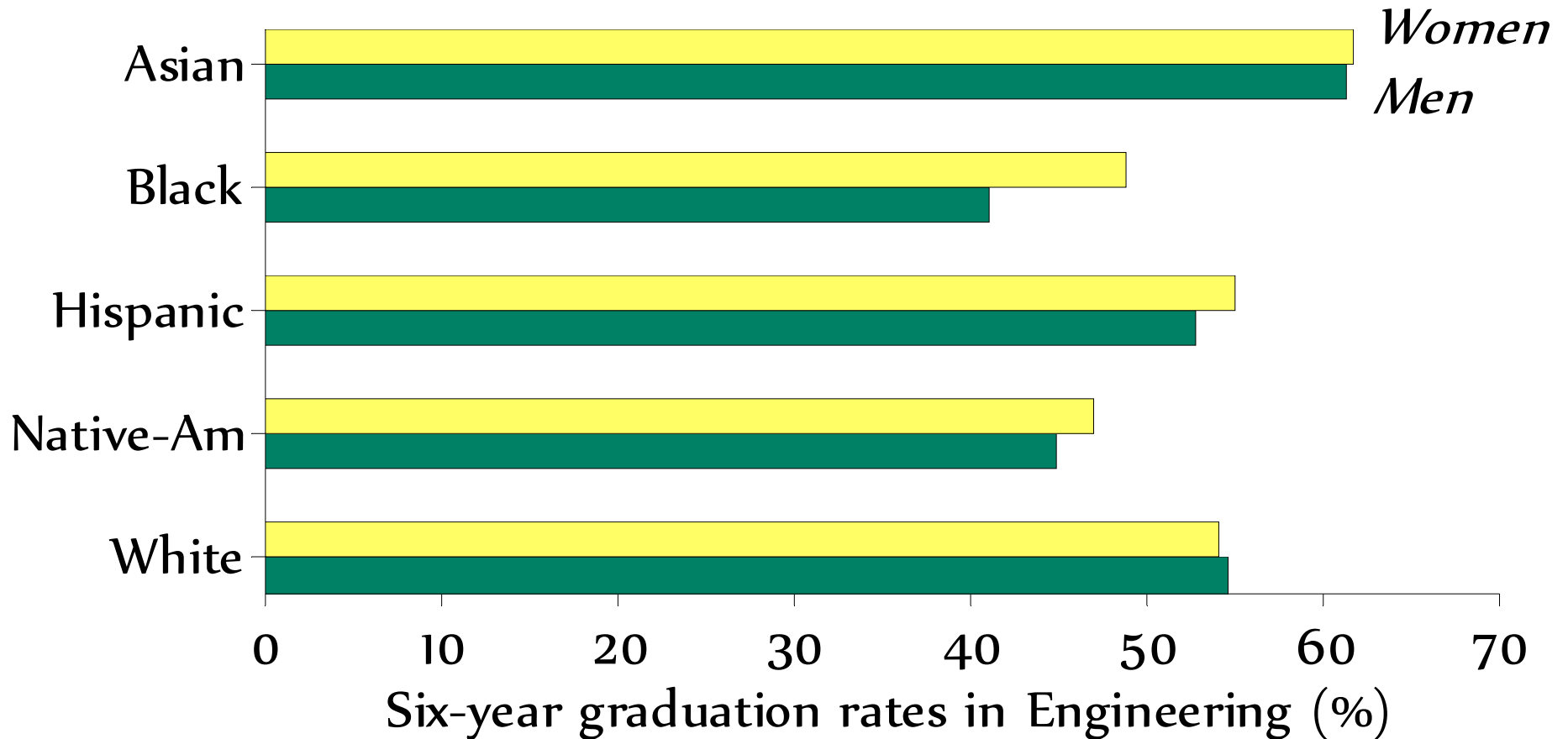
For Engineering matriculants, 6-year graduation rates in Engineering are generally higher for women than for men.

	Number matriculating in ENGR			% Grad in 6 years in ENGR	
Race/ethnicity	Women	Men	Total	Women	Men
Asian	1001	3927	4928	62 %	61 %
