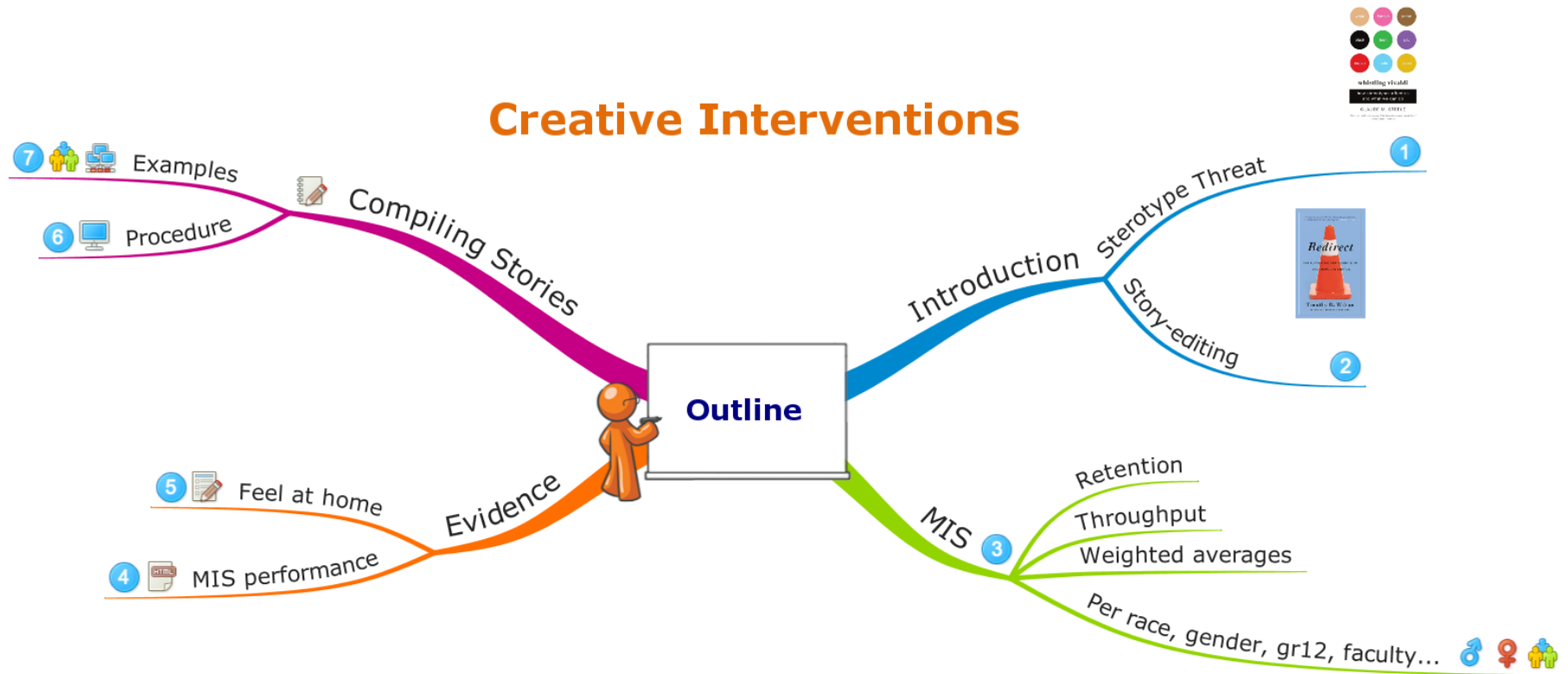




Web-based Story Editing Interventions to Support Students at Risk and to Address Possible Stereotype Threat (ST)

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Address Factors that Influence Academic Performance



Visit www.sun.ac.za/trackwell/stereotypethreat for YouTube videos on Stereotype Threat and Story-editing interventions.

Stereotype Threat

In “Whistling Vivaldi” Steele focuses on the phenomenon of stereotype threat as it explains the trend of minority underperformance in higher education. Steele discusses how identity contingencies can have a drastic negative effect on a person’s functioning, and how these effects can explain racial and gender performance gaps in academic performance.

- Underperformance of black students
- Underperformance of women in Engineering

Steele also offers a host of strategies for reducing stereotype threat, including story editing approaches.



whistling vivaldi

how stereotypes affect us
and what we can do

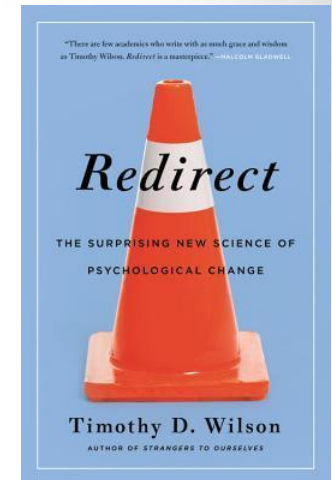
CLAUDE M. STEELE

"This is an intellectual odyssey of the first order—a true tour de force."
—WILLIAM G. BOWEN

Story-editing

In “Redirect” Wilson reports on a study in which college freshmen who were worrying about their grades and not doing well academically were targeted with a simple story editing intervention. Compared to a randomly assigned control group of students who didn’t get any information about grade improvement, those who got the story prompt achieved better grades in the following year and were less likely to drop out of college.

