

MOTIVATING TESTERS – WHAT'S IN A ROLE?

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Scope

- Introduction to Motivation
- Outline of the Motivation Survey
- Survey analysis and results
 - What factors correlate best with motivation?
 - Do existing theories work for testing?
 - How does motivation change for different roles?
- Conclusions & recommendations

Defining Motivation

- a reason or reasons for acting or behaving in a particular way - Oxford Dictionaries
- **internal and external factors that stimulate desire and energy in people to be continually interested and committed to a job**, role or subject, or to make an effort to attain a goal
 - <http://www.businessdictionary.com>

Motivation 101

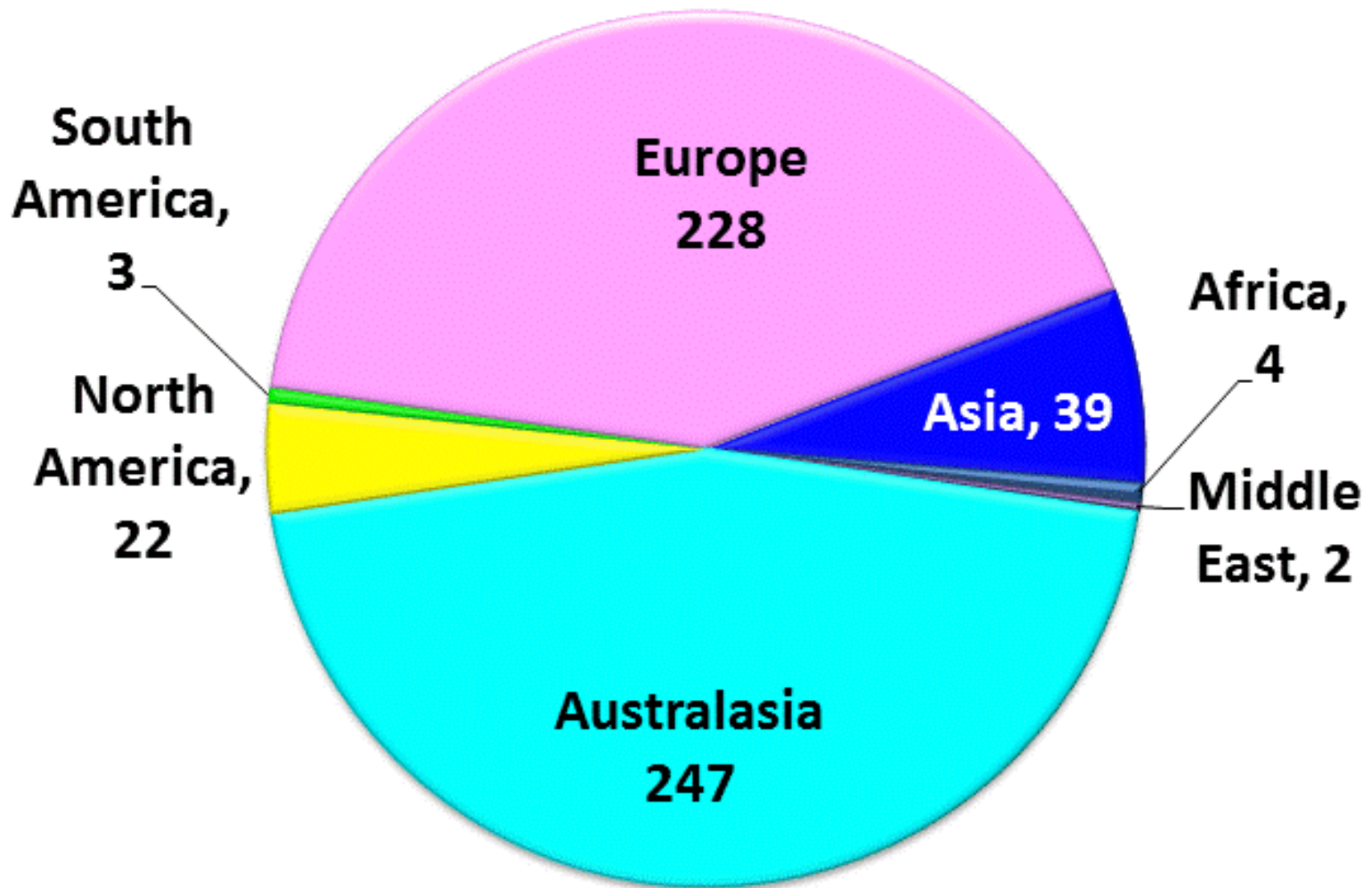


Investigation Approach

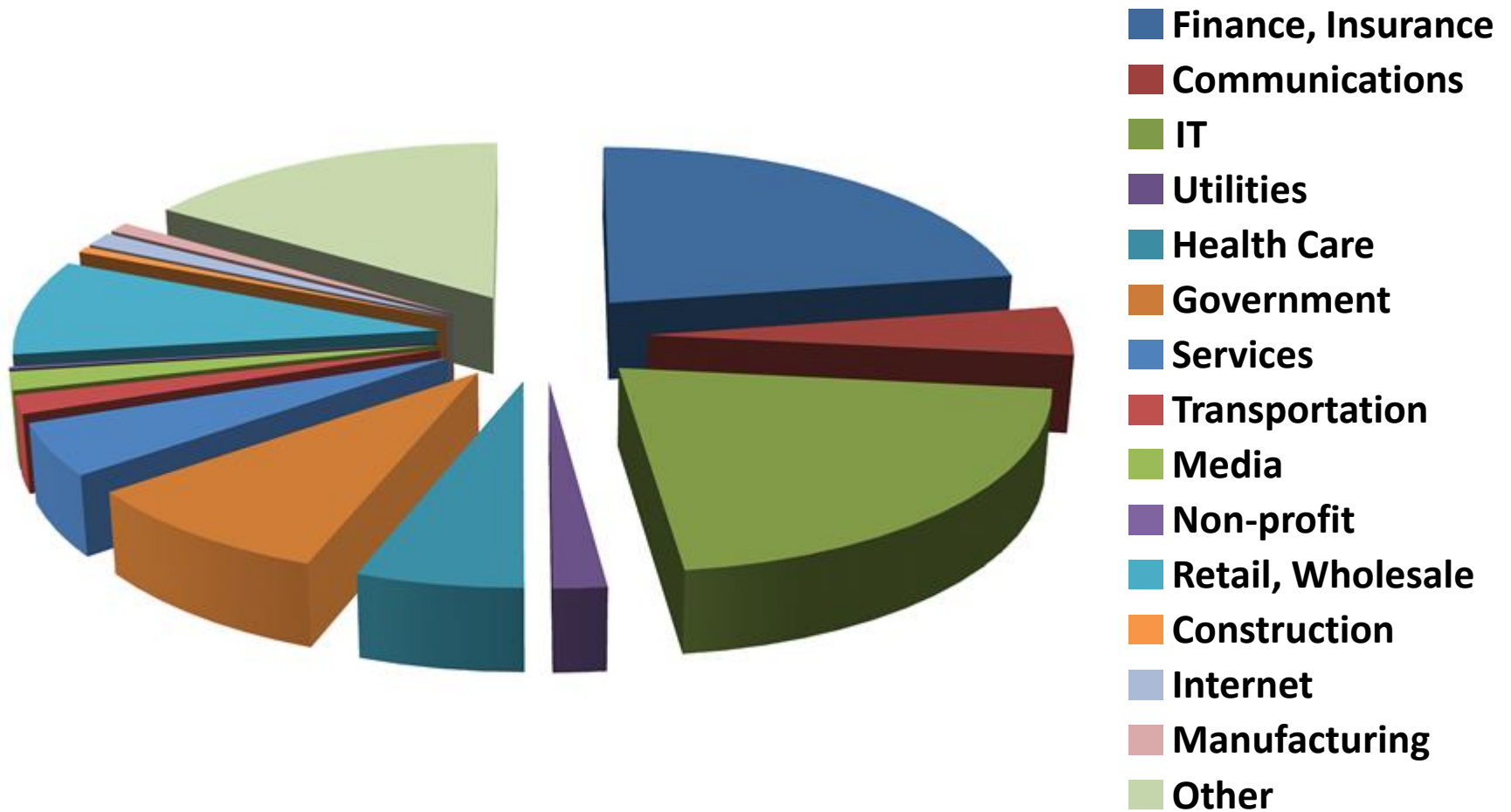
- Questionnaire
 - Paper-based
 - SurveyMonkey
- 40 Questions
 - Demographic
 - Motivation-related (Likert-scale)
 - Open-ended
 - Qualitative & quantitative data
- Responses from around the world (over 600)
- Thanks to Tafline Murnane
 - KJ Ross – Australia