Black	3957	6624	10581	49 %	41 %
Hispanic	390	1607	1997	55 %	53 %
Native-Am	68	258	326	47 %	45 %
White	9997	45291	55288	54 %	55 %

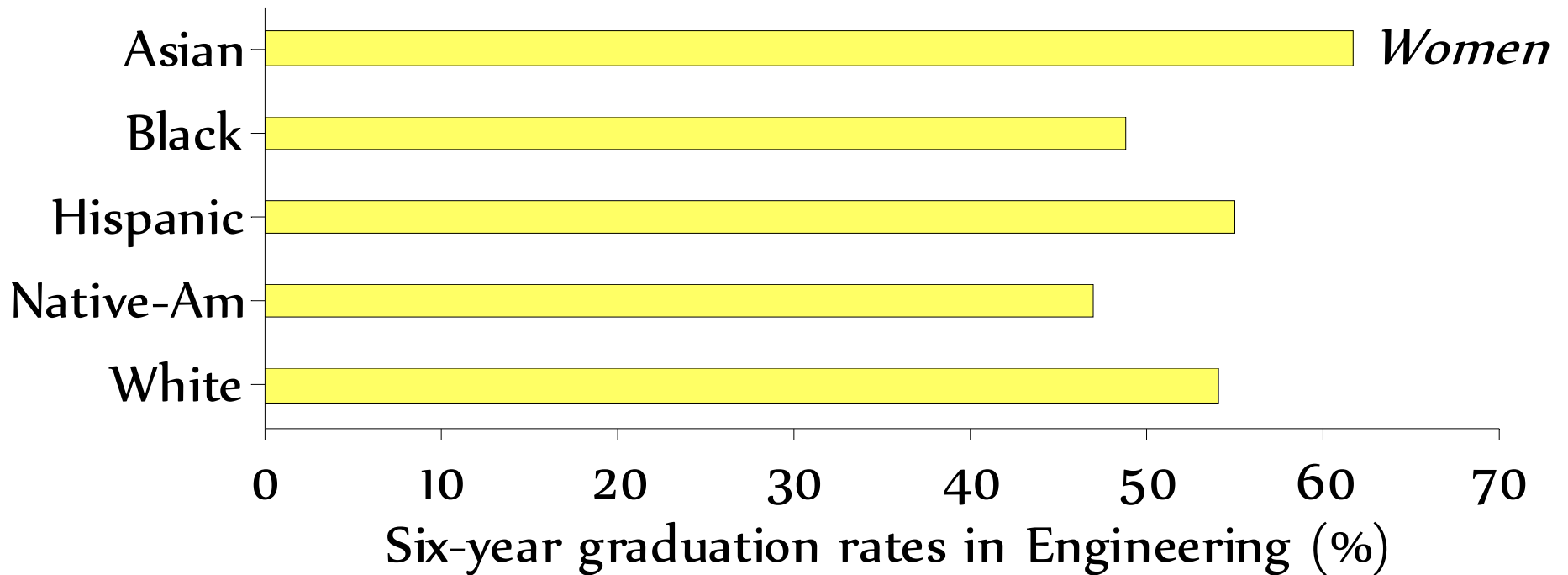
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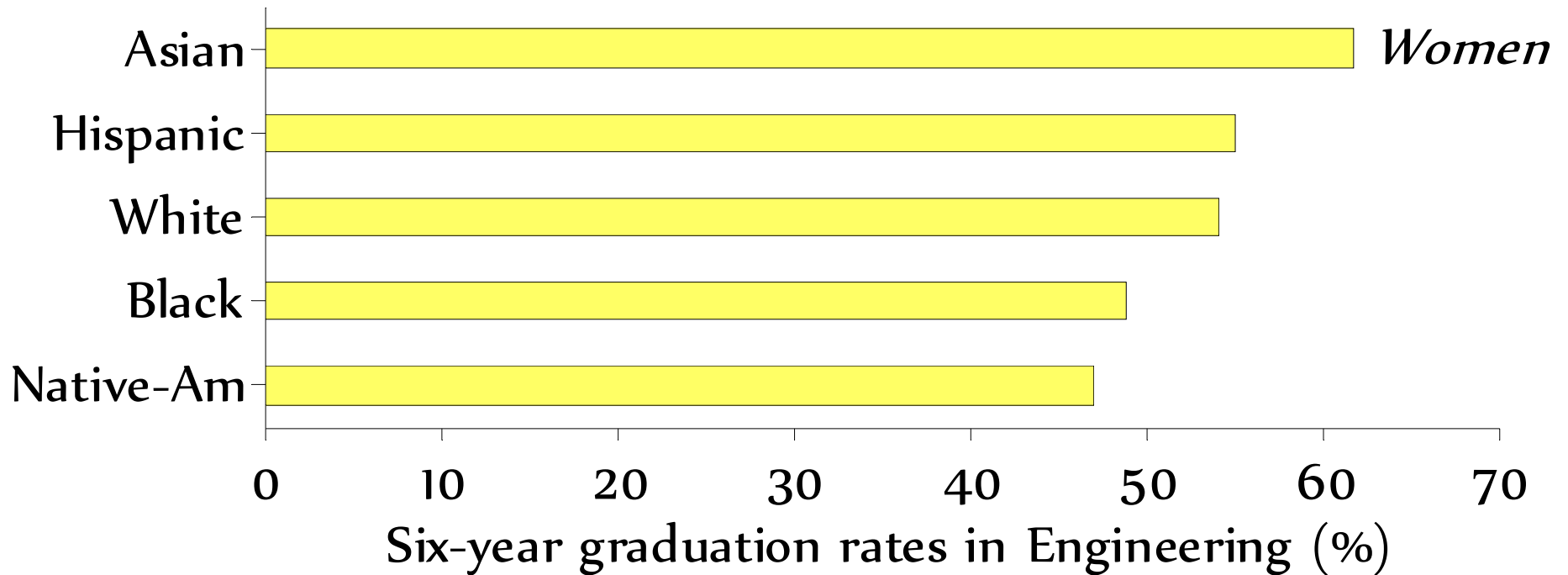