- Video of successful students talking about their initial struggles
- SciMathUS-video

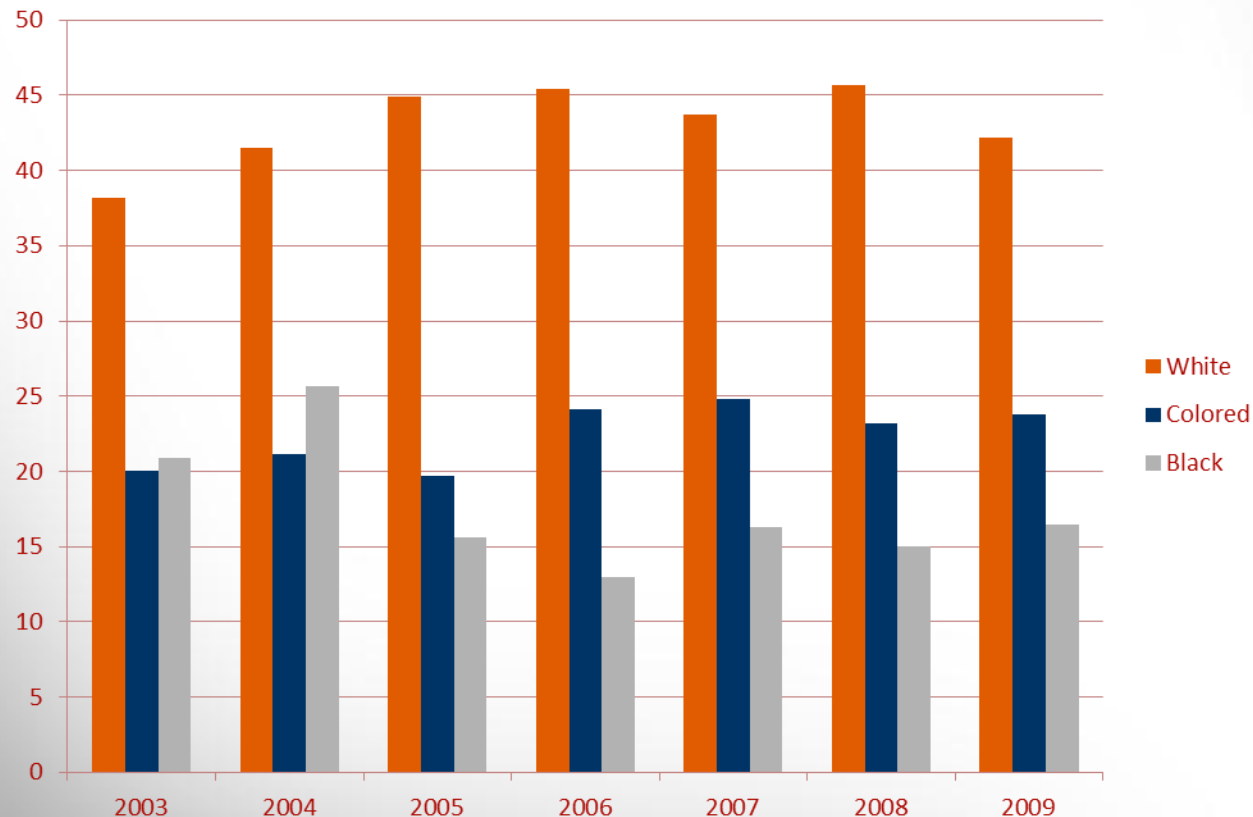


Evidence of Stereotype Threat at SU

- Minimum period completion rates per race, first-year cohort and grade 12 symbol in three year and four year programmes
- Weighted first-year averages per race, first-year cohort and grade 12 symbol in three year and four year programmes
- Weighted first-year averages per gender, first-year cohort and grade 12 symbol in Enineering
- Percentage of white, colored and black final-year students feeling at home at Stellenbosch University (results of Omega Graduating Questionnaire)