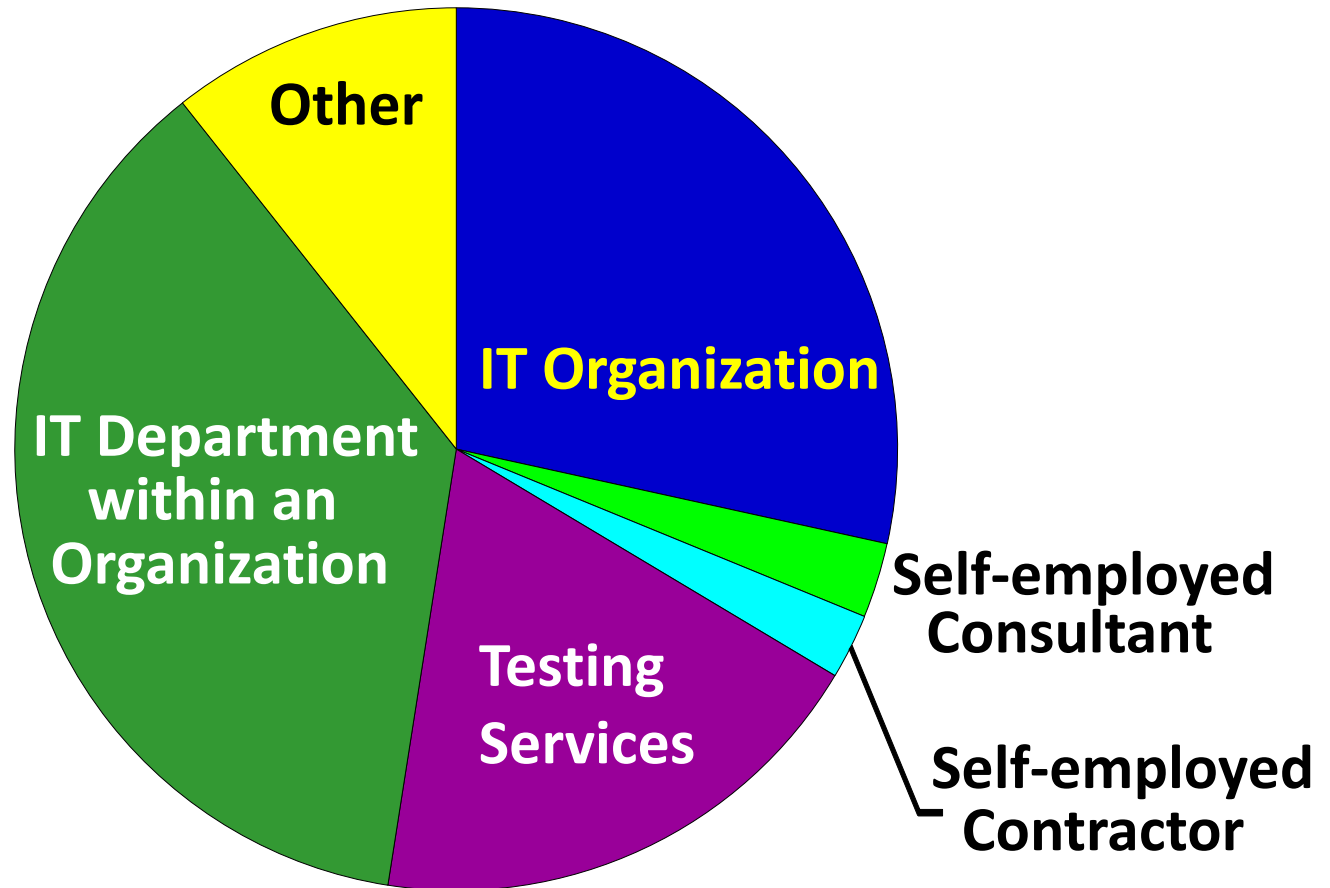
Respondents by Region



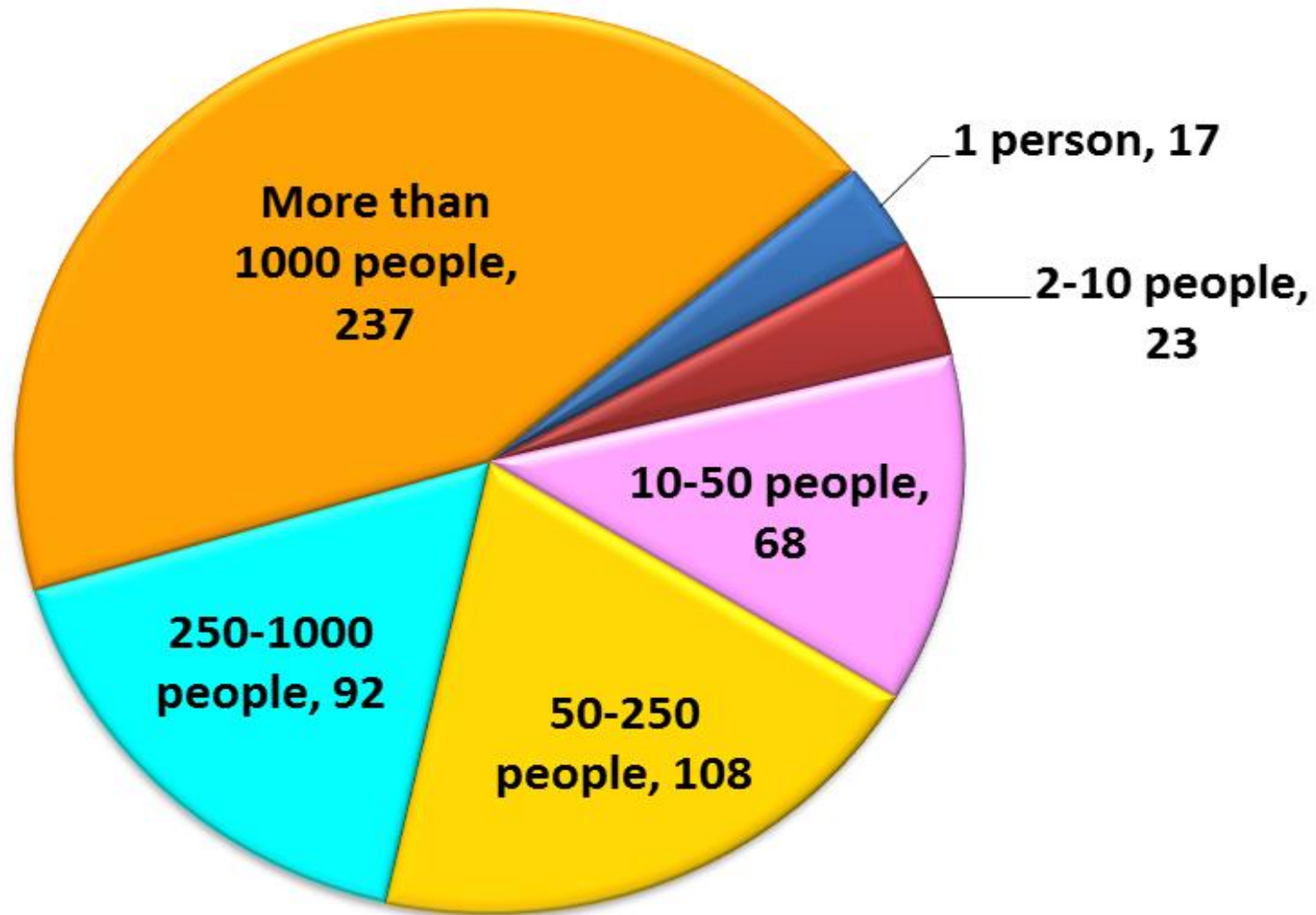
Industry Sectors



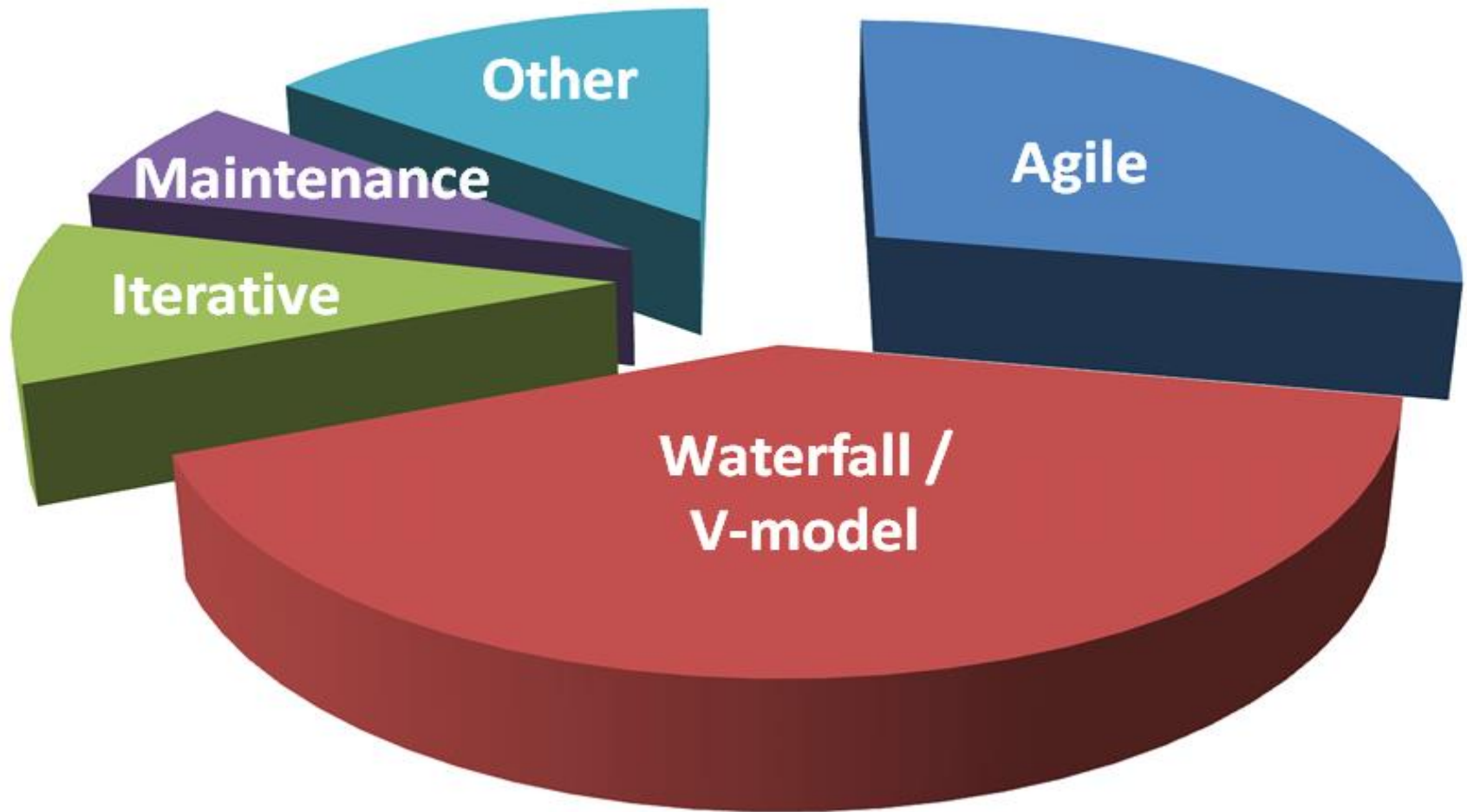
Organization Types



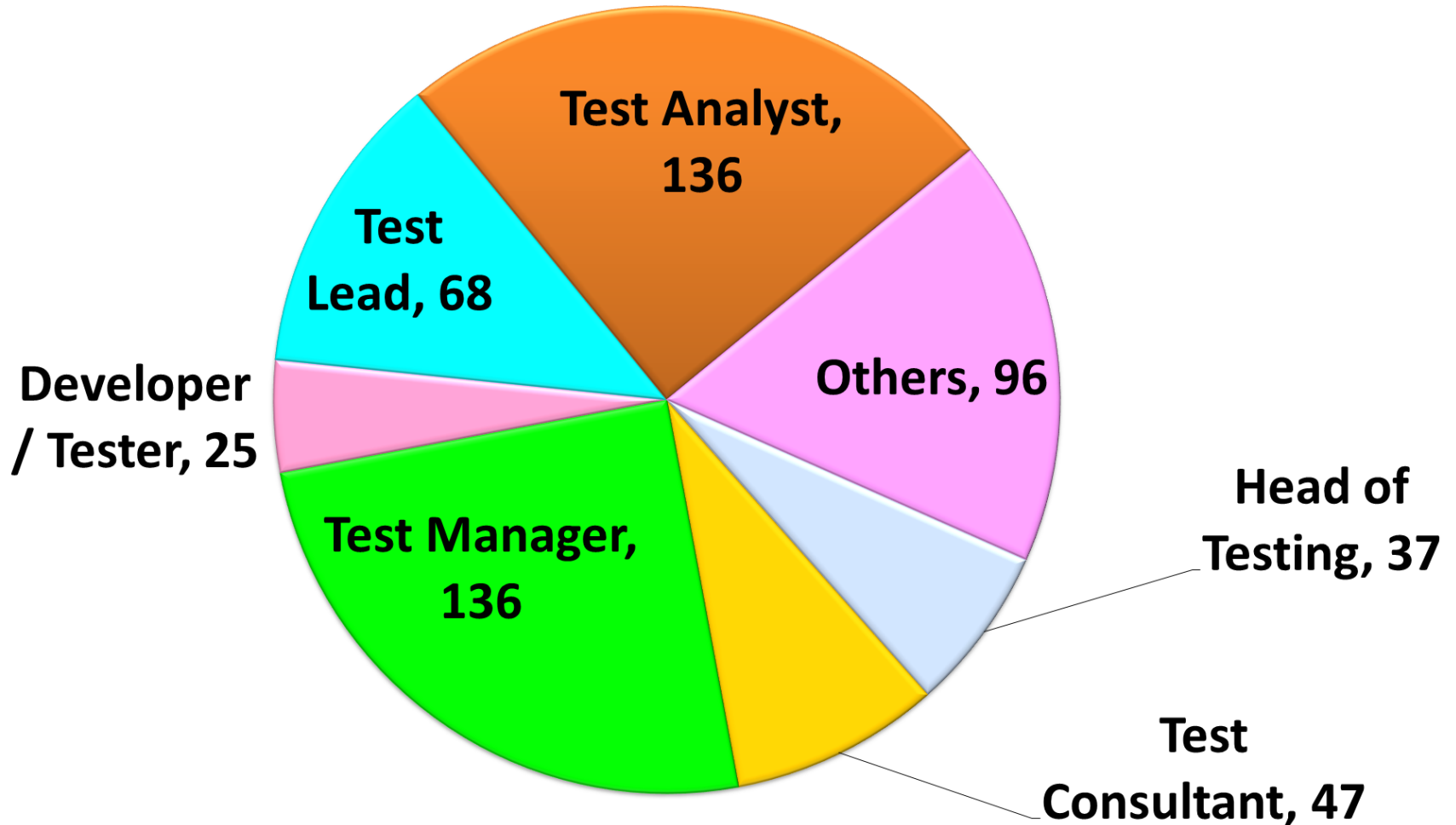