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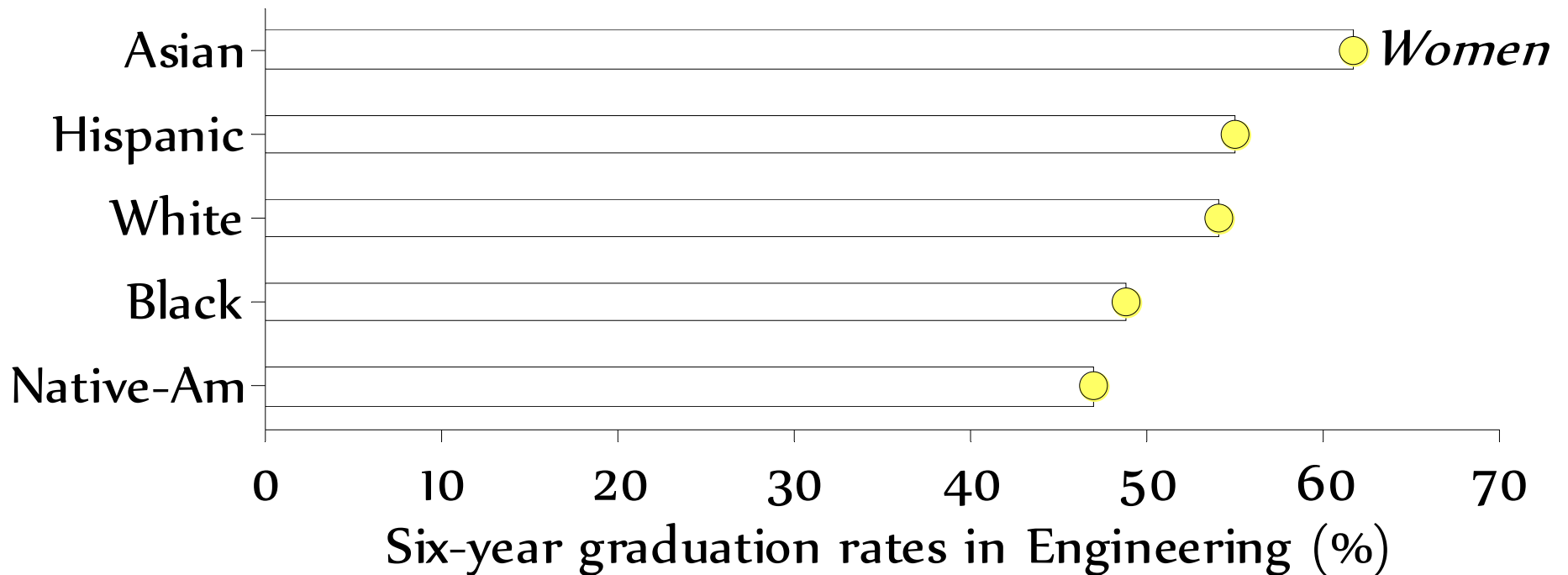
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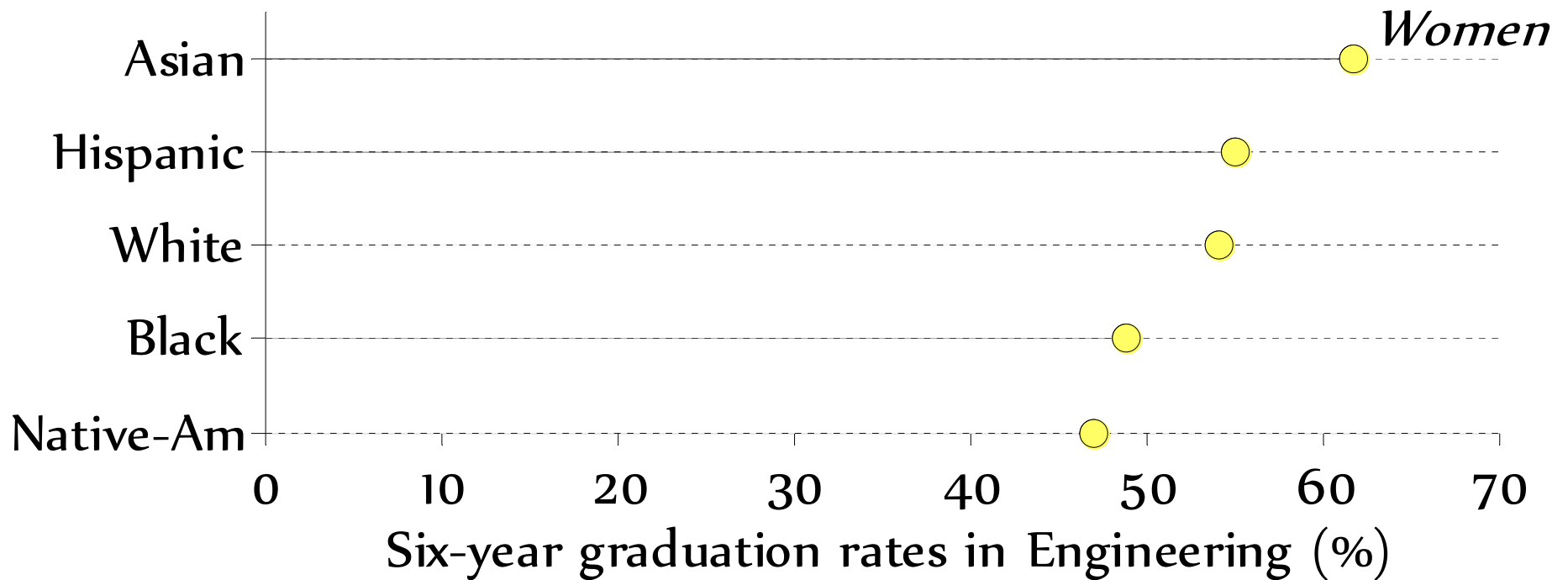
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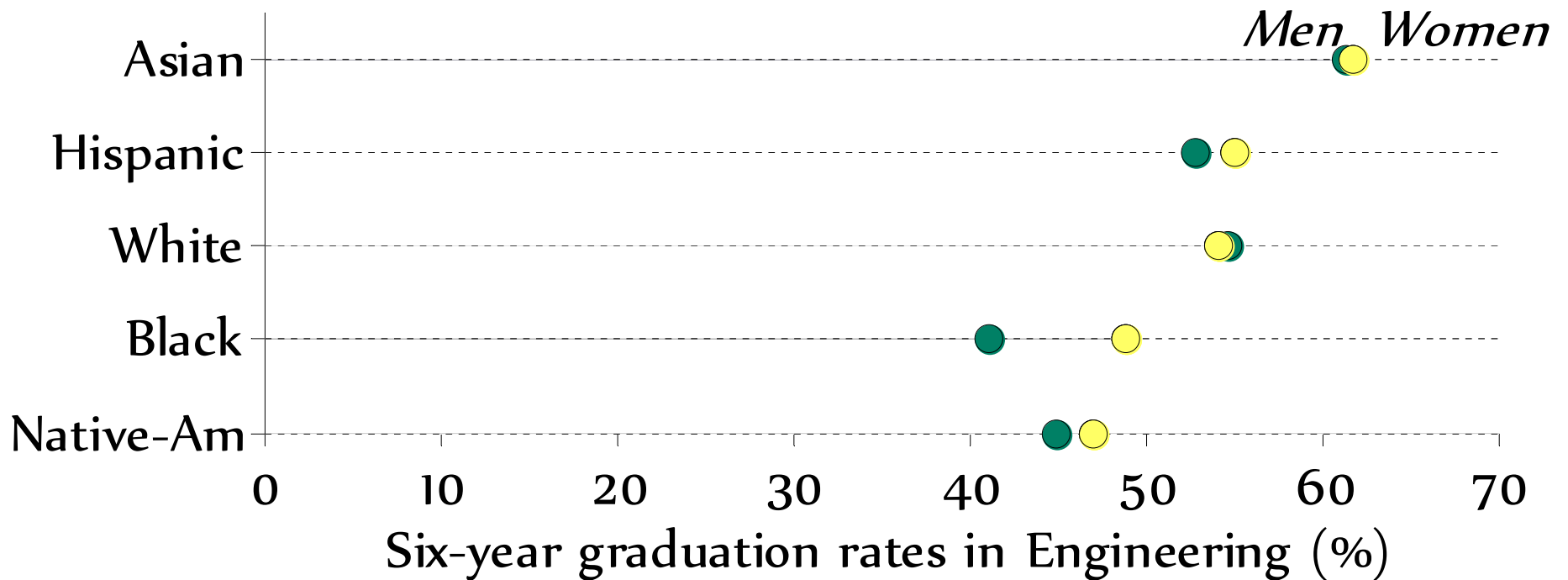