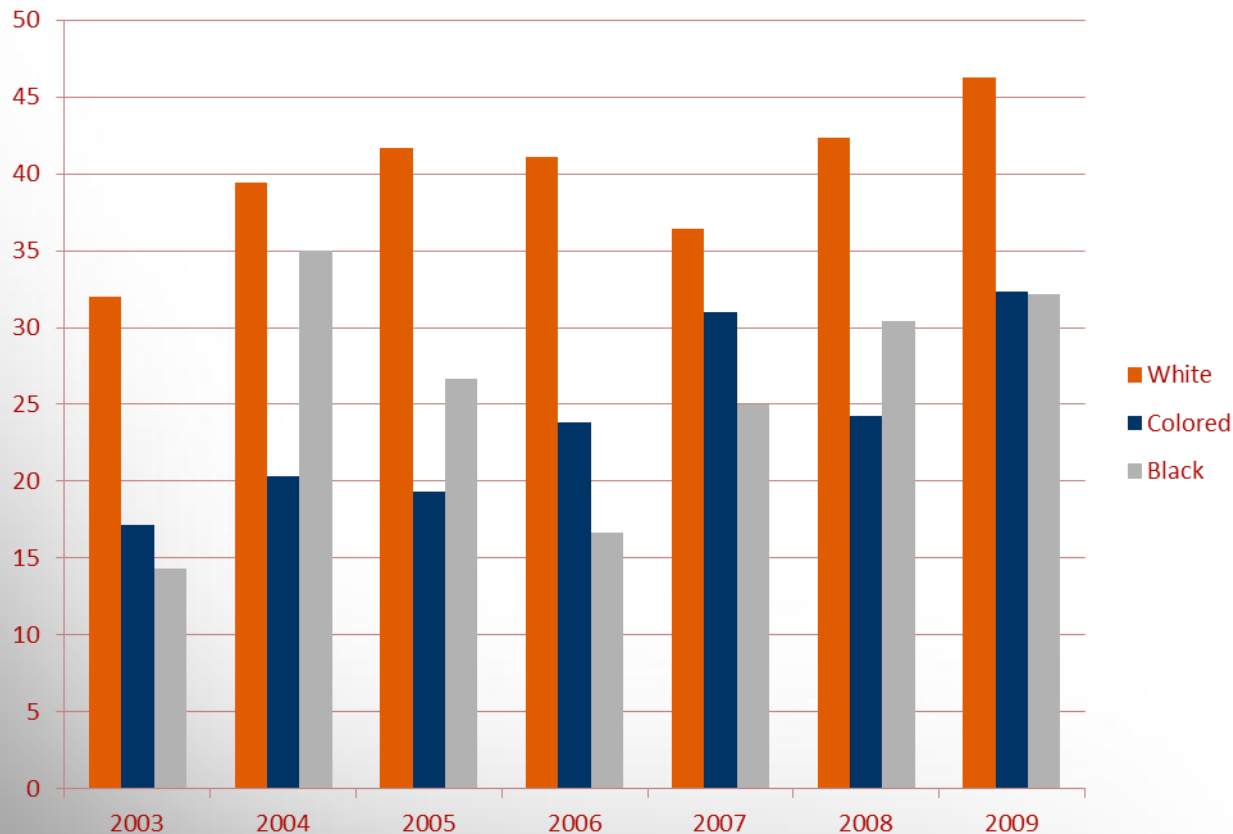


Minimum Period Completion Rates per Race for 2003-2009 Cohorts in 3 Year Programmes



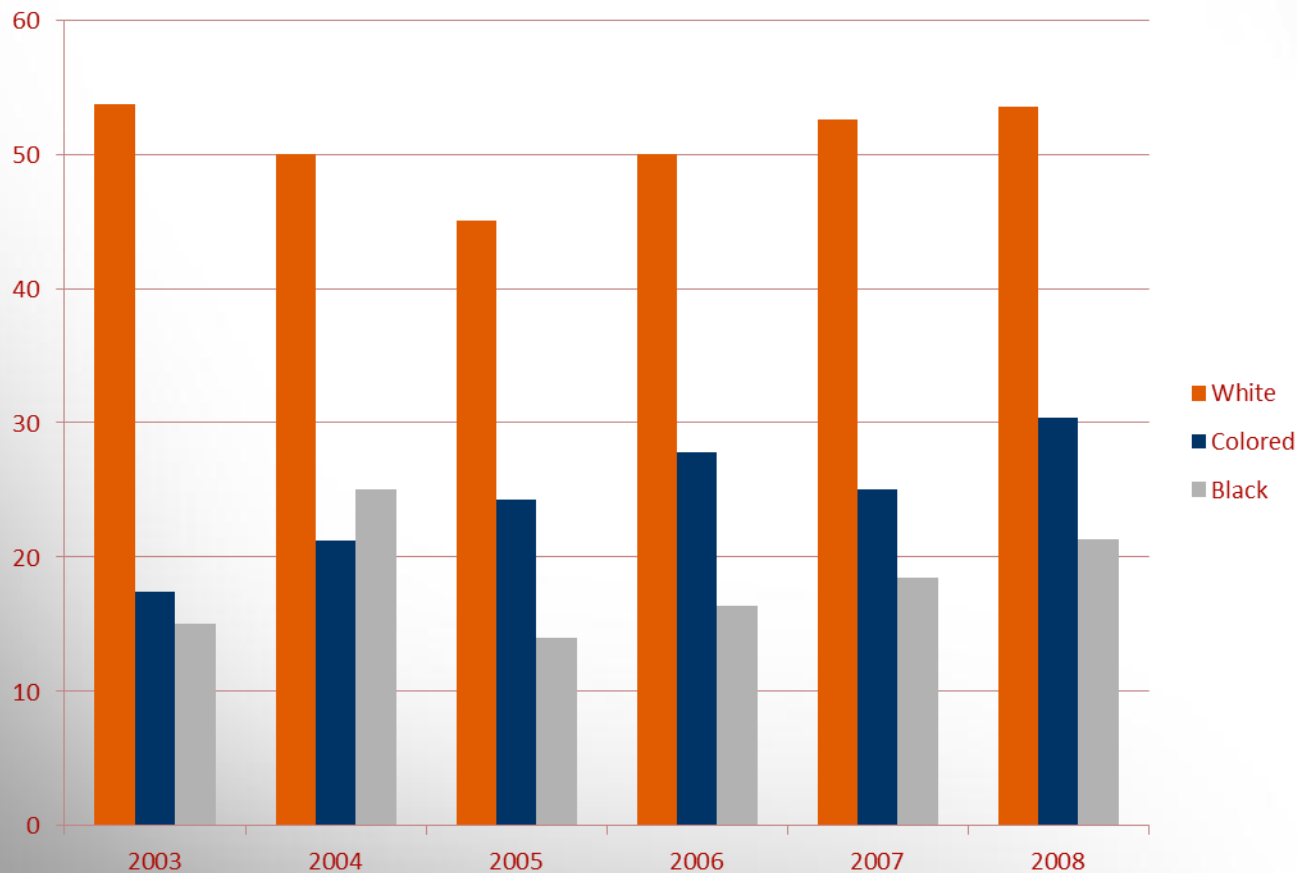
No surprise:
Quality of white
better than rest,
But...