Company Size



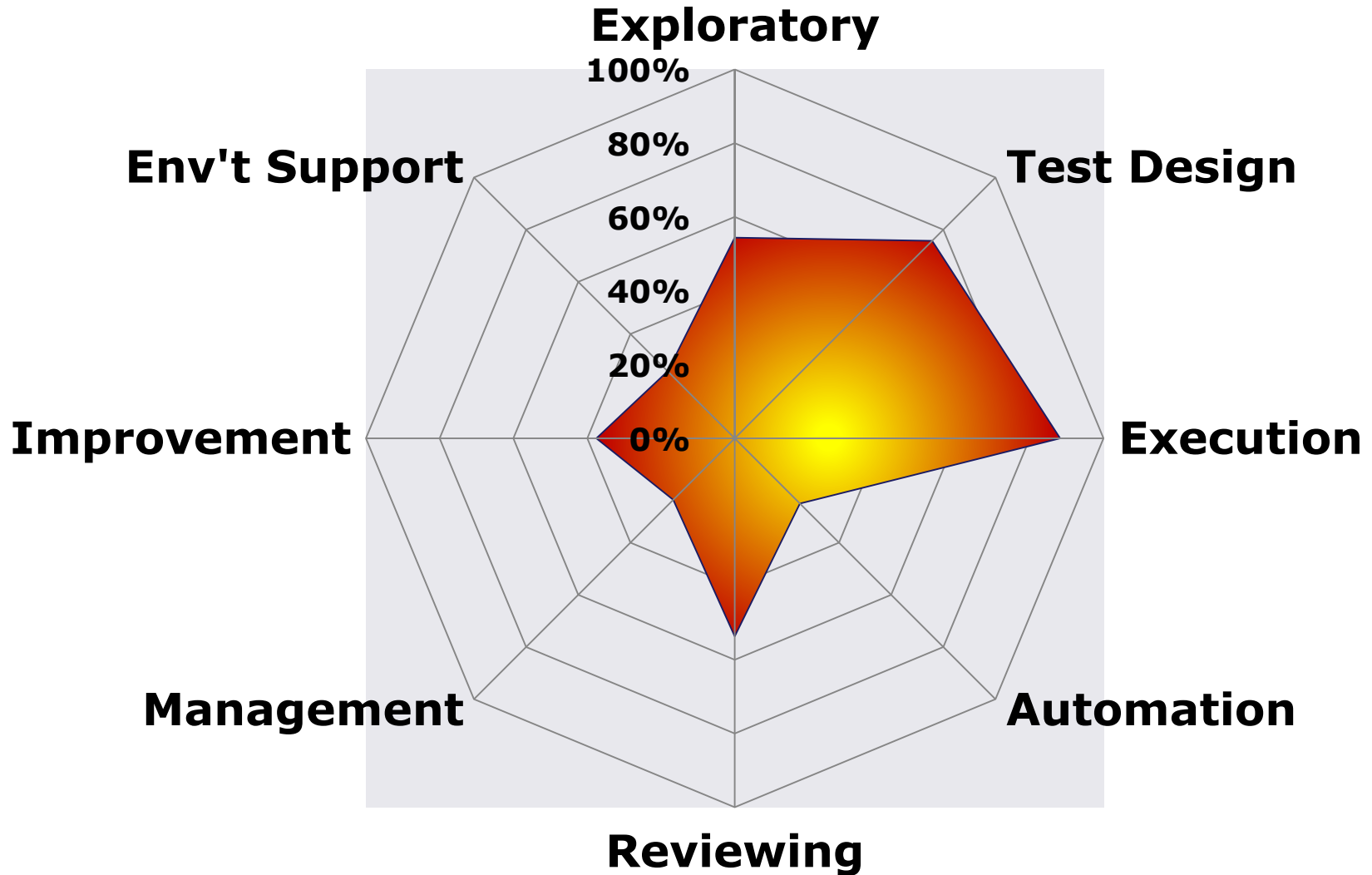
Life Cycles



Testing Roles

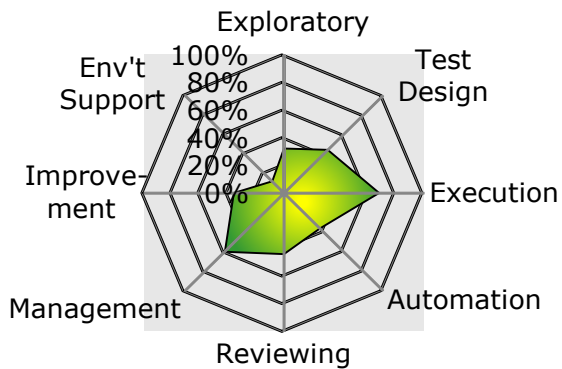


Specified Variety - Test Analyst

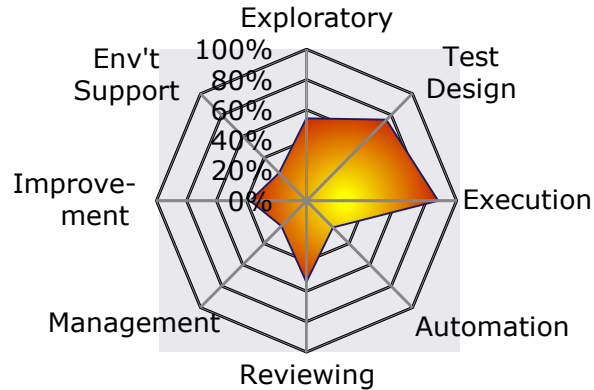


Different Jobs...