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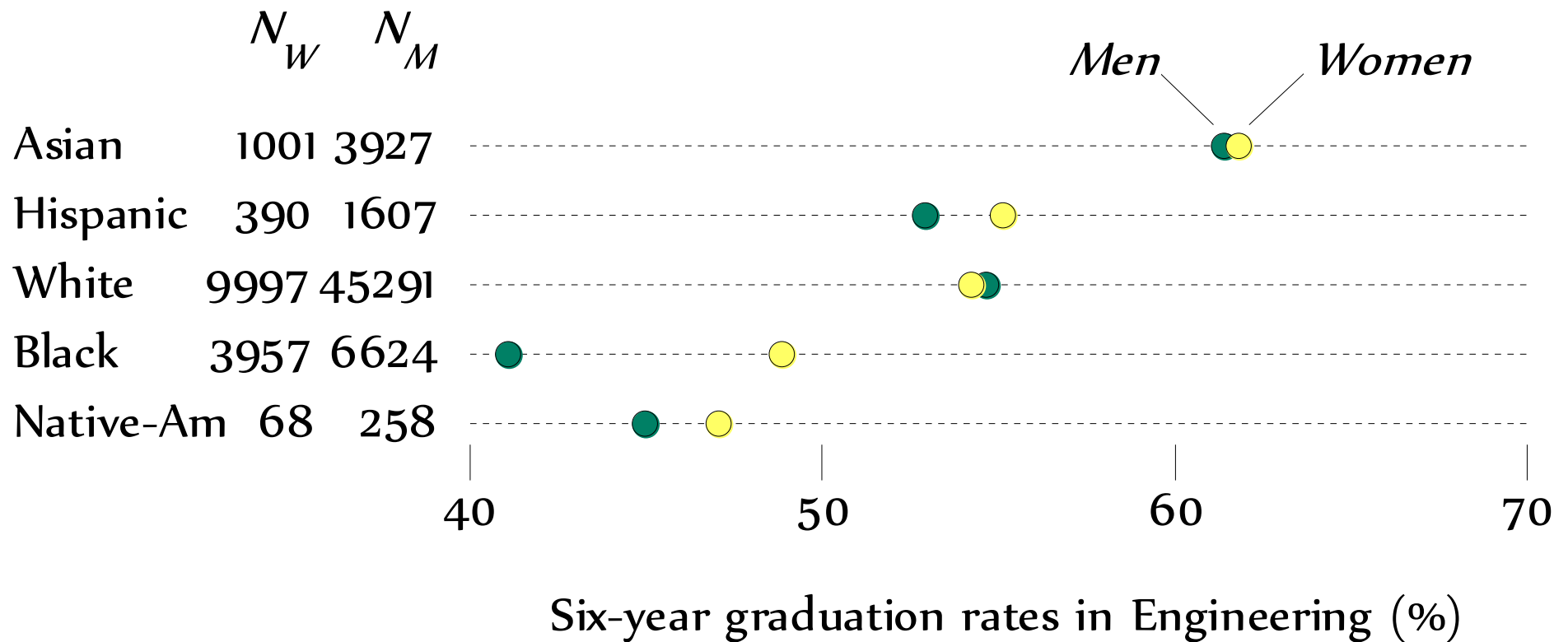


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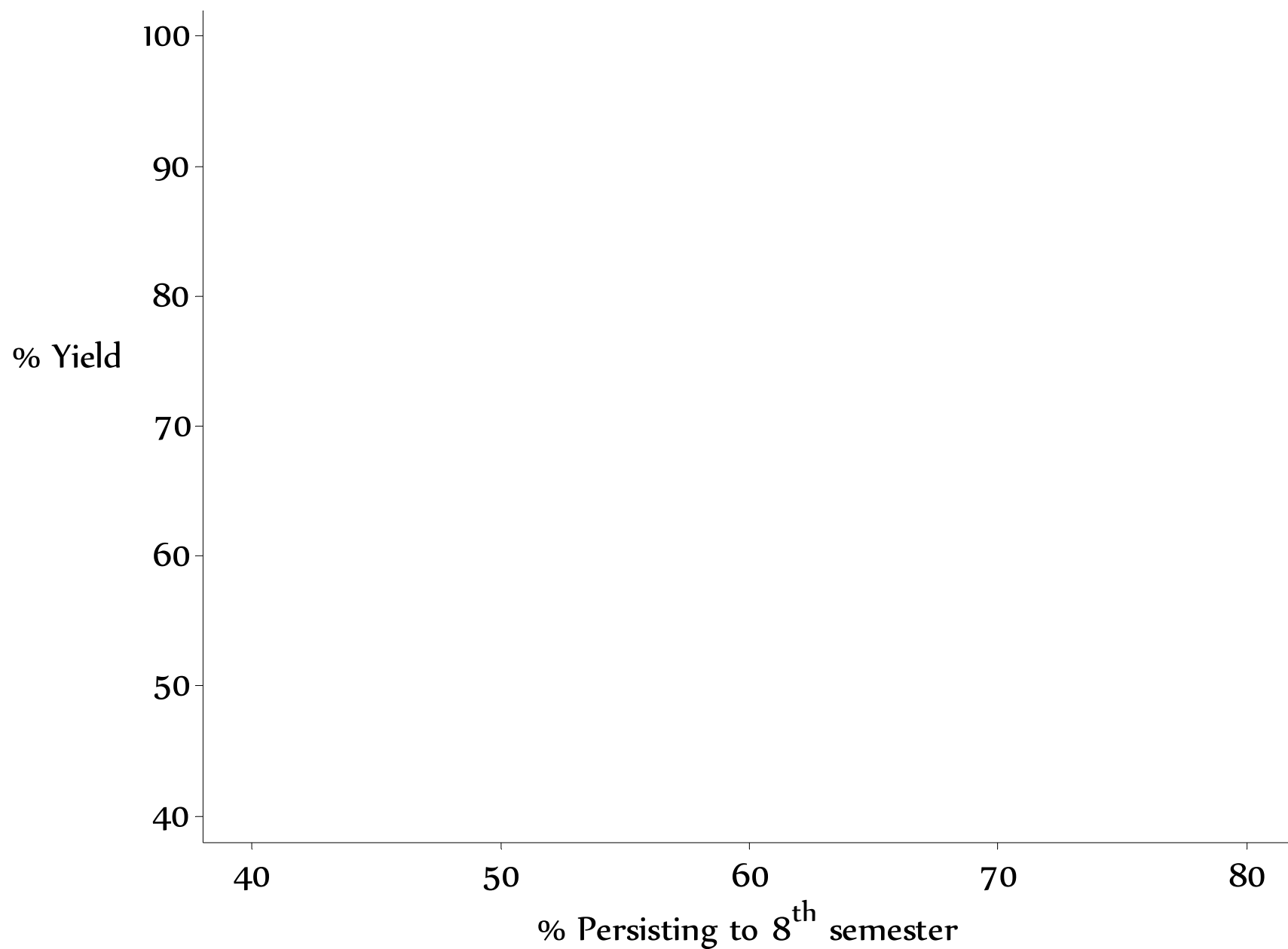


This display contains all the information
in the original table.

