Higher student workloads – lower throughput and success? An investigation in distance education

Glen Barnes & Dion van Zyl

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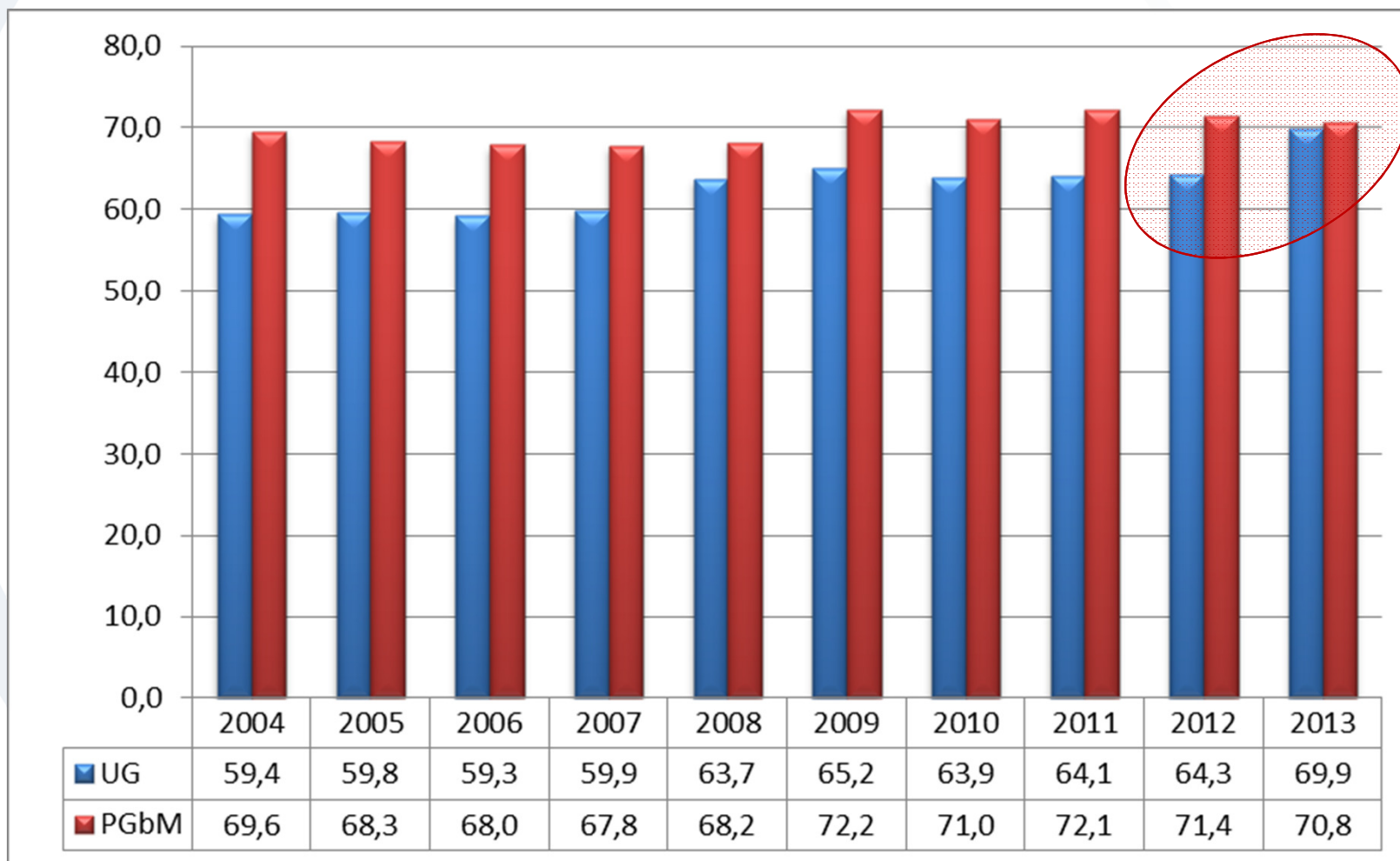
Background

- ## Reaction to the re-admission policy
  – Progression based on credits - minimum load

- ## Enrolment management initiative
  – Increase intake without increasing growth
  – Activity, Credit load, Module load, Flow modelling

- ## Various throughput initiatives
  – Increased retention but with the 'graduate lag'