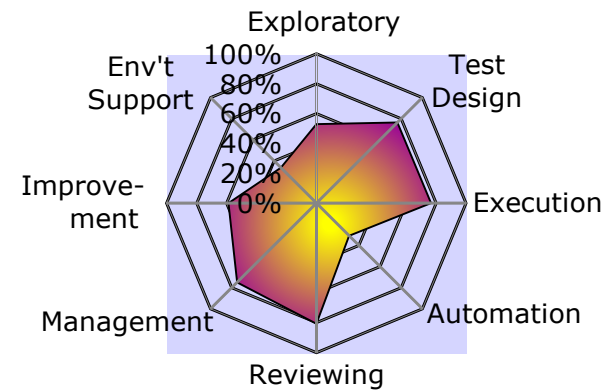
Developer/Tester



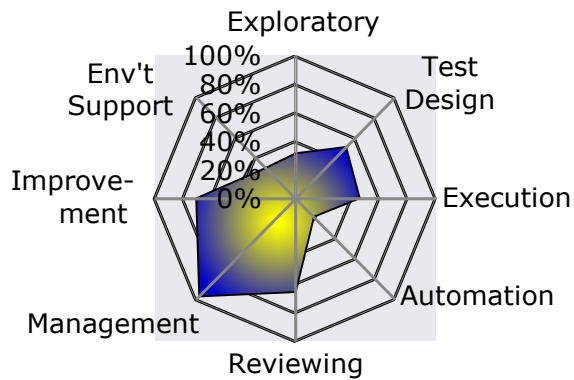
Test Analyst



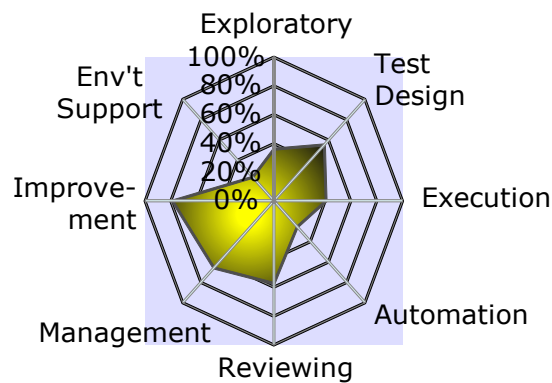
Test Lead



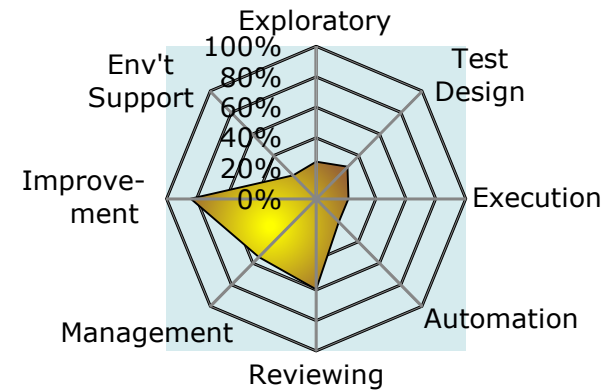
Test Manager



Test Consultant



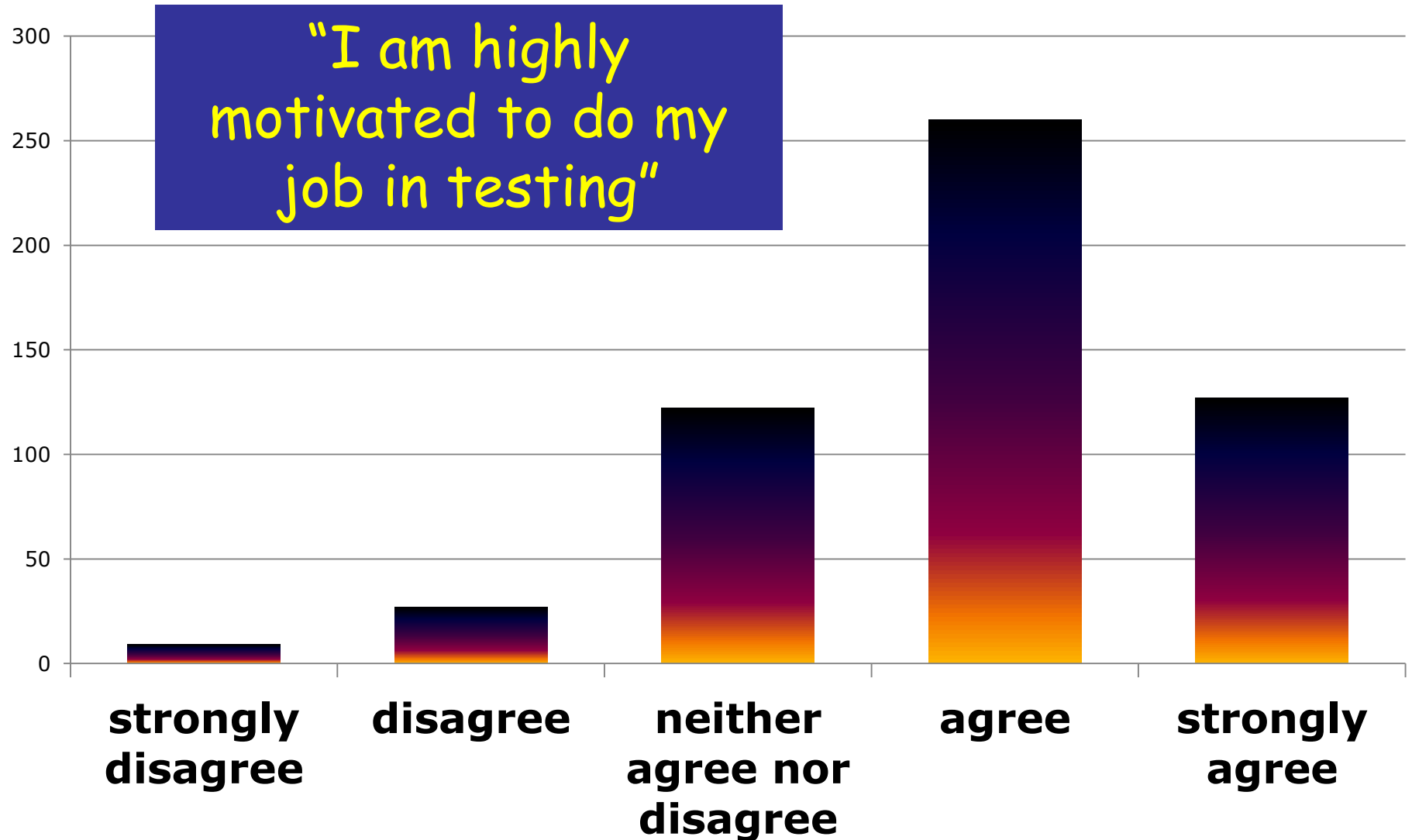
Head of Testing



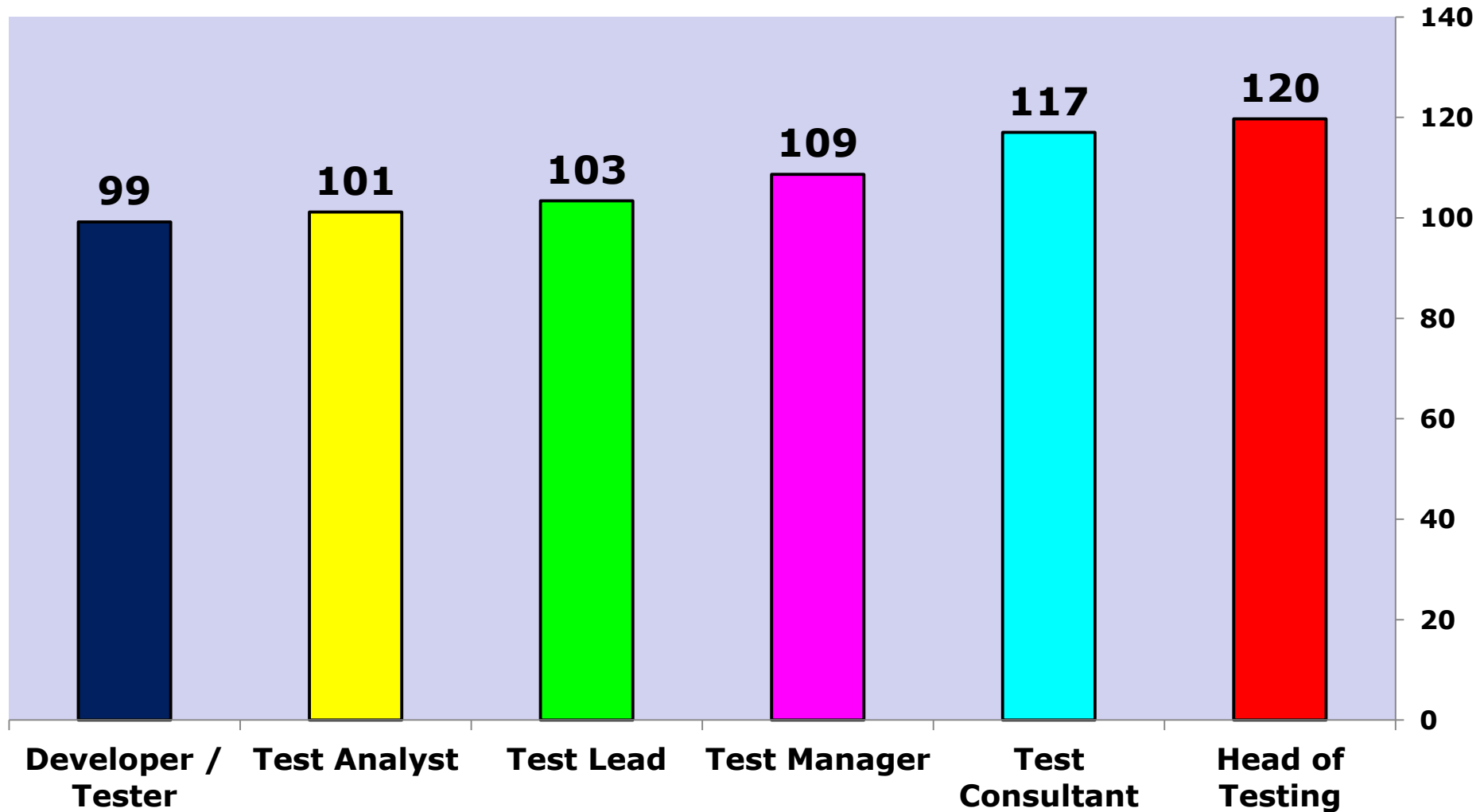
Motivation Theories

- Hierarchy of Needs – Maslow, 1943
- Motivation-Hygiene Theory – Herzberg, 1959
- Theory X & Theory Y – McGregor, 1960
- Expectancy Theory – Vroom, 1964
- Equity Theory – Adams, 1965
- Job Characteristics Model (MPS) – Hackman & Oldham, 1976
- Three Needs Theory – McClelland, 1988
- Temporal Motivation Theory (TMT) - Steel and Konig, 2006
- Motivation 3.0 (MAP) – Pink, 2010