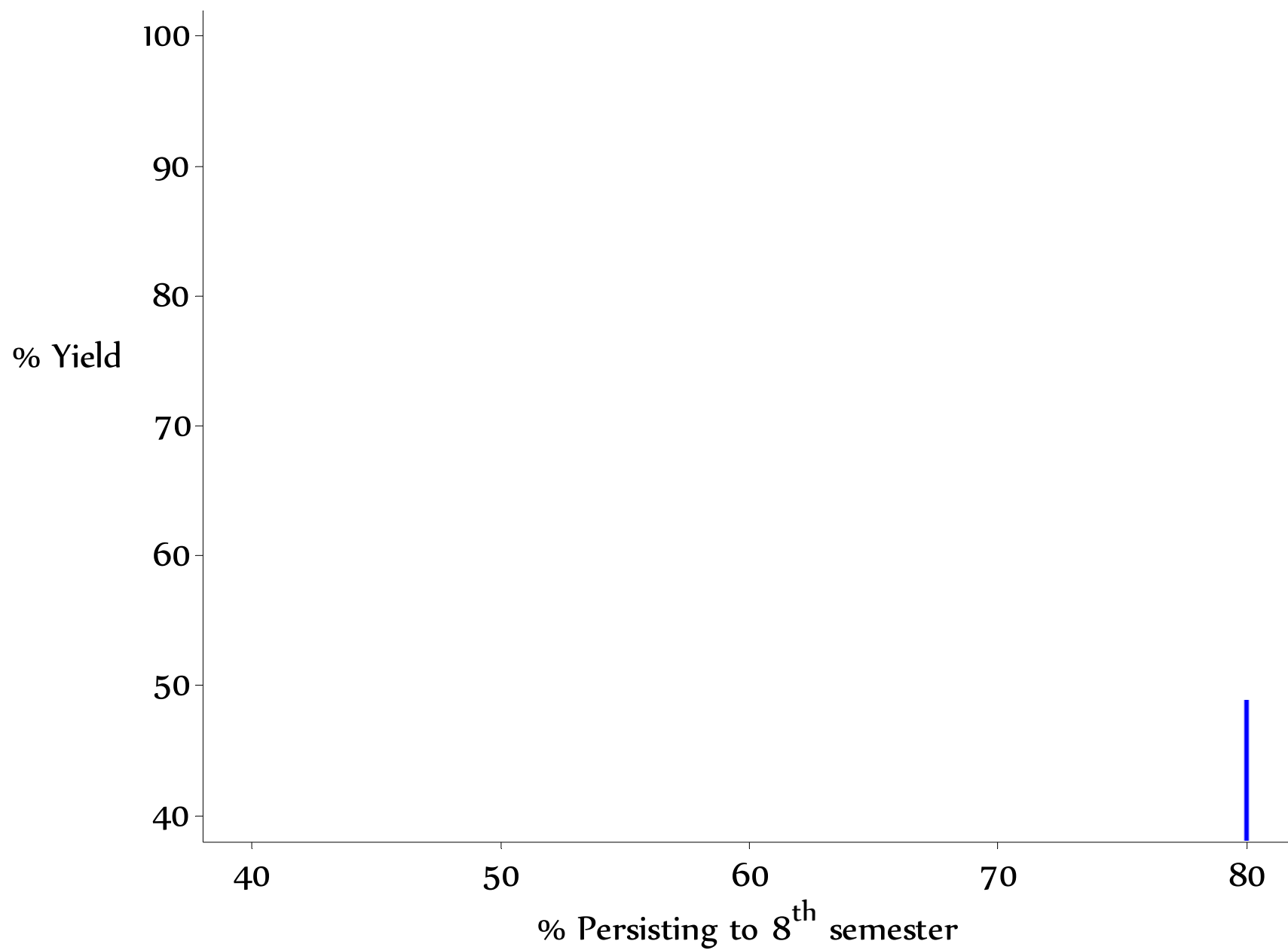
All Engineering Matriculants



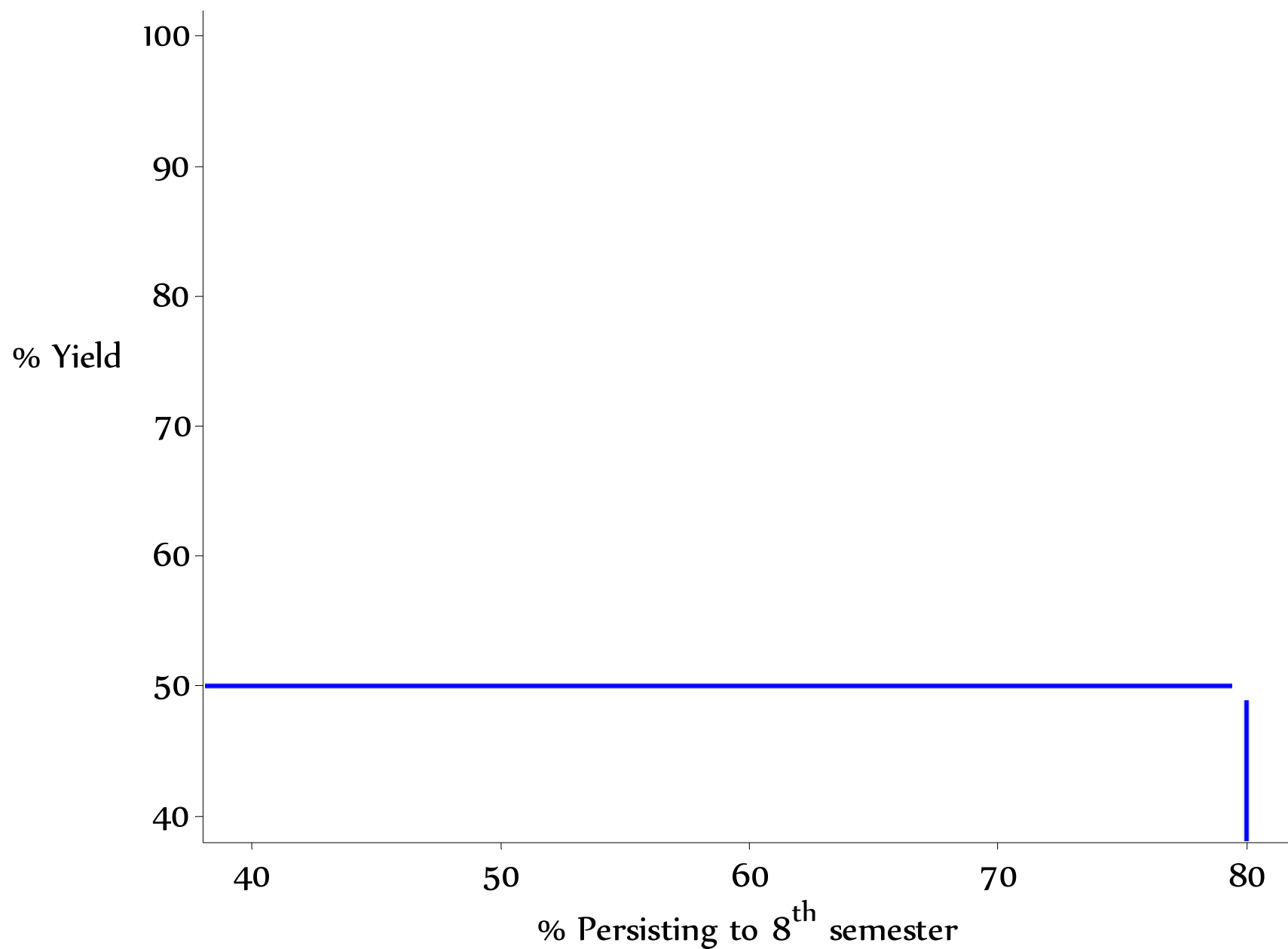