Minimum Period Completion Rates per Race for 2003-2009 Cohorts with B Gr12 Symbols in 3 Year Programmes



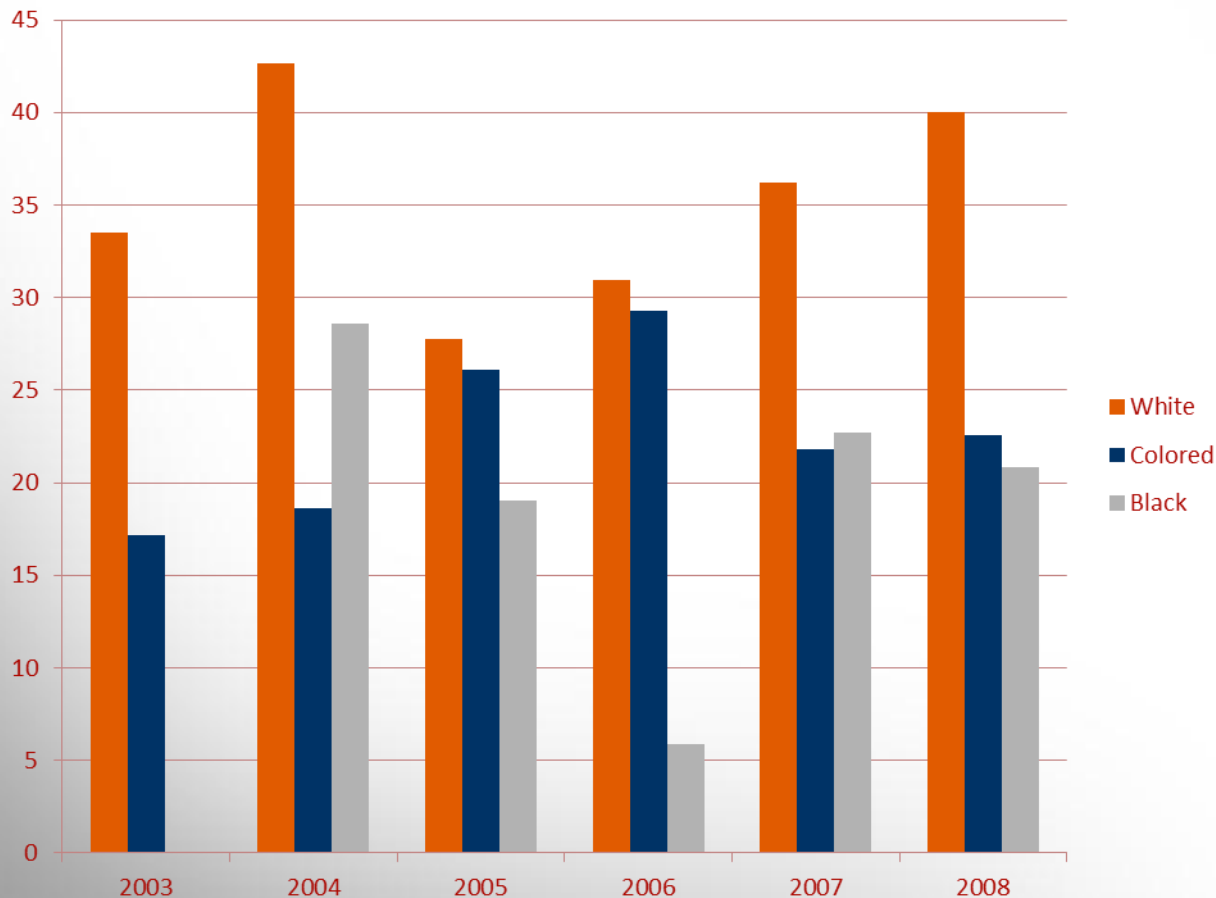
White much better than rest for same grade 12 symbol (Gr 12 between 70 and 80)

Minimum Period Completion Rates per Race for 2003-2008 Cohorts in 4 Year Programmes



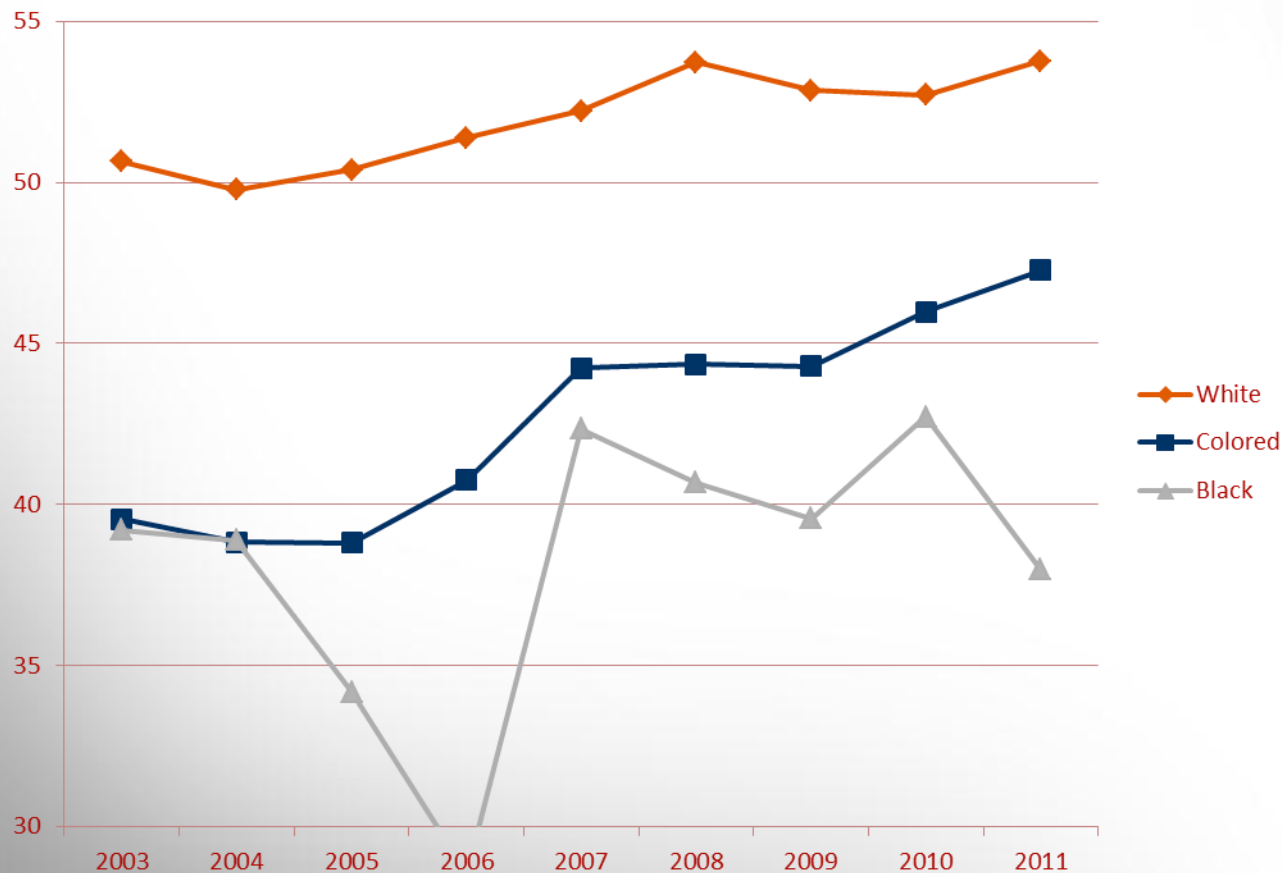
No surprise:
Quality of white
better than rest,
But...