Perceived Motivation

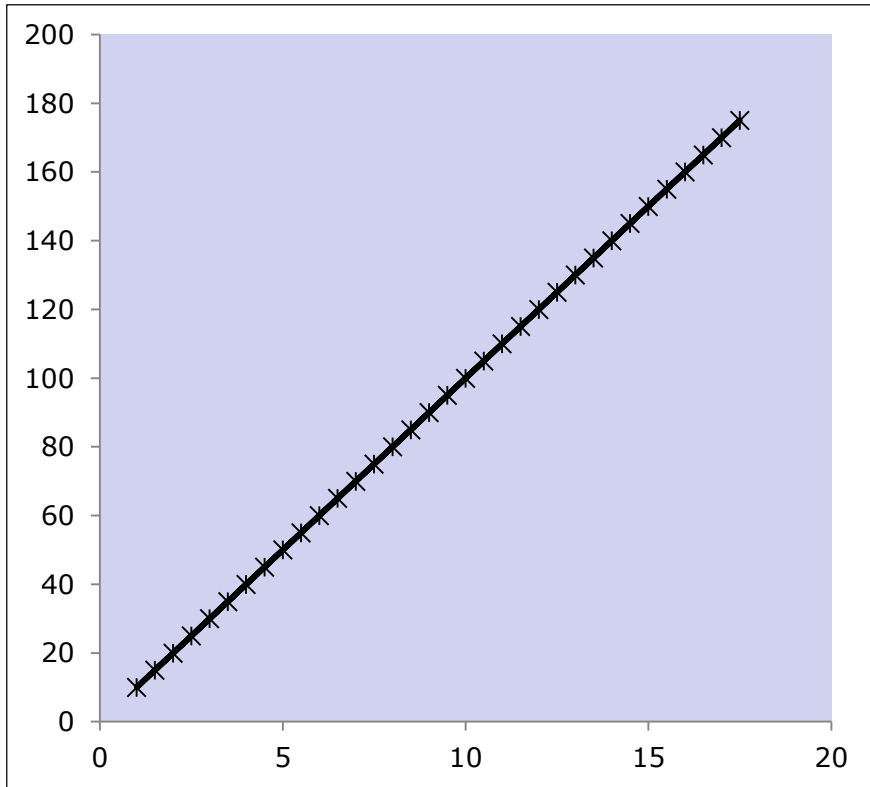


Perceived Motivation - Roles

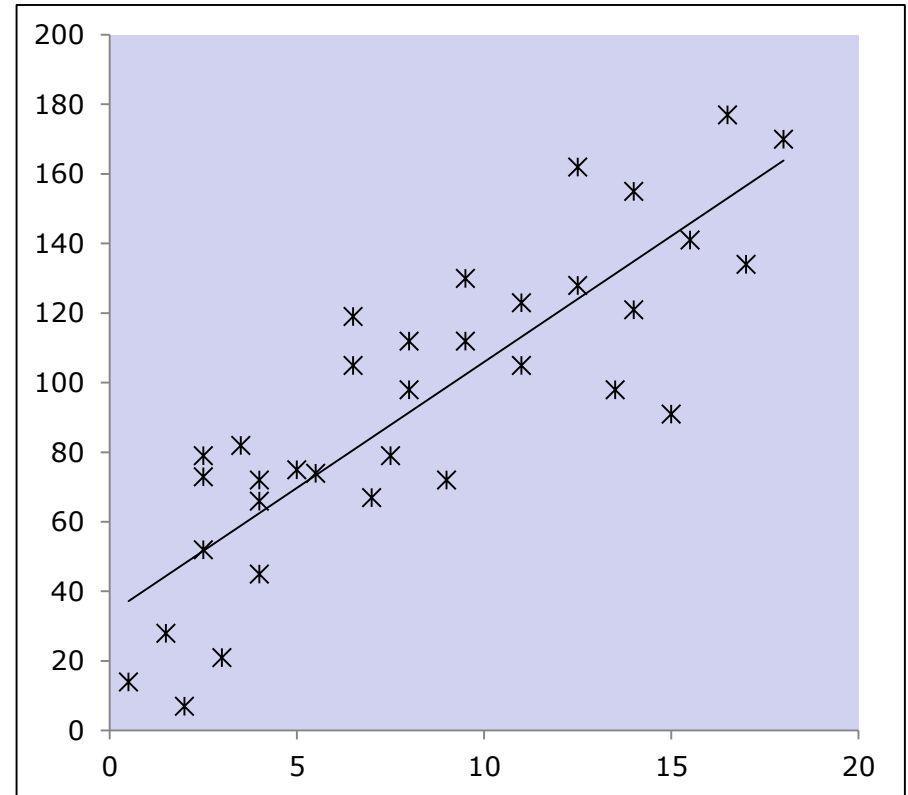


Pearson's Correlation Coefficient

$$r = 1$$



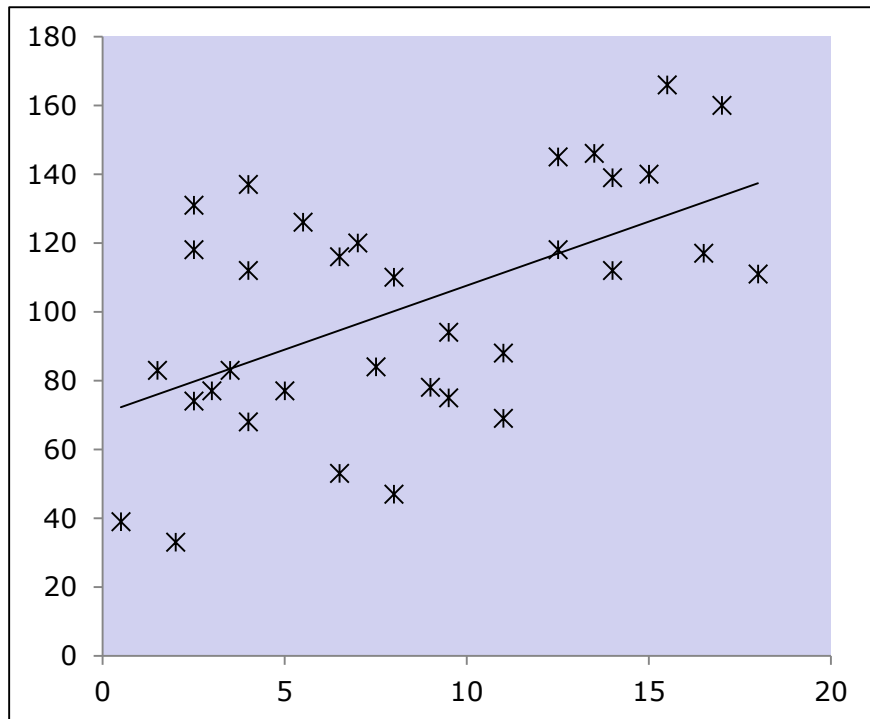
$$r = 0.85$$



**$r = +0.70$ or higher
Very strong positive relationship**

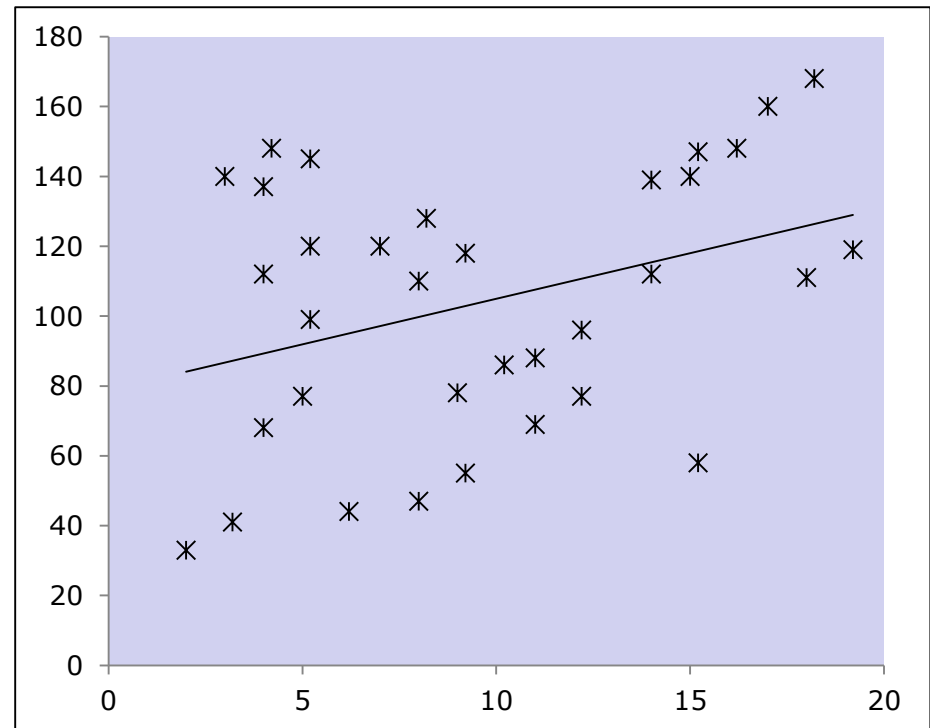
Pearson's Correlation Coefficient

$$r = 0.55$$



$r = +0.40$ to $+0.69$
Strong positive relationship

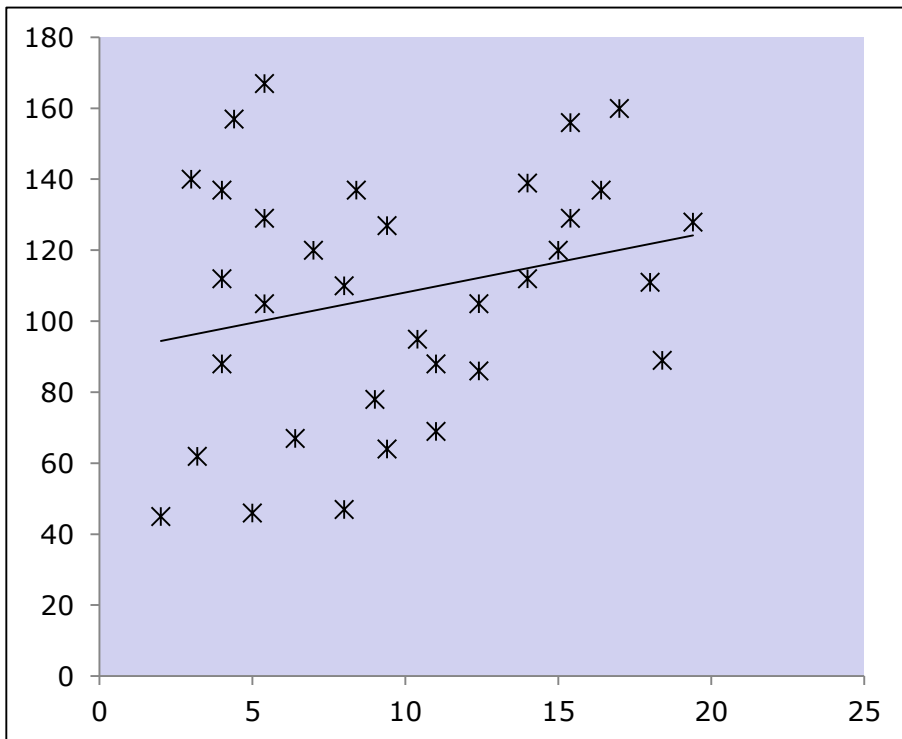
$$r = 0.35$$



$r = +0.30$ to $+0.39$
Moderate positive relationship

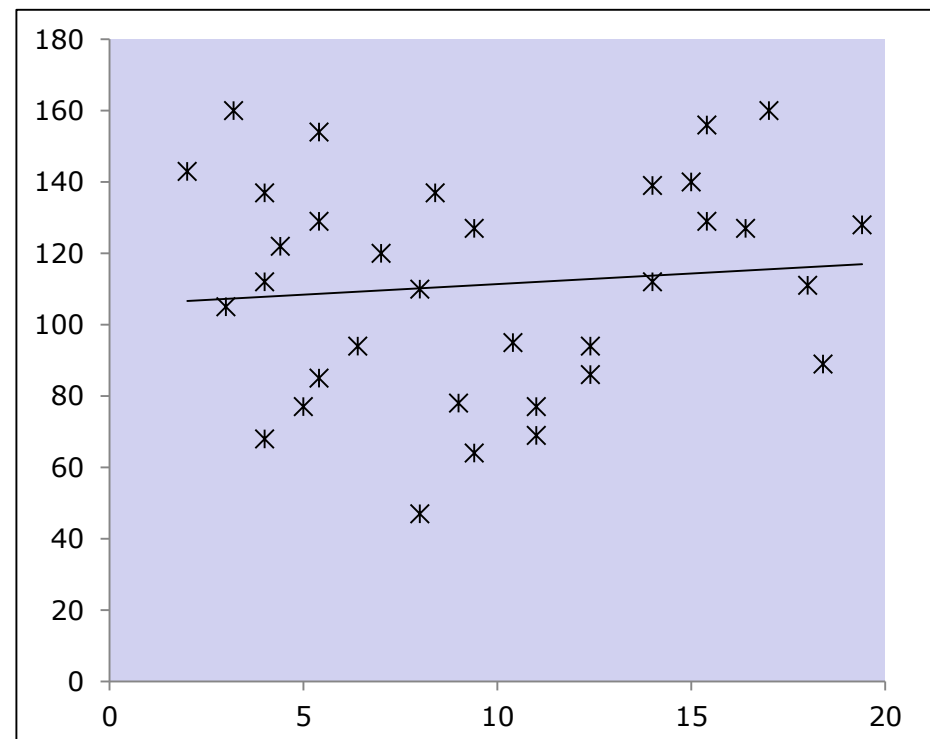
Pearson's Correlation Coefficient

$$r = 0.25$$