“Success” is a complex story.



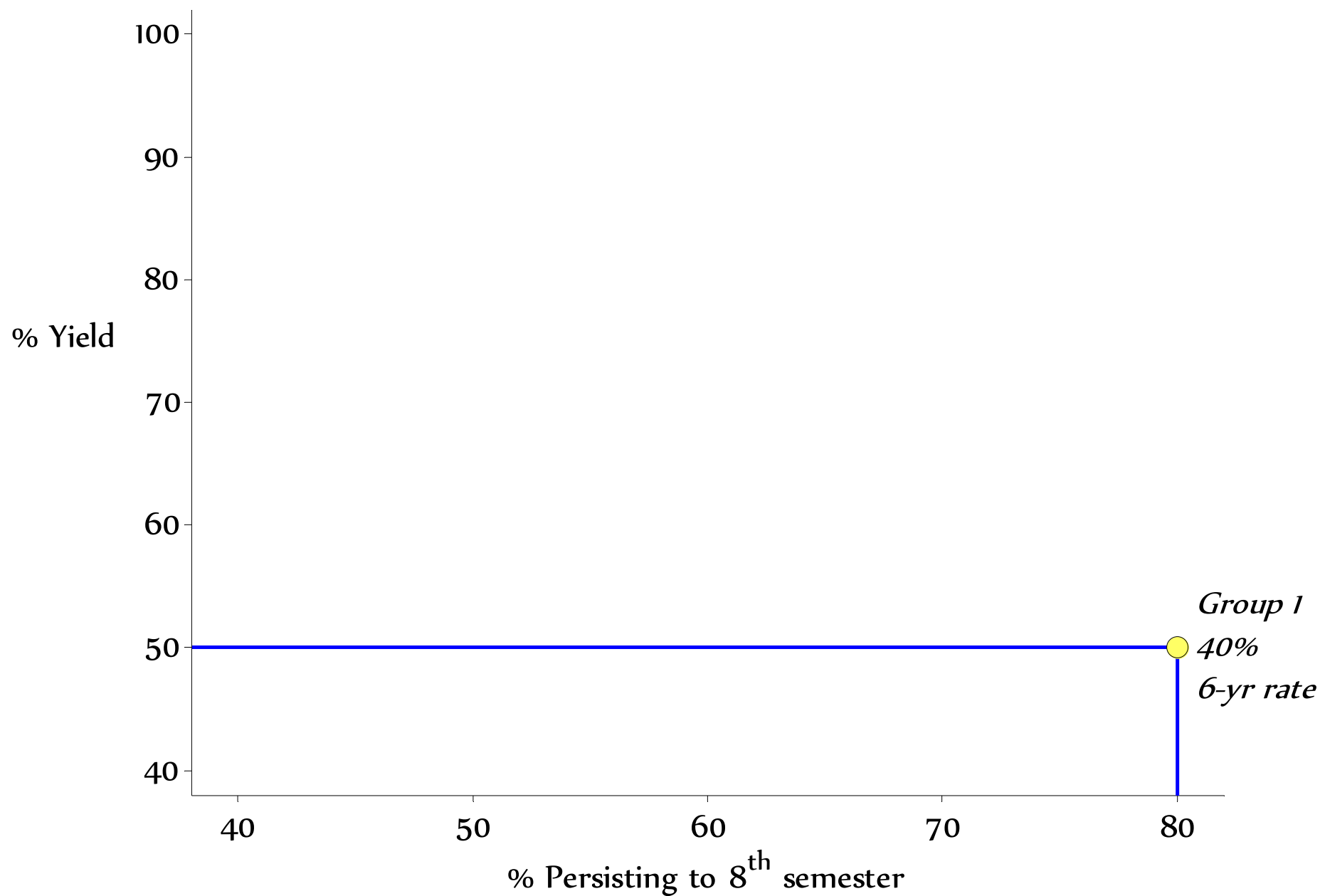
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