Minimum Period Completion Rates per Race for 2003-2008 Cohorts with C Gr12 Symbols in 4 Year Programmes



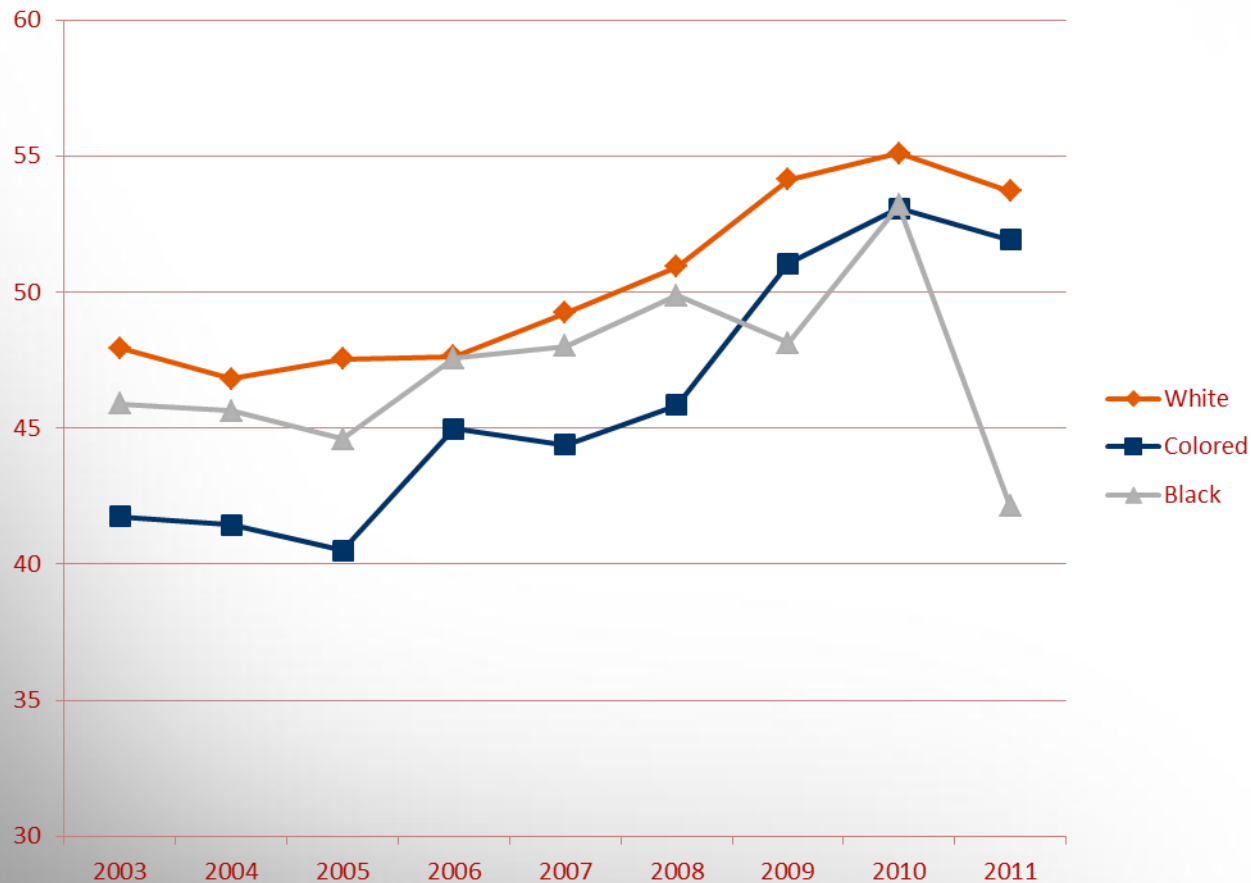
For Gr 12 between 60 and 70 the same phenomenon – stereotype threat a possible cause?