$r = +0.20$ to $+0.29$
Weak positive relationship

$$r = 0.10$$

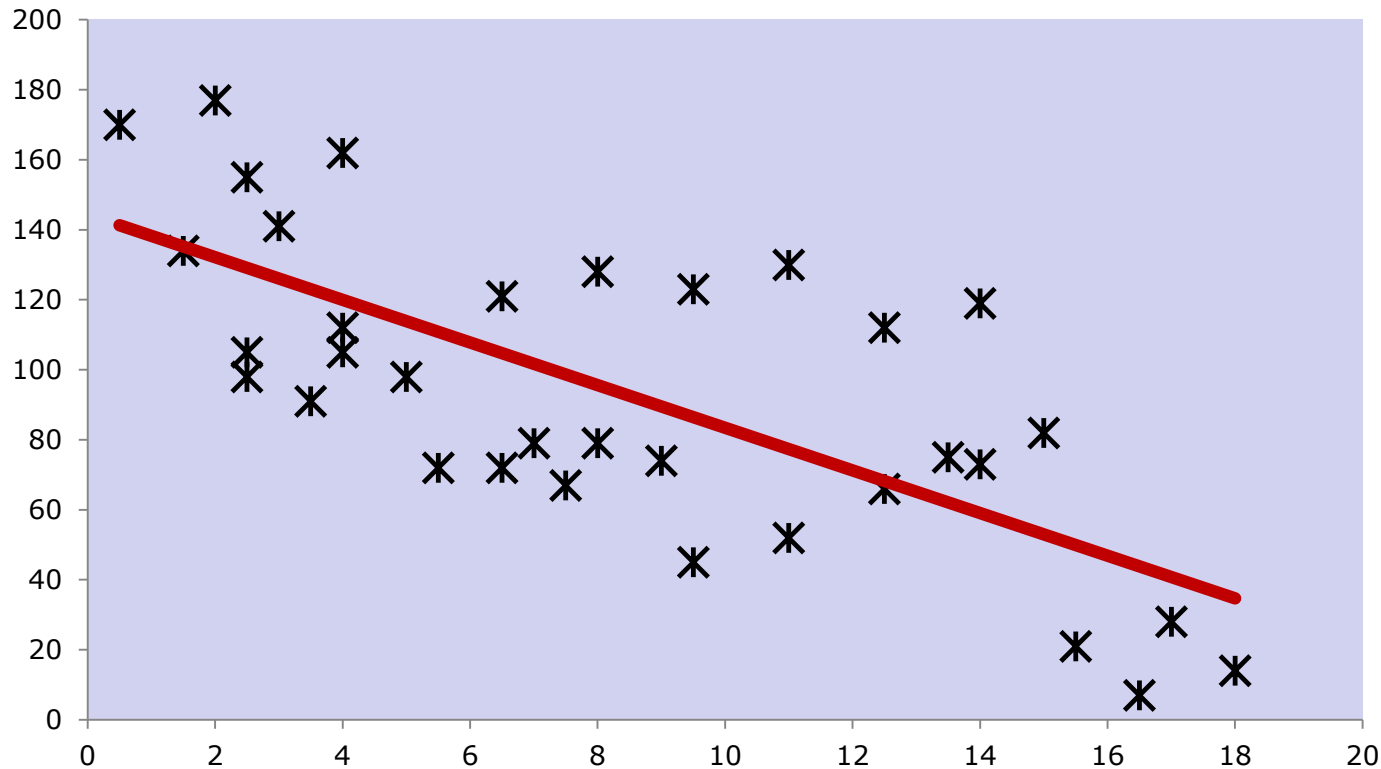


$r = 0$ to $+0.19$
Negligible positive relationship

Pearson's Correlation Coefficient

$r = -0.71$

(Very) strong negative relationship



Motivating Potential Score

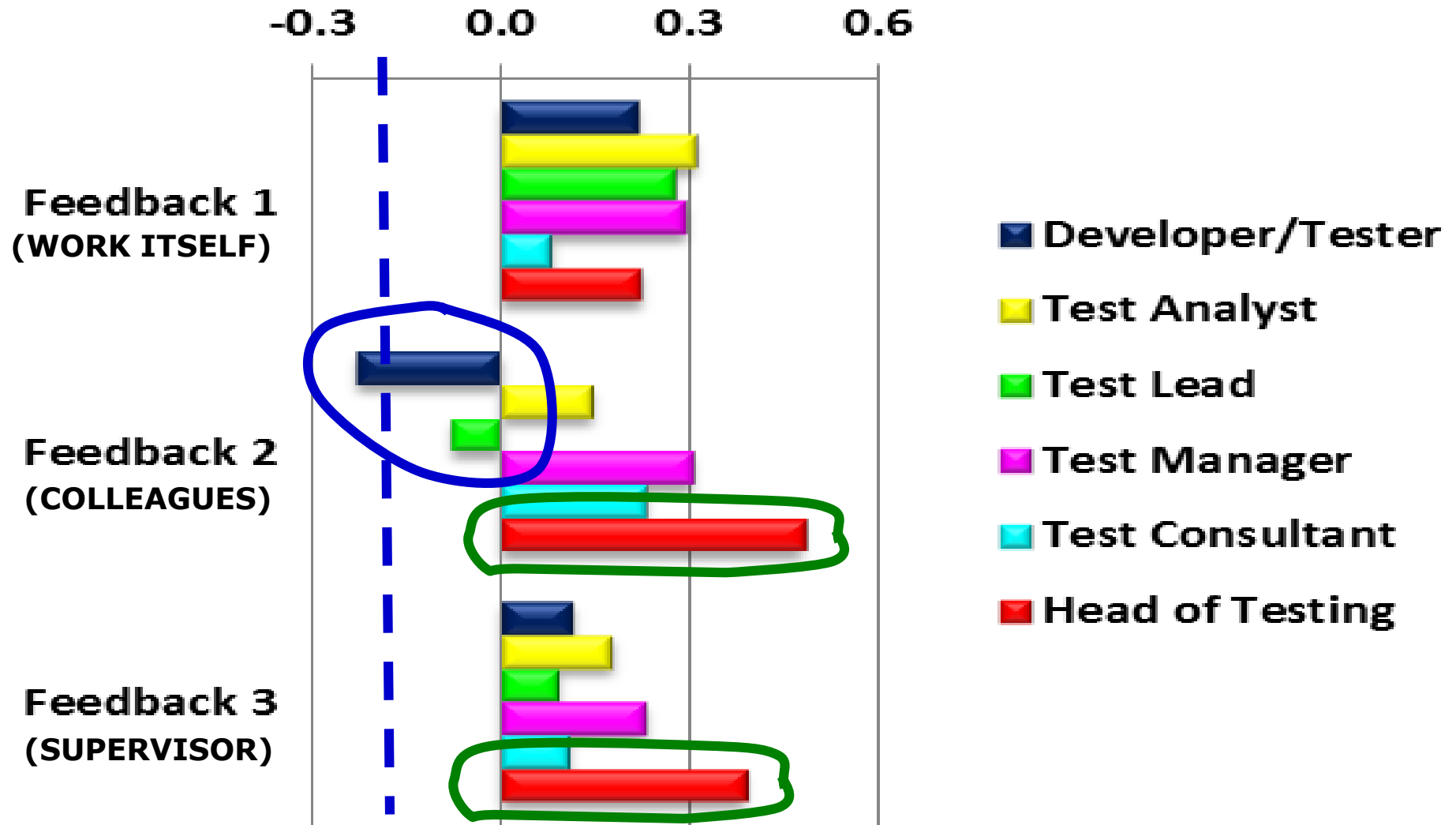
- **Skill Variety** (V)
 - range of different skills used
- **Task Identity** (I)
 - degree of completing a whole job
- **Task Significance** (S)
 - importance of the job
- **Autonomy** (A)
 - level of control of your own time
- **Feedback** (F)
 - degree of supervisory & results-based feedback

Assign a score
of 1 to 7 to
each
attribute...