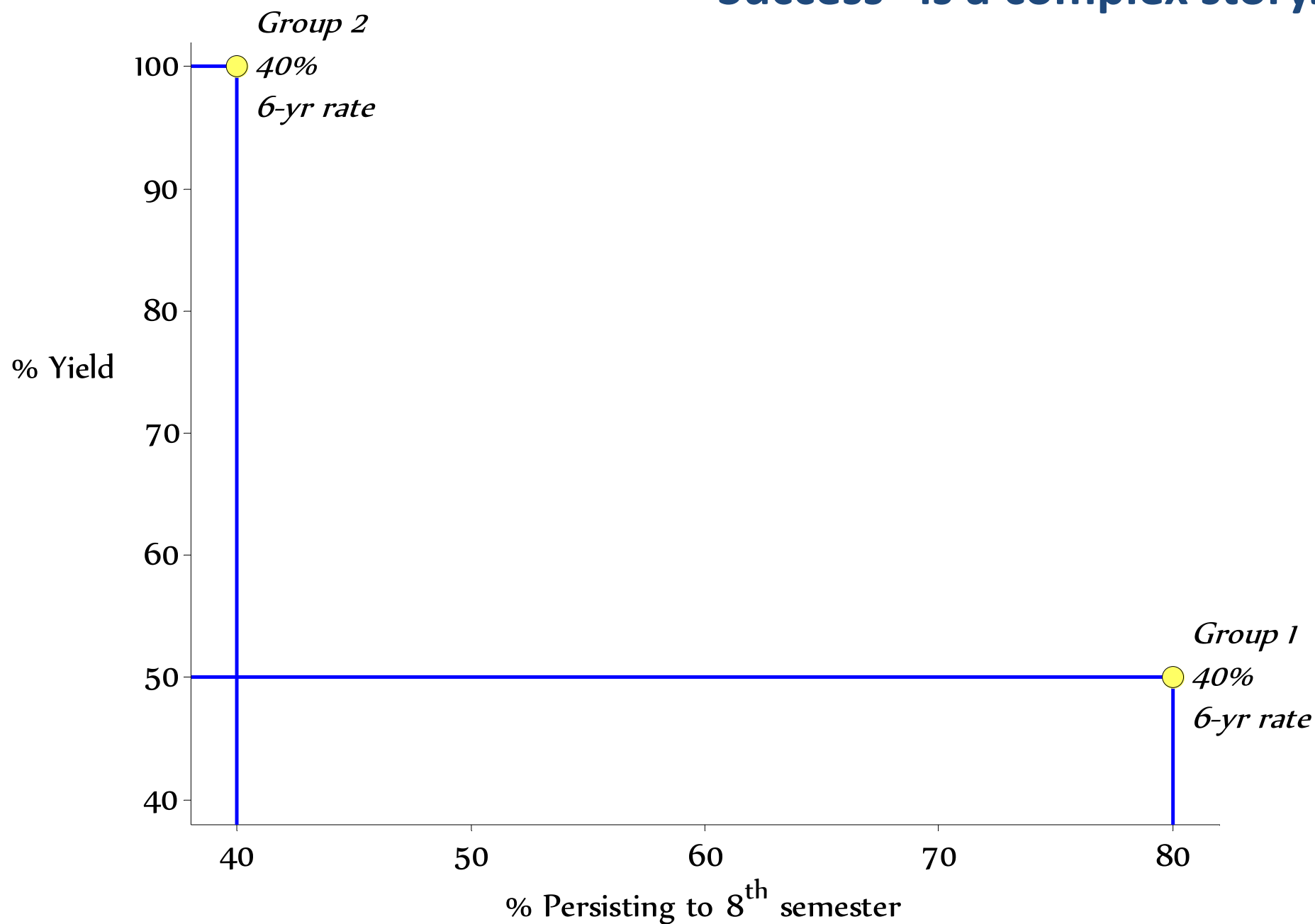
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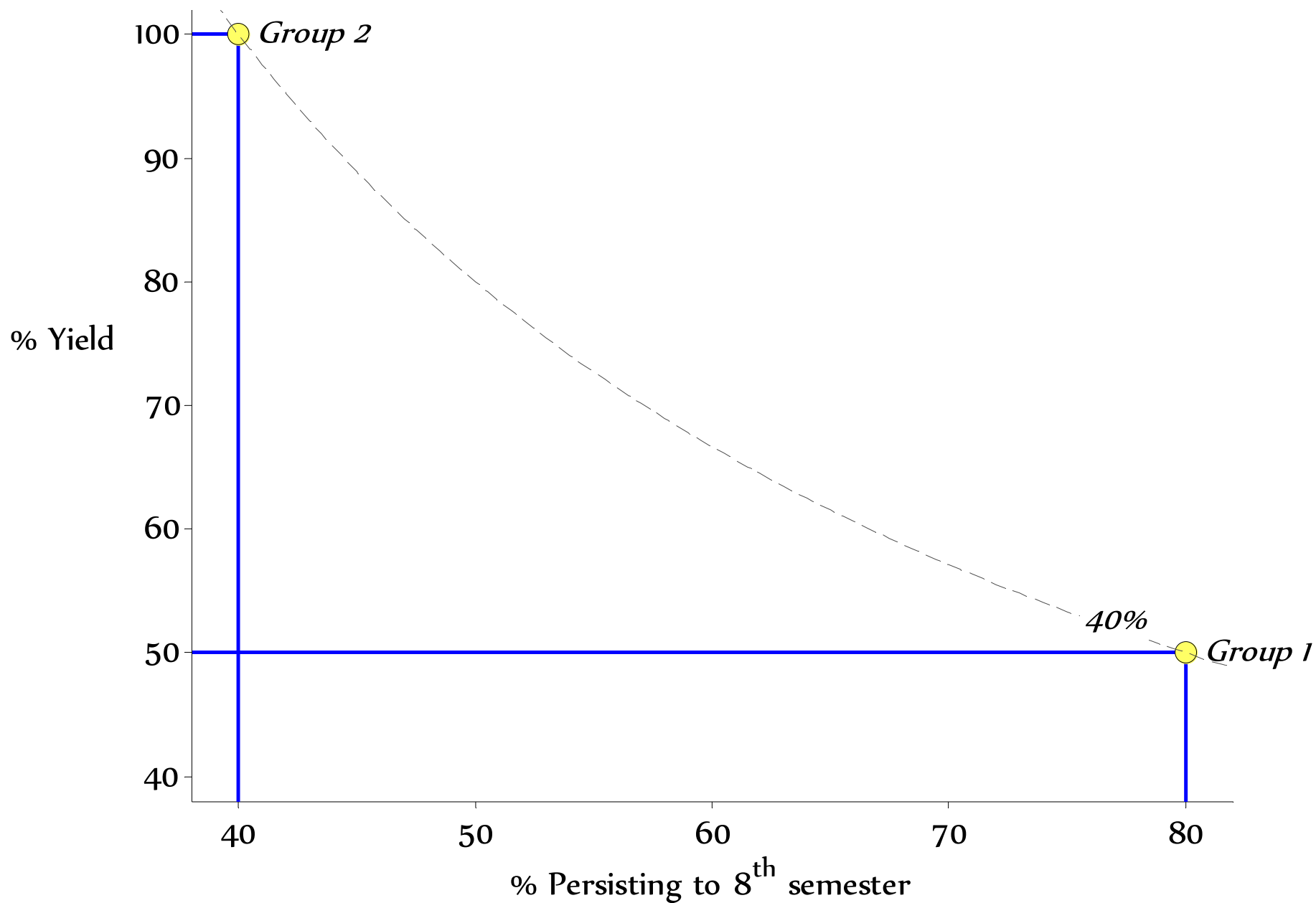