Weighted First-year Averages per Race for 2003-2011 Cohorts in 3 Year Programmes



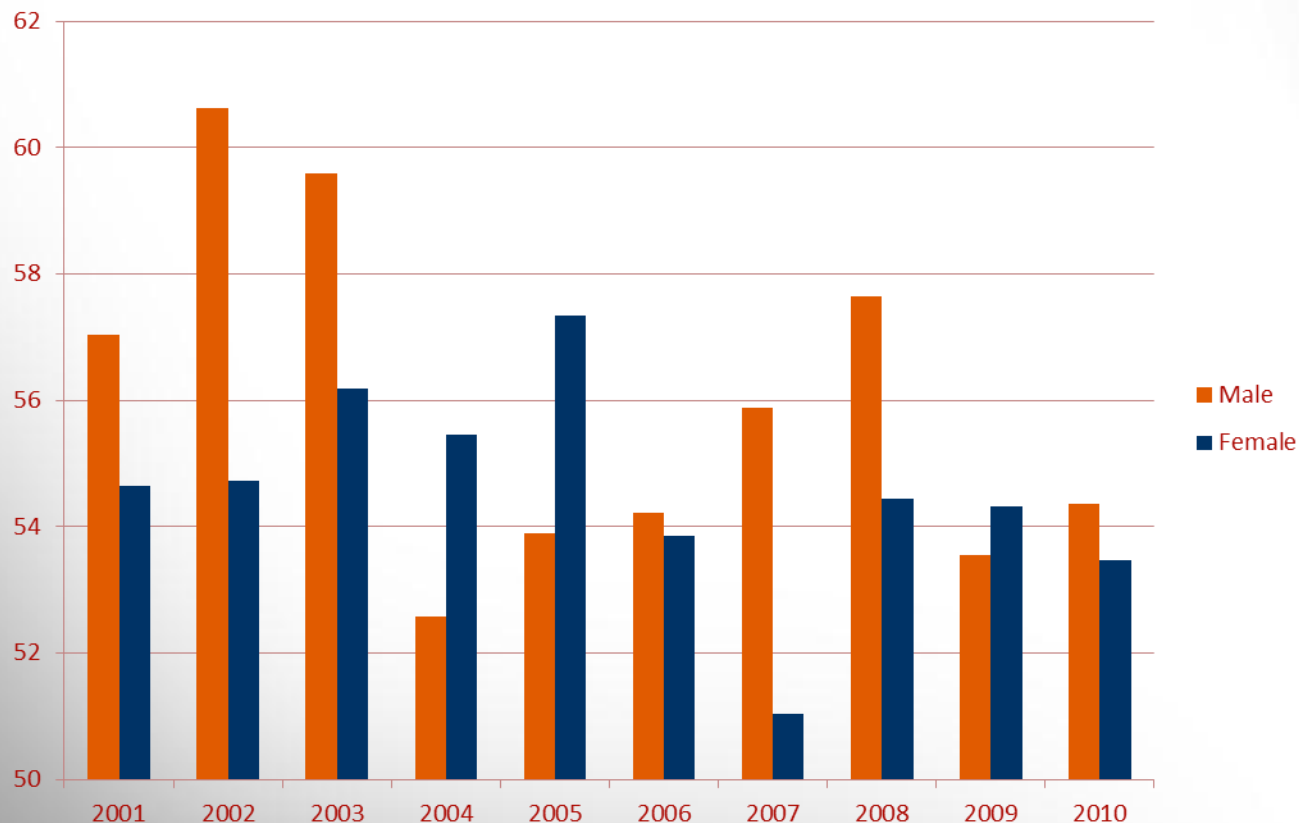
No surprise:
Quality of white
better than rest,
But...

Weighted First-year Averages per Race for 2003-2011 Cohorts with B Gr12 Symbols in 3 Year Programmes



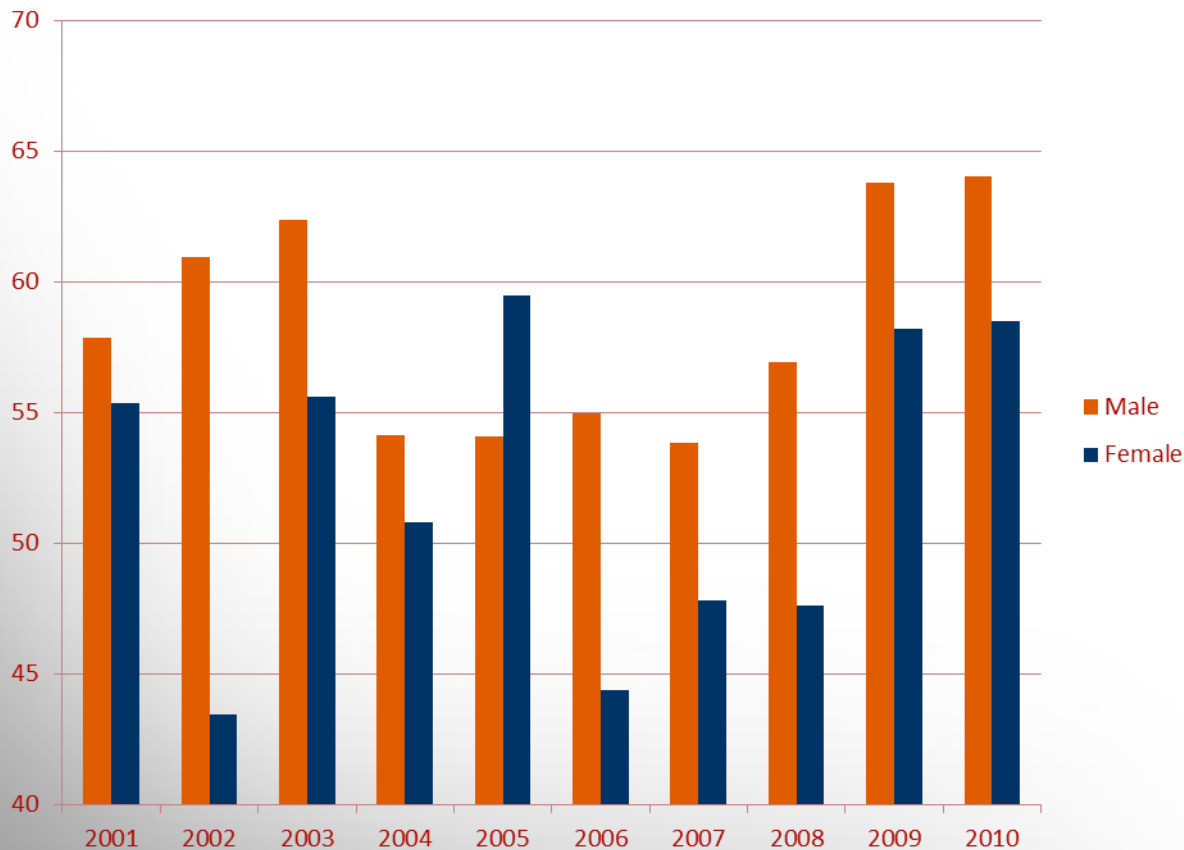
White better than rest for grade 12 between 70 and 80 – majority students have A-, B and C symbols