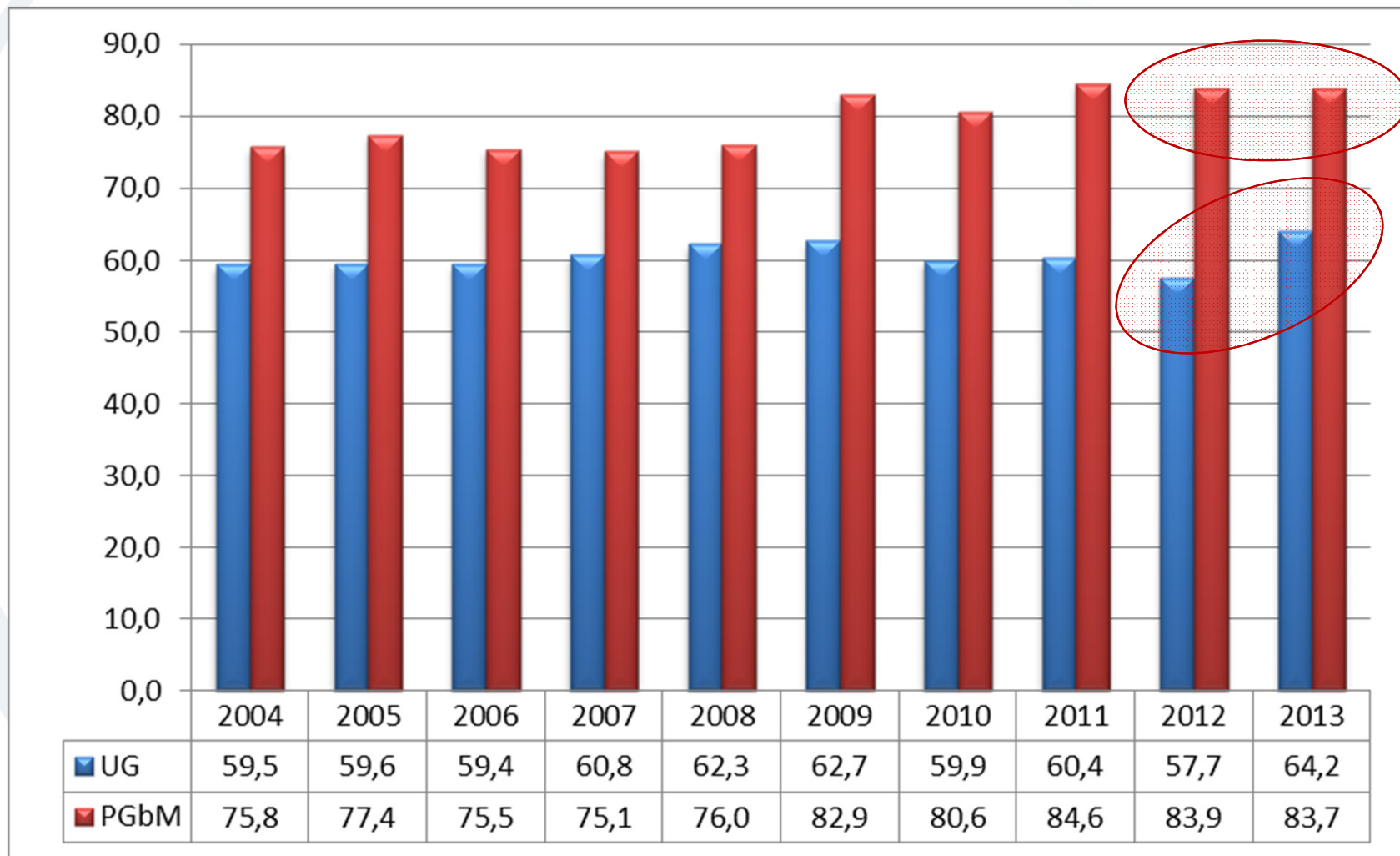Planning, monitoring & evaluation

Objectives

- ## Monitor recent changes in workload
  - Workload (FTE:QC ratio)
  - Module load (number)
  - Credit Load (NSH)

- ## Relate these to measures success
  - First-year dropout rate
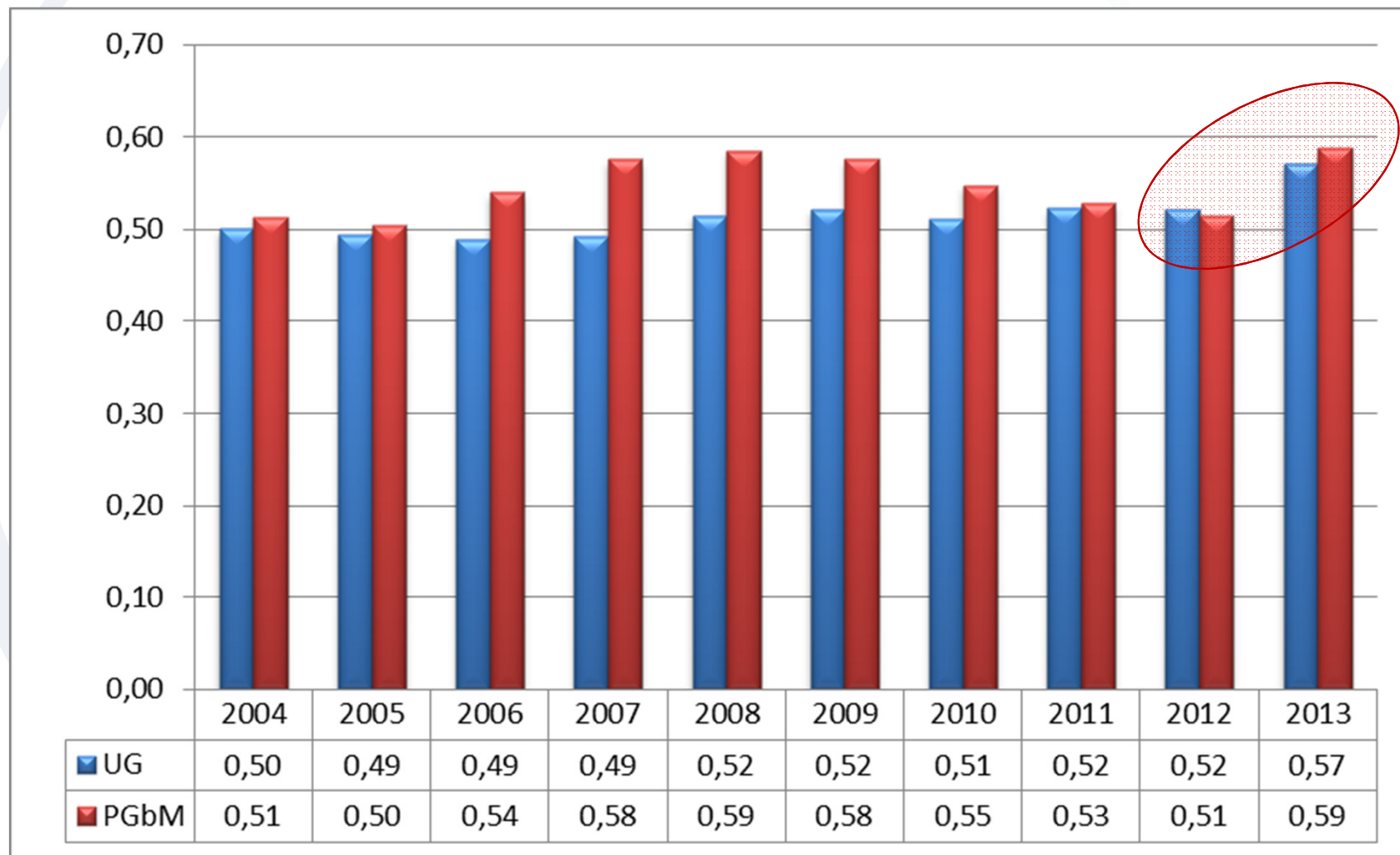 - Exam pass rate
  - Degree credit success rate