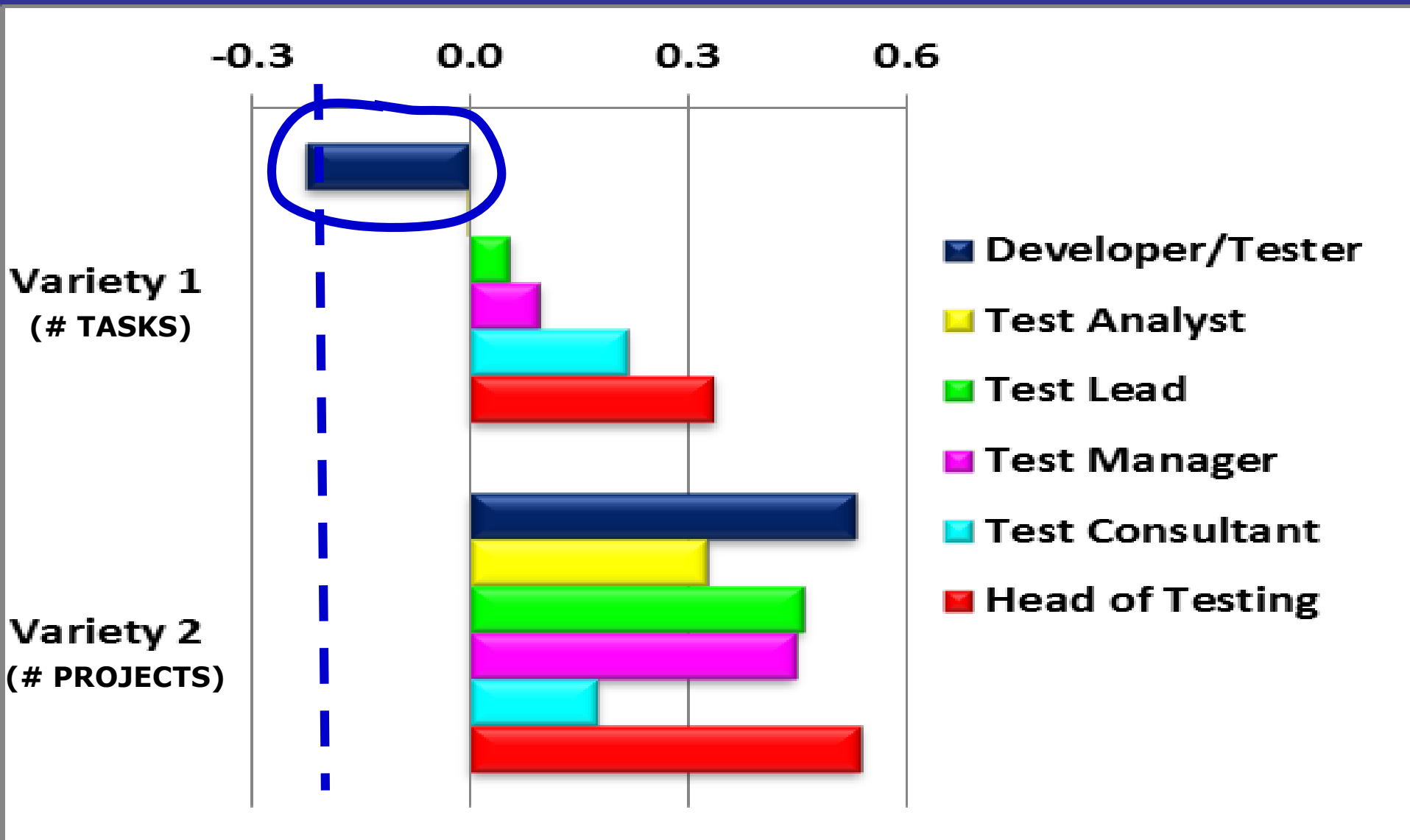
- **MPS** =
$$\frac{(V + I + S)}{3} * A * F$$