Weighted First-year Averages per Gender for 2001-2010 Cohorts in Engineering Programmes



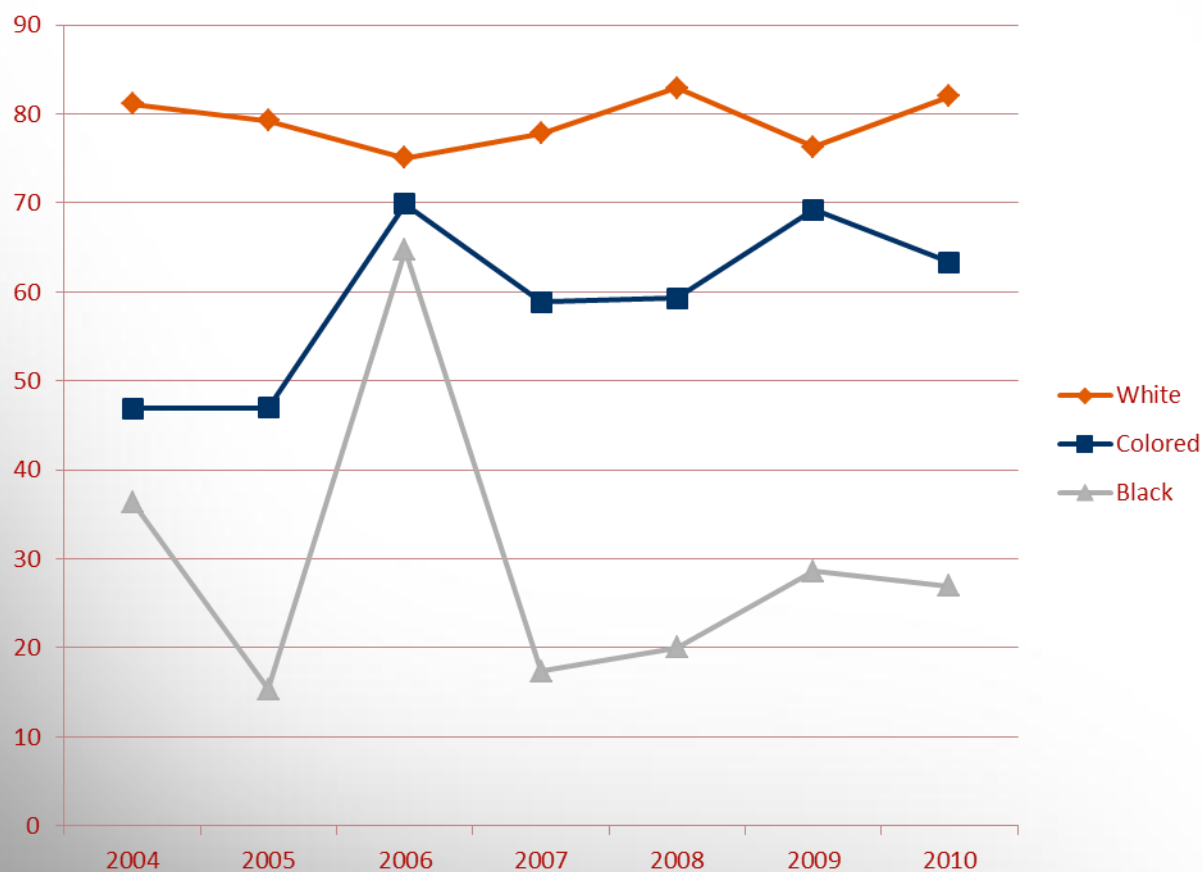
Male in 7/10
cases better than
female

Weighted First-year Averages per Gender for 2003-2011 Cohorts with A- Gr12 Symbols in Engineering Programmes



Men in 9/10 cases
better than women
for grade 12
between 80 and 90
(strong candidates!)
– stereotype threat?

Overall Feeling of Belonging to the University Community (Feeling at Home): Percentage of White, Colored and Black Final-year Students Feeling Satisfied or Very Satisfied



Number of final-year students

White: 3025

Colored: 531

Black: 124



Example 1: Struggling Student's Story

I became a first-year student at Stellenbosch University in 2011. I am studying in the Faculty of Engineering. My programme is called "BIng (Siviel)(4Jr) E " and it has a minimum study period of 4 years. I achieved an average of 82.67% in grade 12.

I am a white male student. My home language is "AFR/ENG ". I stay in the university residence "HELSHOOGTE ".

I am the holder of a merit bursary worth R10583.00.

My weighted average after the first semester is 58.83%. That means that my academic performance thus far is 71.16% of what I achieved in matric. My performance has therefore decreased quite substantially during my first six months at university in comparison with my grade 12 results.

I have, however, some role models whose stories inspire me and motivate me to achieve success in my studies. The reason they are so motivating? Well, they all struggled initially, like me, to adapt and find their feet. Eventually they managed to survive and became successful academically. Their stories are listed below.