Workload Trends

The Average Credit Load per Student over Time

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
UG	59,4	59,8	59,3	59,9	63,7	65,2	63,9	64,1	64,3	69,9
PGbM	69,6	68,3	68,0	67,8	68,2	72,2	71,0	72,1	71,4	70,8

The Average Credit Load per New Student over Time

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
UG	59,5	59,6	59,4	60,8	62,3	62,7	59,9	60,4	57,7	64,2
PGbM	75,8	77,4	75,5	75,1	76,0	82,9	80,6	84,6	83,9	83,7

Student Workload for UG and PGbM Students over Time

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
■ UG	0,50	0,49	0,49	0,49	0,52	0,52	0,51	0,52	0,52	0,57
■ PGbM	0,51	0,50	0,54	0,58	0,59	0,58	0,55	0,53	0,51	0,59

Summary

- Increase in aspects of student load:

    - Significant increase from 2012 to 2013 for UG

    - Not so much for PGbM

    - Similar trends for both new and returning students

Workload and Success

- Credit load vs First-year dropout rate
- UG and PGbM:
    - Credit load and Workload (not module load):
        - vs Degree Success rate and Normal Pass rate

The Average Credit Load of New Students vs First-year Dropout Rate
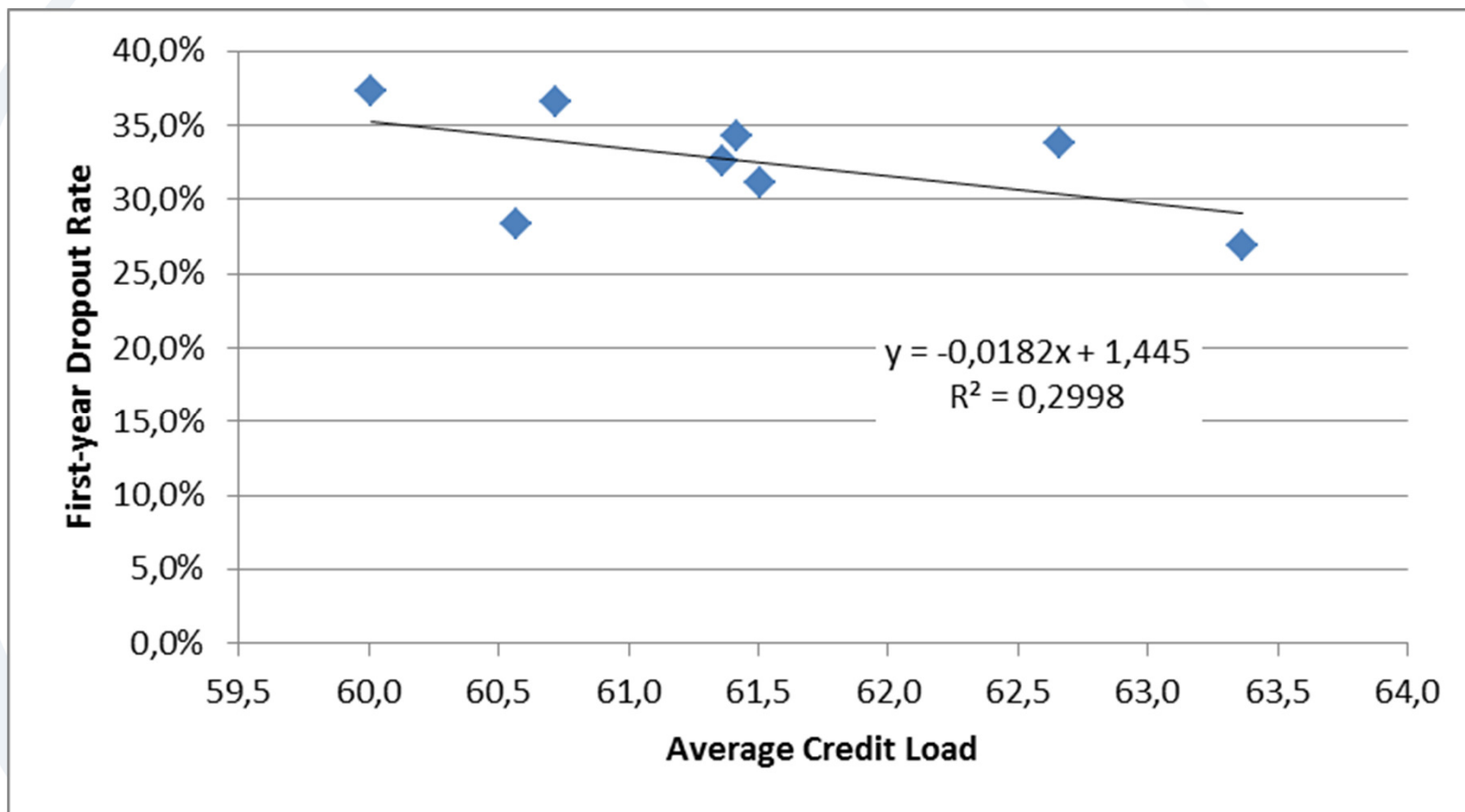
UG Students