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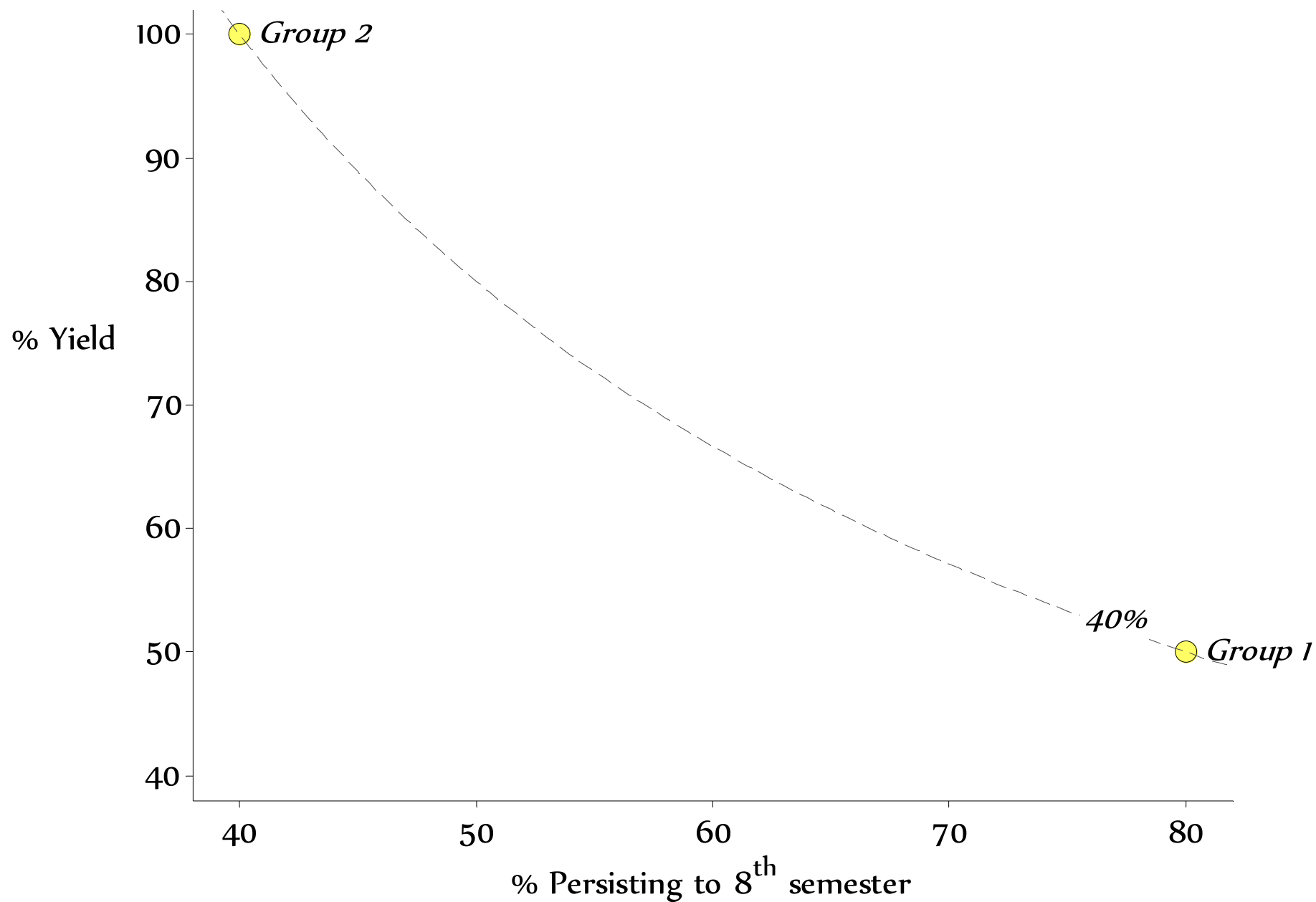
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