Example 1: Role Model's Story

I began my studies in 2002 at Stellenbosch University as a first-year student in the Faculty of Engineering. My programme of choice was BEng (Mechanical) (4Yr) E . The minimum period to complete this programme is 4 years. I achieved an average of 85.60% in grade 12.

I am a white male student. My home language is "AFRIKAANS ". During my first year I stayed in SIMONSBURG .

I was a merit bursary holder during my first year at Stellenbosch. The value of the bursary was R4400.00.

As a first-year student I had a bursary from an external institution. The support amounted to R1420.00.

My weighted average academic performance after the first semester of my first year at university was 61.40%. That means that my university performance was equal to 71.73 % of what I achieved in grade 12. My performance had therefore decreased substantially during my first six months at university in comparison with my grade 12 performance.



Example 1: Role Model's Success

A Record of My Academic Success (since my first semester)

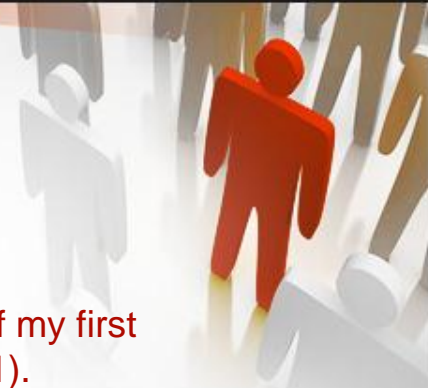
I managed to improve on my worse than expected first semester results: At the end of my first year my weighted average was higher than at the middle of the year (after semester 1).

After six months as a third year student my first semester performance was better than my performance after six months as a new student.

At the end of my third year at university my weighted average for the year was higher than my weighted average for semester 1 of year 1.

Despite my worse than expected start after six months at university, I still managed to successfully complete my study programme within the minimum period and graduated after 4 years.

I therefore was able to overcome a slightly disappointing start at Stellenbosch and became academically successful.



Example 2: Colored Student's Story

I became a first-year student at Stellenbosch University in 2011. I am studying in the Faculty of Education. My programme is called "BEEd(Alg Ondw)(Inter Senior) E " and it has a minimum study period of 4 years. I achieved an average of 65.83% in grade 12.

I am a colored female student. My home language is "ENGELS ". I stay in the university residence "METANOIA (DAMES) ".

I am the holder of a NSFAS bursary worth R45000.00.

I have a few role models whose stories inspire me and motivate me to achieve success in my studies. Their stories are told below.



Example 2: Role Model's Success

I began my studies in 2004 at Stellenbosch University as a first-year student in the Faculty of Education. My programme of choice was BEdPsig E . The minimum period to complete this programme is 4 years. I achieved an average of 62.70% in grade 12.

I am a colored female student. My home language is "ENGELS ". During my first year I stayed in IRENE .

As a first-year student I had a recruitment bursary from the university. The value of the bursary was R15000.00.

I had a loan from the university when I was in my first year of my studies. The loan was worth R7500.00.

As a first-year student I had a bursary from an external institution. The support amounted to R7500.00.

I successfully completed my study programme within the minimum period plus one year and graduated after 5 years.

I therefore was academically successful at Stellenbosch University.



Example 3: Black Student's Story

I became a first-year student at Stellenbosch University in 2011. I am studying in the Faculty of Science. My programme is called "BSc (Aardwetenskap) E " and it has a minimum study period of 3 years. I achieved an average of 62.83% in grade 12.

I am a black male student. My home language is "XHOSA ". I stay in the university residence "SIMONSBURG ".

I am the holder of a NSFAS bursary worth R54000.00.

I have a bursary of an outside institution worth R15000.00.

I have a few role models whose stories inspire me and motivate me to achieve success in my studies. Their stories are told below.



Example 3: Role Model's Success

I began my studies in 2004 at Stellenbosch University as a first-year student in the Faculty of Science. My programme of choice was BSc(Mens Lewes)(Biol Menswet) E. The minimum period to complete this programme is 3 years. I achieved an average of 62.80% in grade 12.

I am a black male student. My home language is "VENDA ". During my first year I stayed in MAJUBA .

I had a loan from the university when I was in my first year of my studies. The loan was worth R24000.00.

As a first-year student I had a bursary from an external institution. The support amounted to R5000.00.

I successfully completed my study programme within the minimum period plus one year and graduated after 4 years.

I therefore was academically successful at Stellenbosch University.



Example 4: Female Engineering Student's Story

I became a first-year student at Stellenbosch University in 2011. I am studying in the Faculty of Engineering. My programme is called "BIng (Chem Ing) (4Jr) E " and it has a minimum study period of 4 years. I achieved an average of 71.00% in grade 12.

I am a black female student. My home language is "OWAMBO ". I stay in a private ward.

I have a few role models whose stories inspire me and motivate me to achieve success in my studies. Their stories are told below.



Example 4: Role Model's Success

I began my studies in 2005 at Stellenbosch University as a first-year student in the Faculty of Engineering. My programme of choice was BEng (Chem Mineraalproses) E . The minimum period to complete this programme is 4 years. I achieved an average of 68.90% in grade 12.

I am a black female student. My home language is "TSWANA ". During my first year I stayed in SONOP .

I was a NSFAS bursary holder when I was a first-year student. The amount of the bursary was R30000.00.

As a first-year student I had a bursary from an external institution. The support amounted to R13000.00.

I successfully completed my study programme within the minimum period plus two years and graduated after 6 years.

I therefore was academically successful at Stellenbosch University.



Thank You! Any Questions?

For more information:

Contact Dr Alten du Plessis at sadp@sun.ac.za.

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