Credit Load vs Success for UG Students

Degree Credit Success Rate
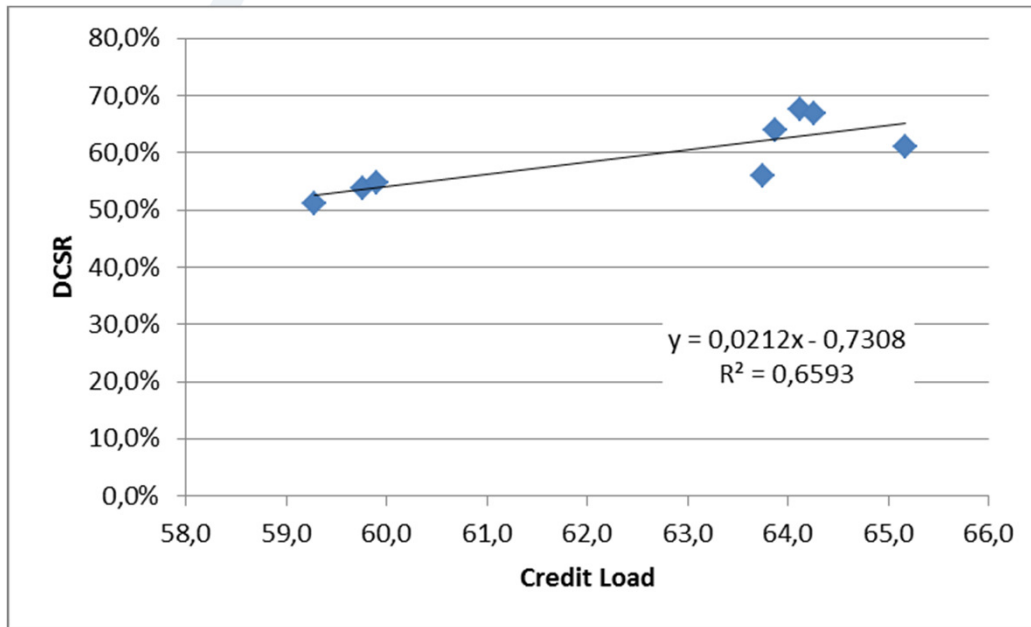
Normal Pass Rate

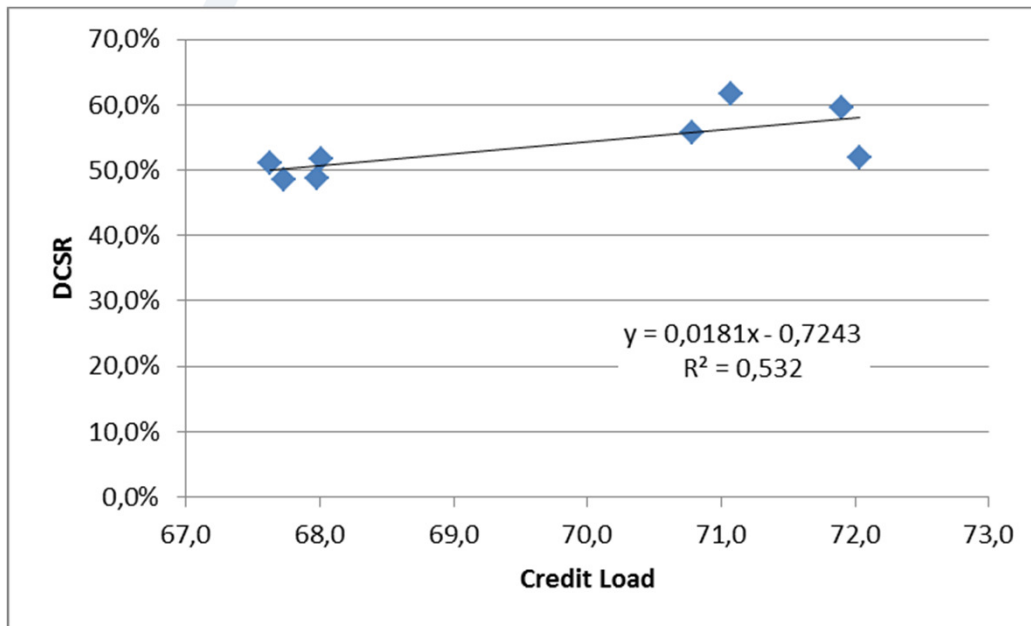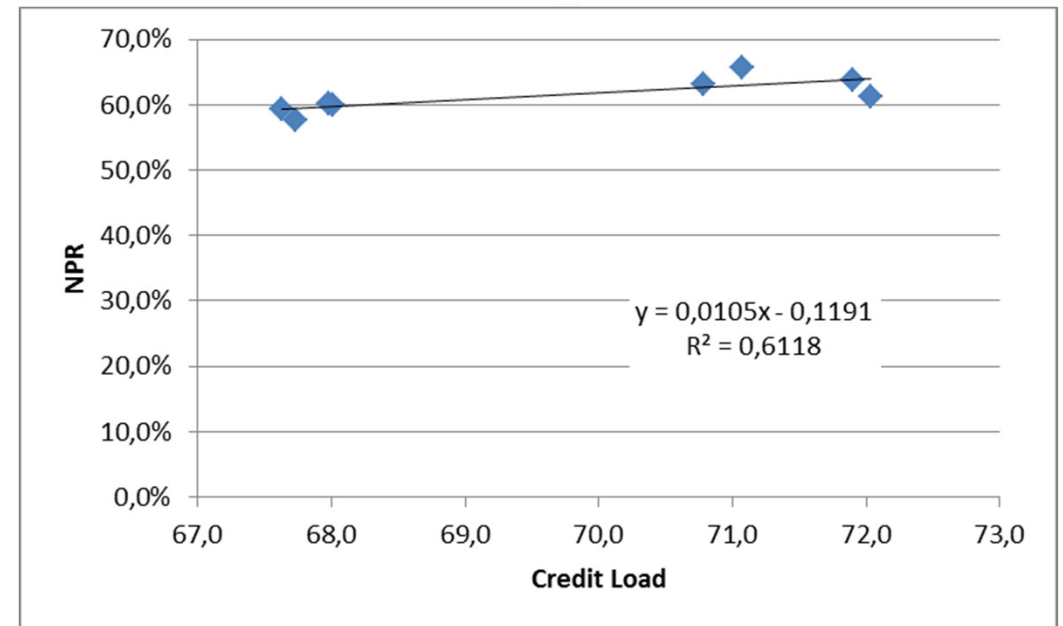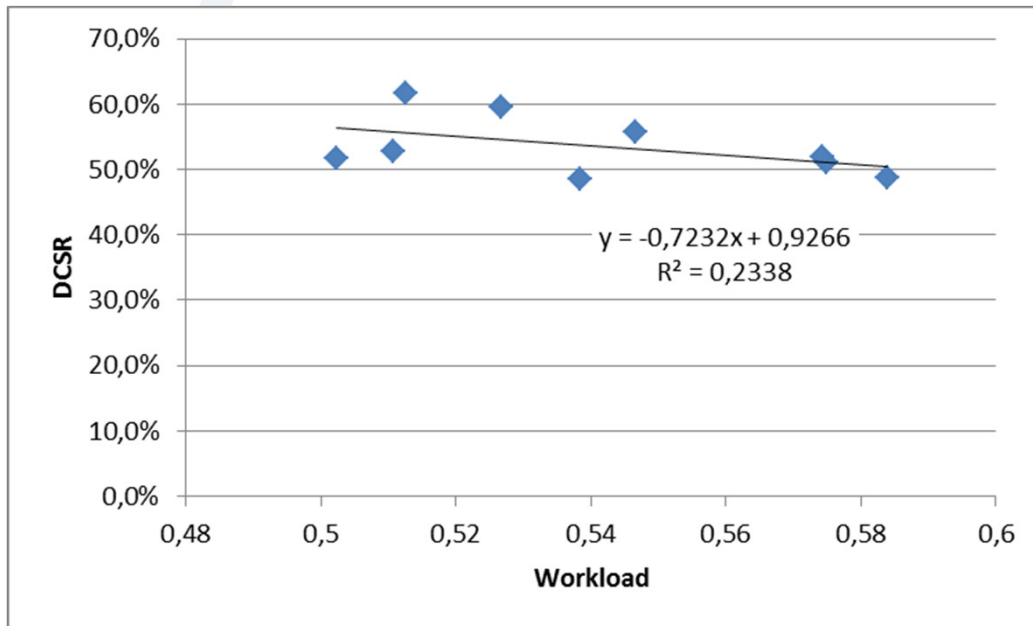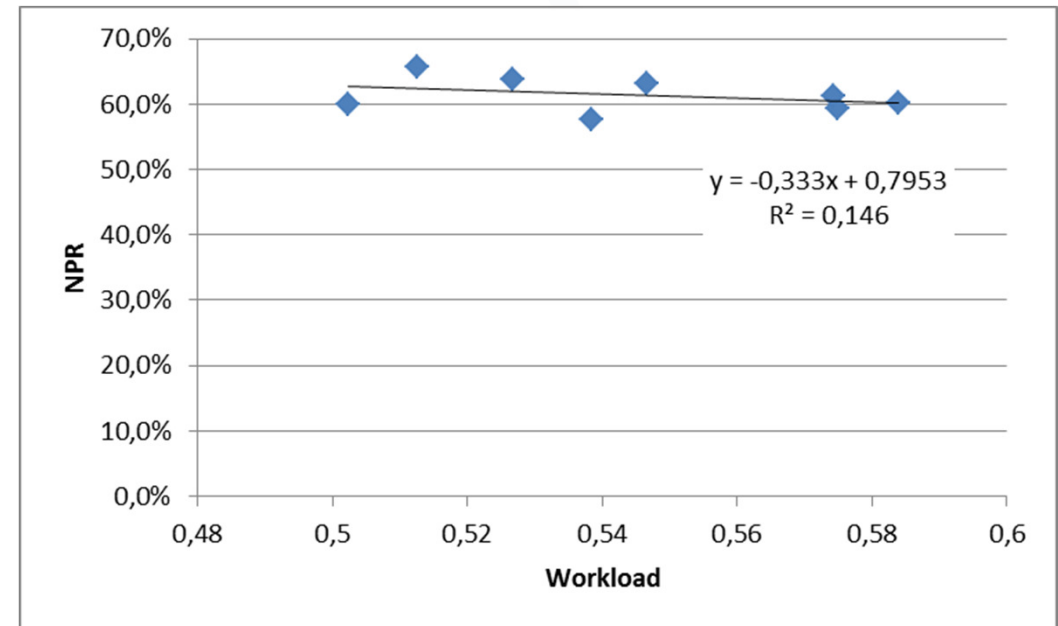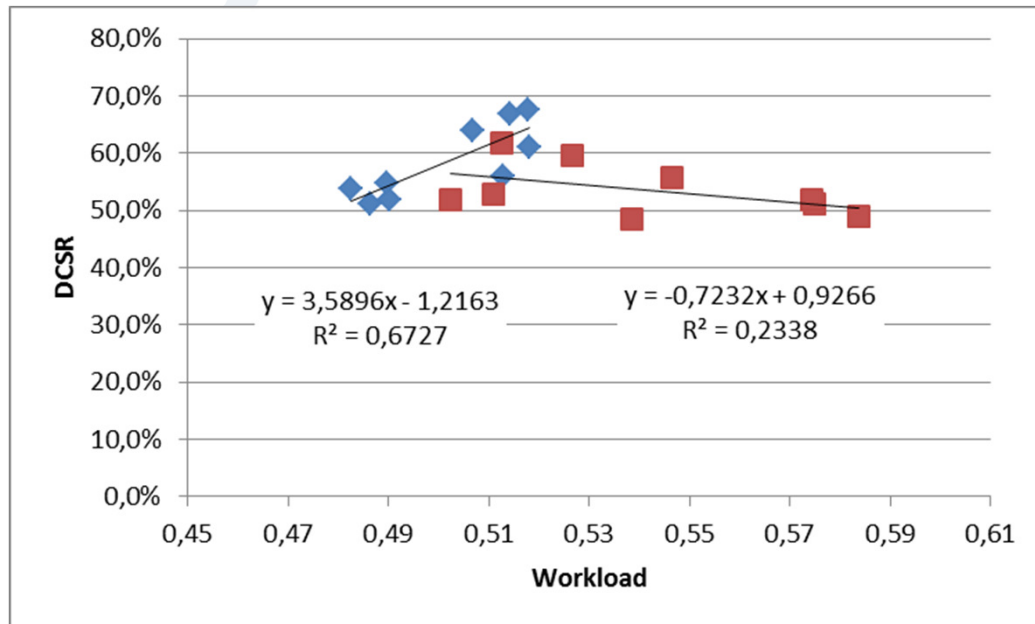# Student Workload vs Success for UG Students

Degree Credit Success Rate

$$y = 3,5896x - 1,2163$$
$$R^2 = 0,6727$$

Normal Pass Rate

$$y = 1,2999x - 0,041$$
$$R^2 = 0,5406$$

PGbM Students

Credit Load vs Success for PGbM Students

Degree Credit Success Rate

$y = 0{,}0181x - 0{,}7243$
$R^2 = 0{,}532$

Normal Pass Rate

$y = 0{,}0105x - 0{,}1191$
$R^2 = 0{,}6118$

Student Workload vs Success for PGbM Students

Degree Credit Success Rate

$y = -0.7232x + 0.9266$
$R^2 = 0.2338$

Normal Pass Rate

$y = -0.333x + 0.7953$
$R^2 = 0.146$

UG and PGbM Students

Student Workload vs Success for UG and PGbM Students

Degree Credit Success Rate

$y = 3,5896x - 1,2163$
$R^2 = 0,6727$

$y = -0,7232x + 0,9266$
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Normal Pass Rate

$y = 1,2999x - 0,041$
$R^2 = 0,5406$

$y = -0,333x + 0,7953$
$R^2 = 0,146$

◆ UG   ■ PGbM

In summary …

- Research is exploratory
- Over the range of workload measured
  - No evidence of a negative impact on success for UGs
  - Note that the range of workload is different for UG and PGbM students
  - Evidence that further increases in load could decrease success for PGbM
  - Not concluded that this same pattern will apply for UGs
- Patterns of load will be closely monitored

Anscombe's quartet
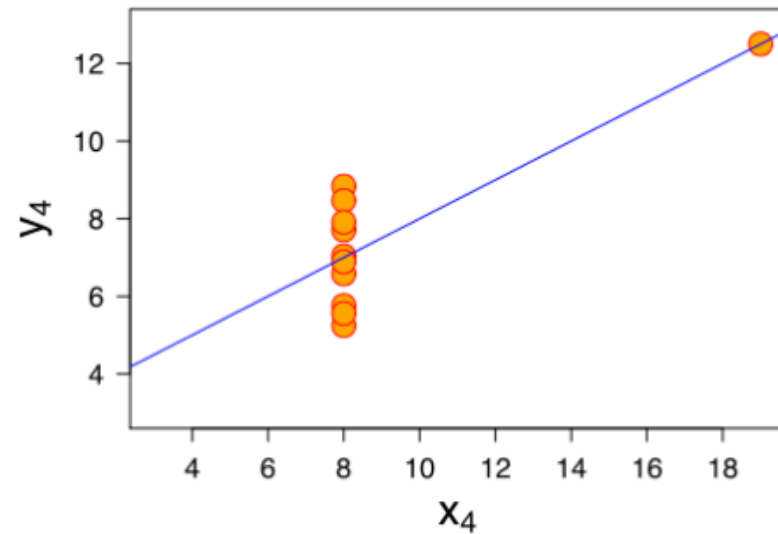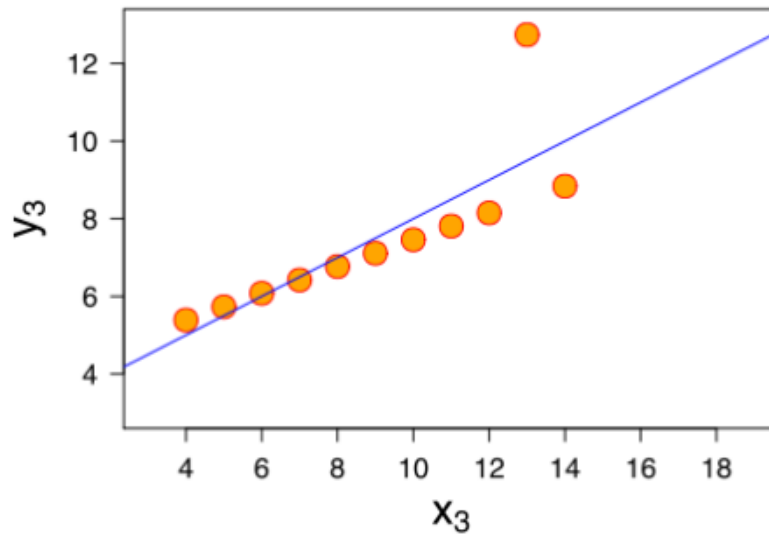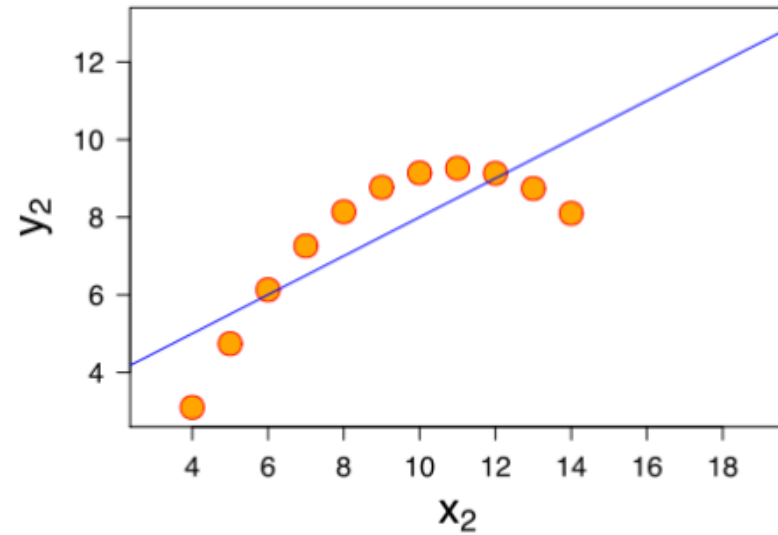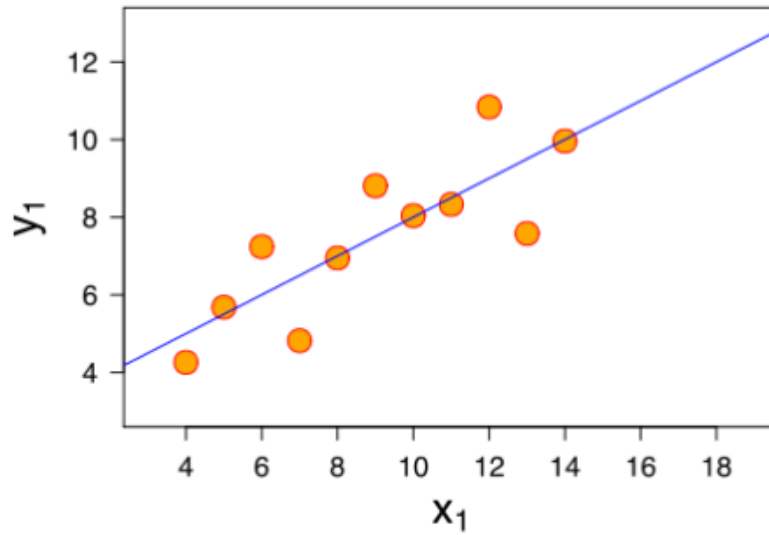
Property	Value
Mean of x in each case	9 (exact)
Sample variance of x in each case	11 (exact)
Mean of y in each case	7.50 (to 2 decimal places)
Sample variance of y in each case	4.122 or 4.127 (to 3 decimal places)
Correlation between x and y in each case	0.816 (to 3 decimal places)
Linear regression line in each case	$y = 3.00 + 0.500x$ (to 2 and 3 decimal places, respectively)
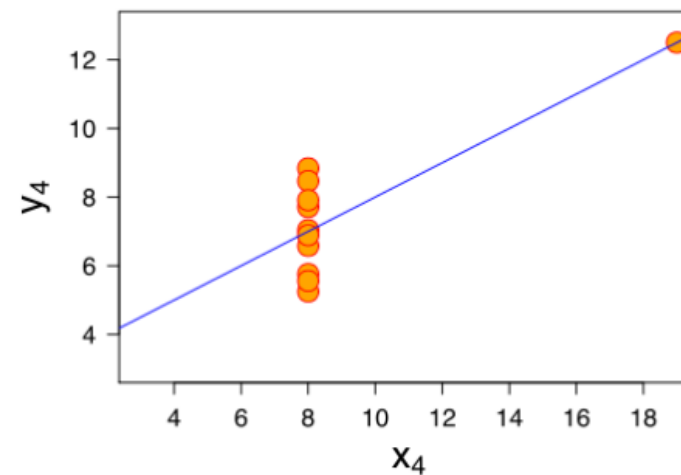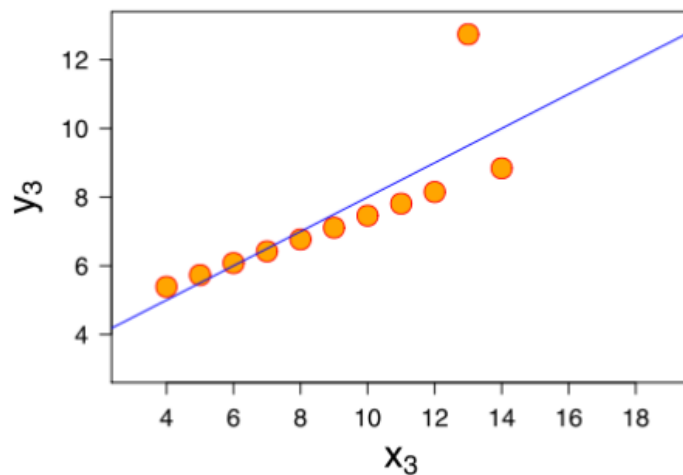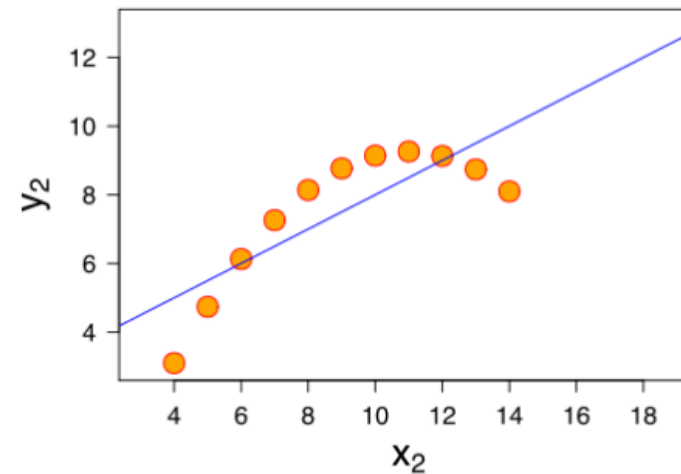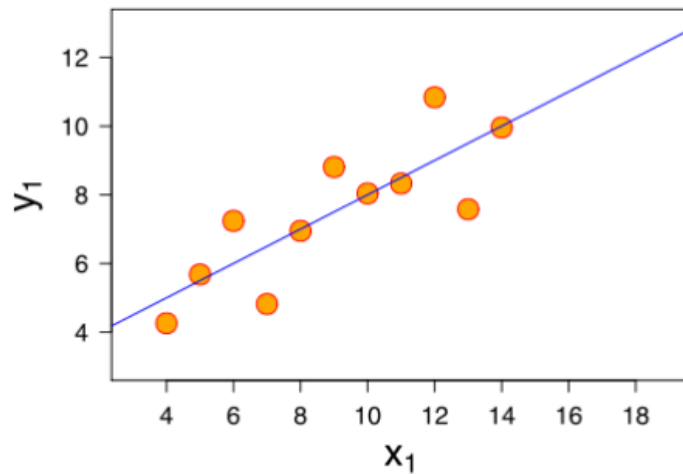
Thank you

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