...and then
calculate your
MPS

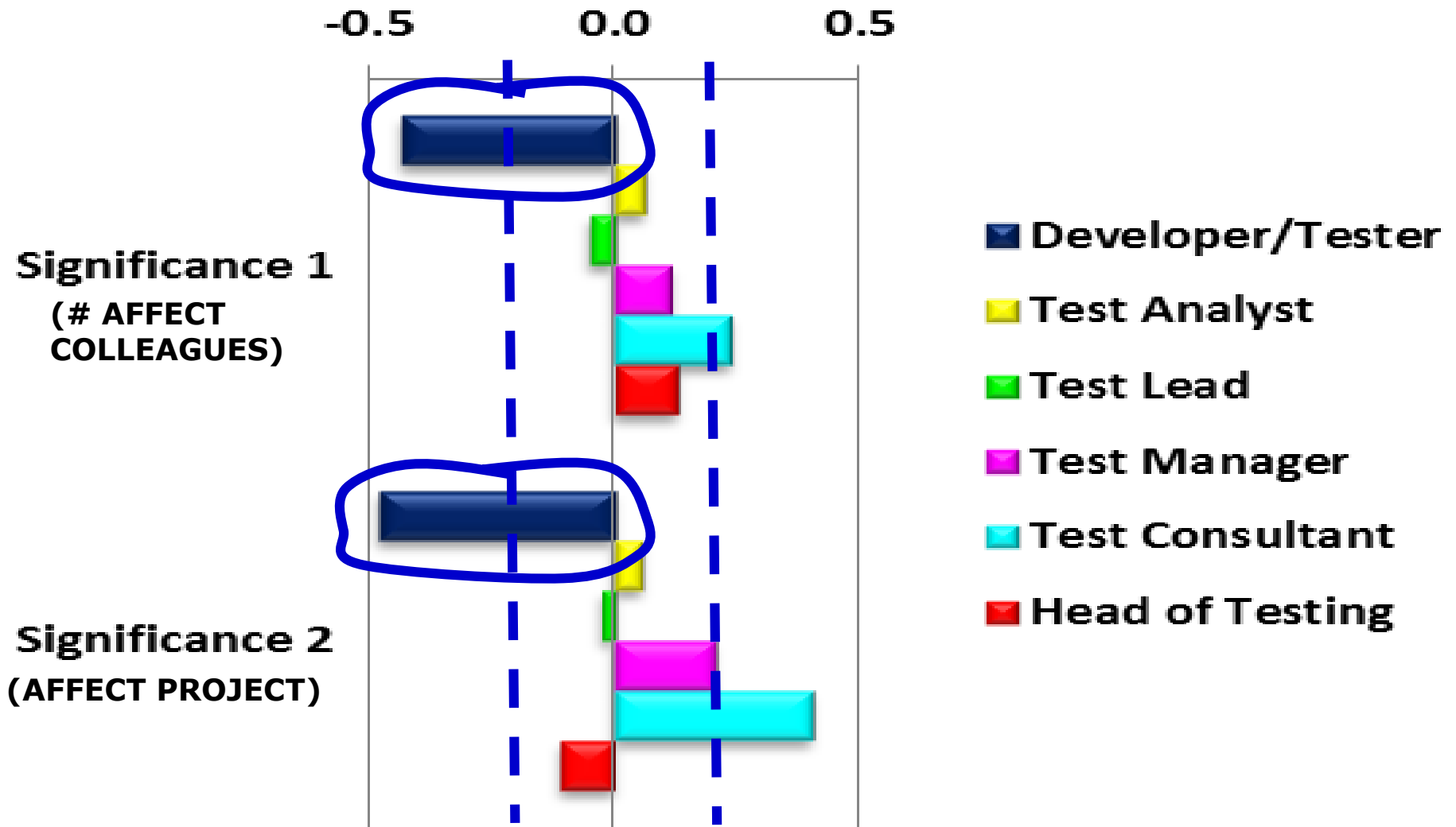
Feedback



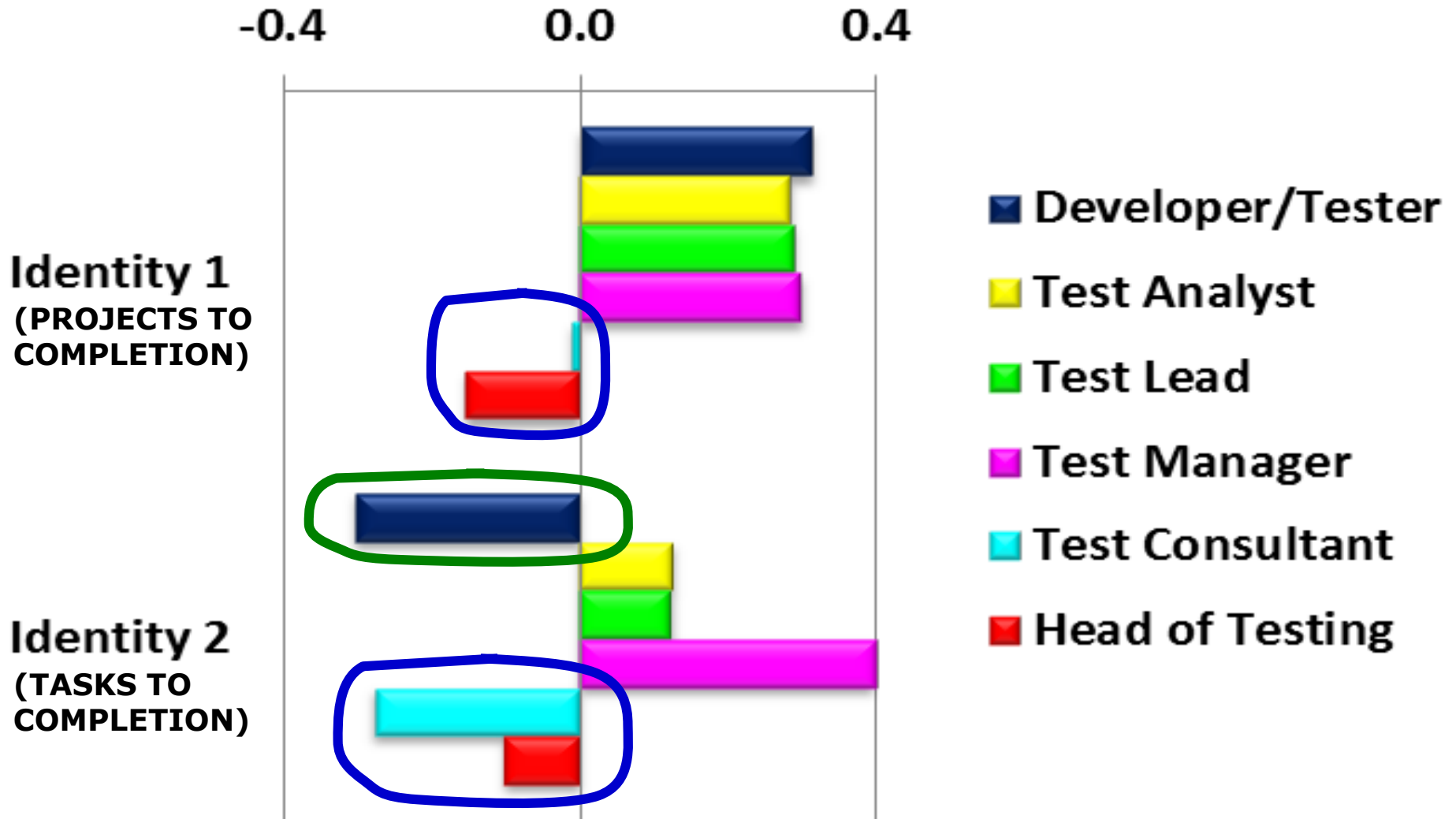
Variety



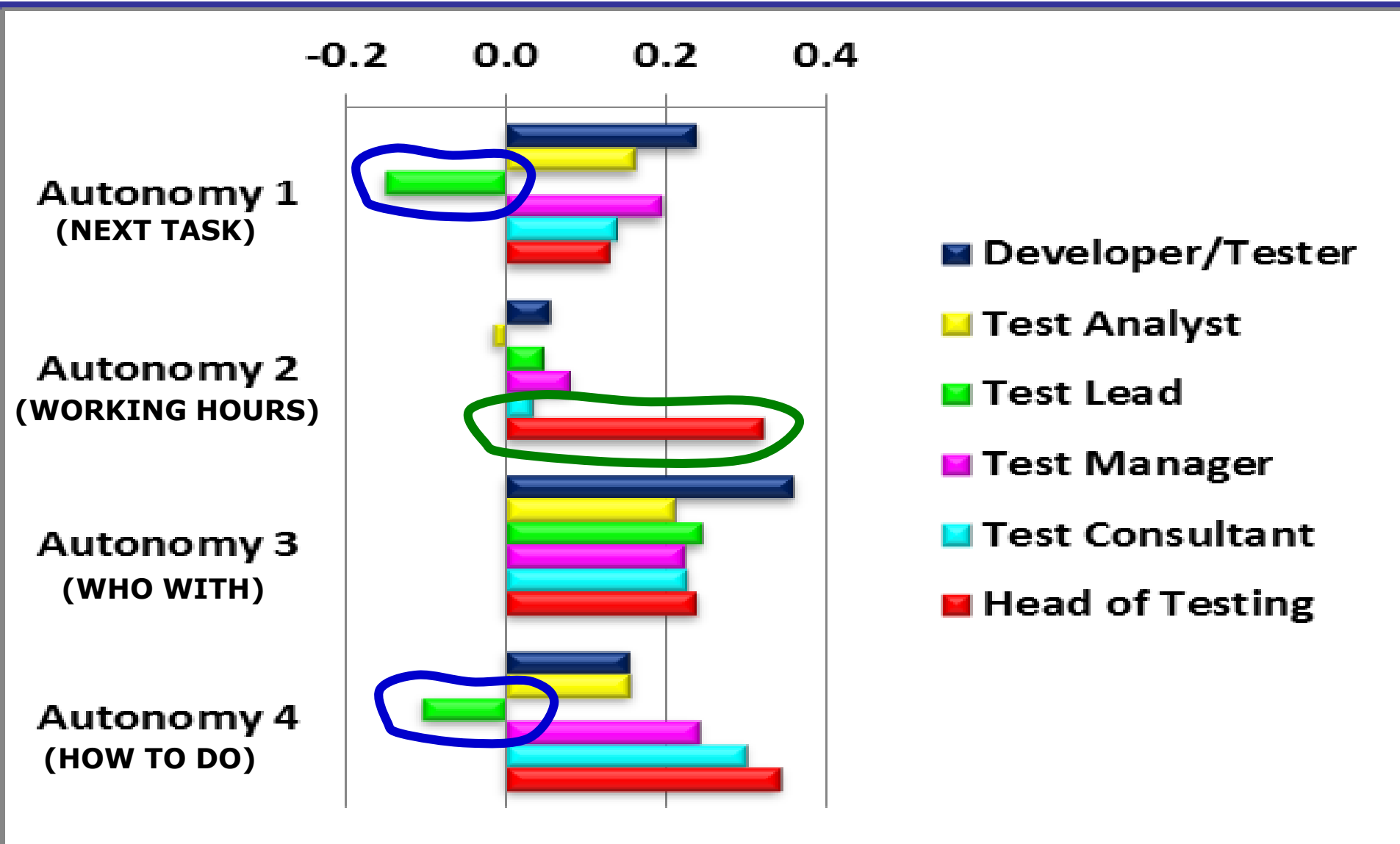
Significance



Identity

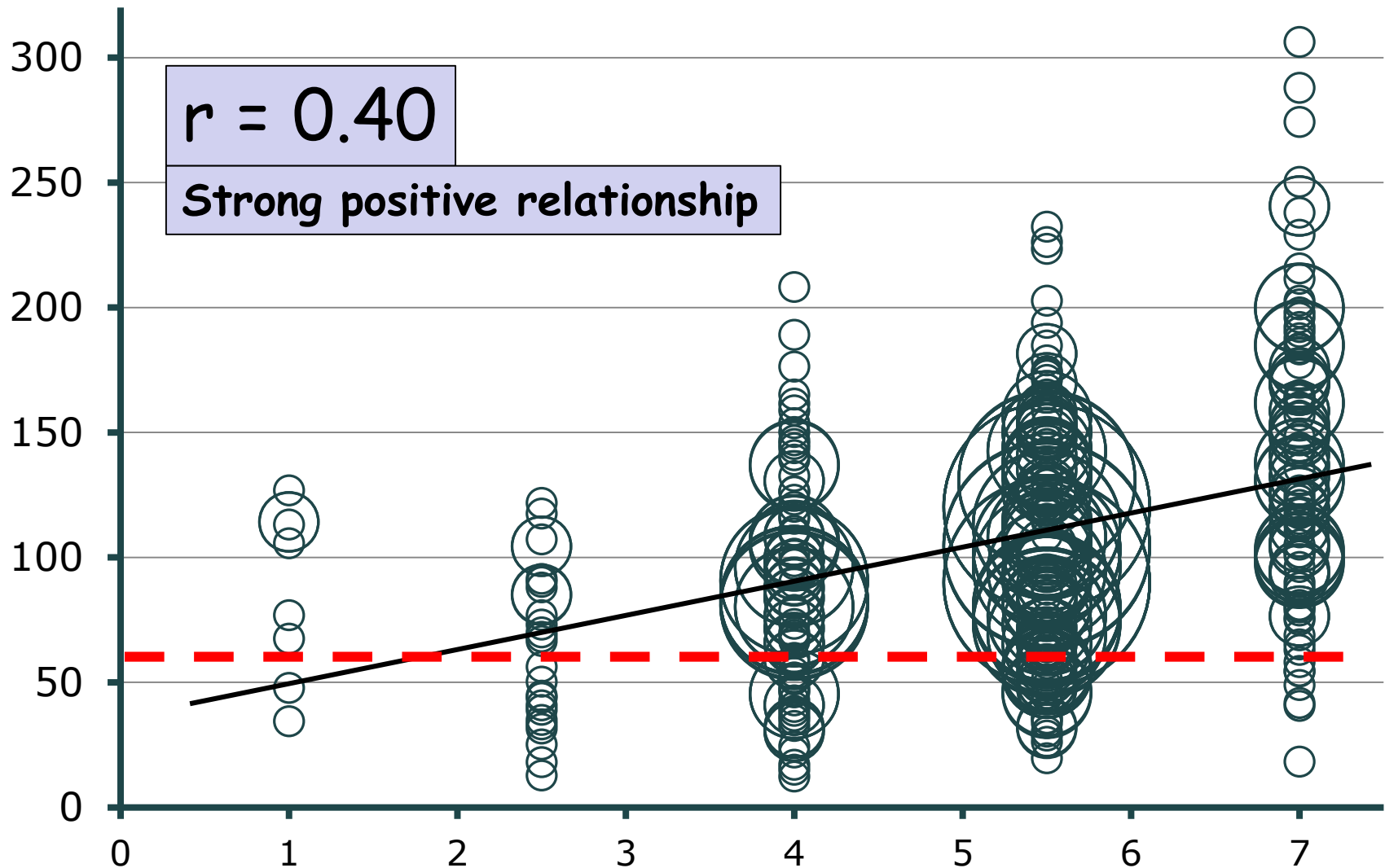


Autonomy



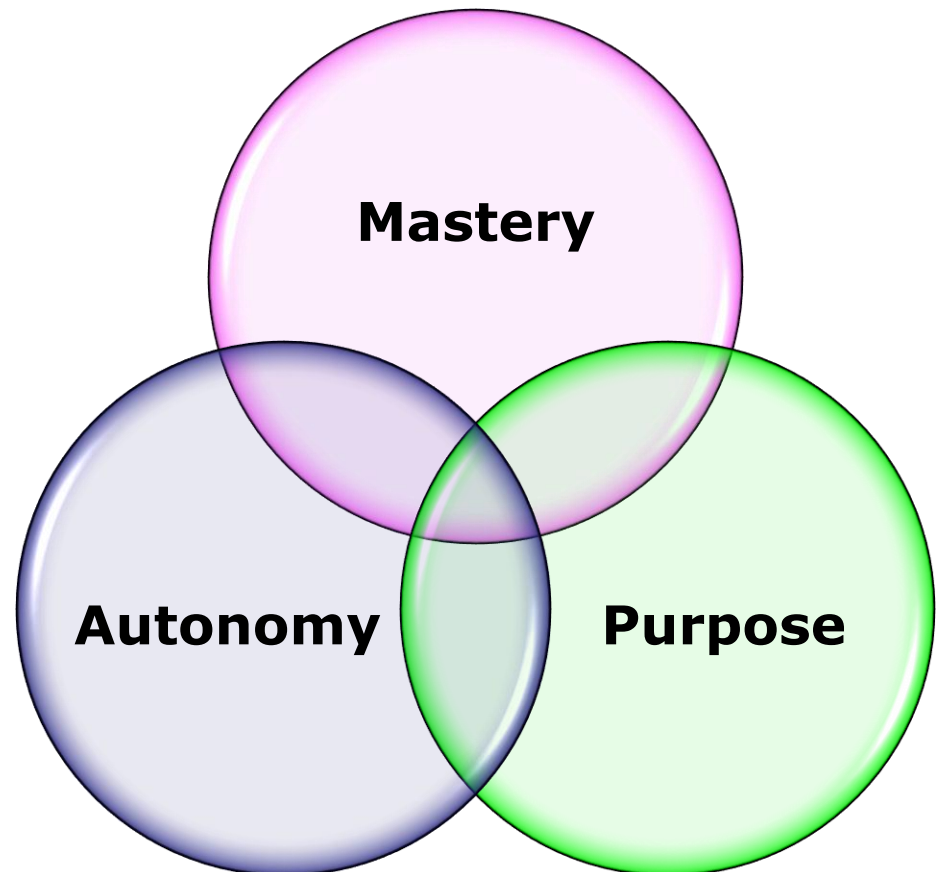
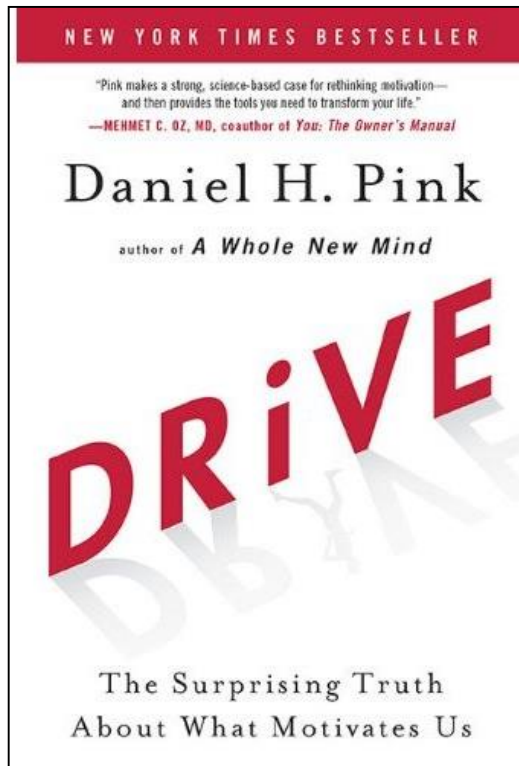
It works!

MPS & Perceived Motivation

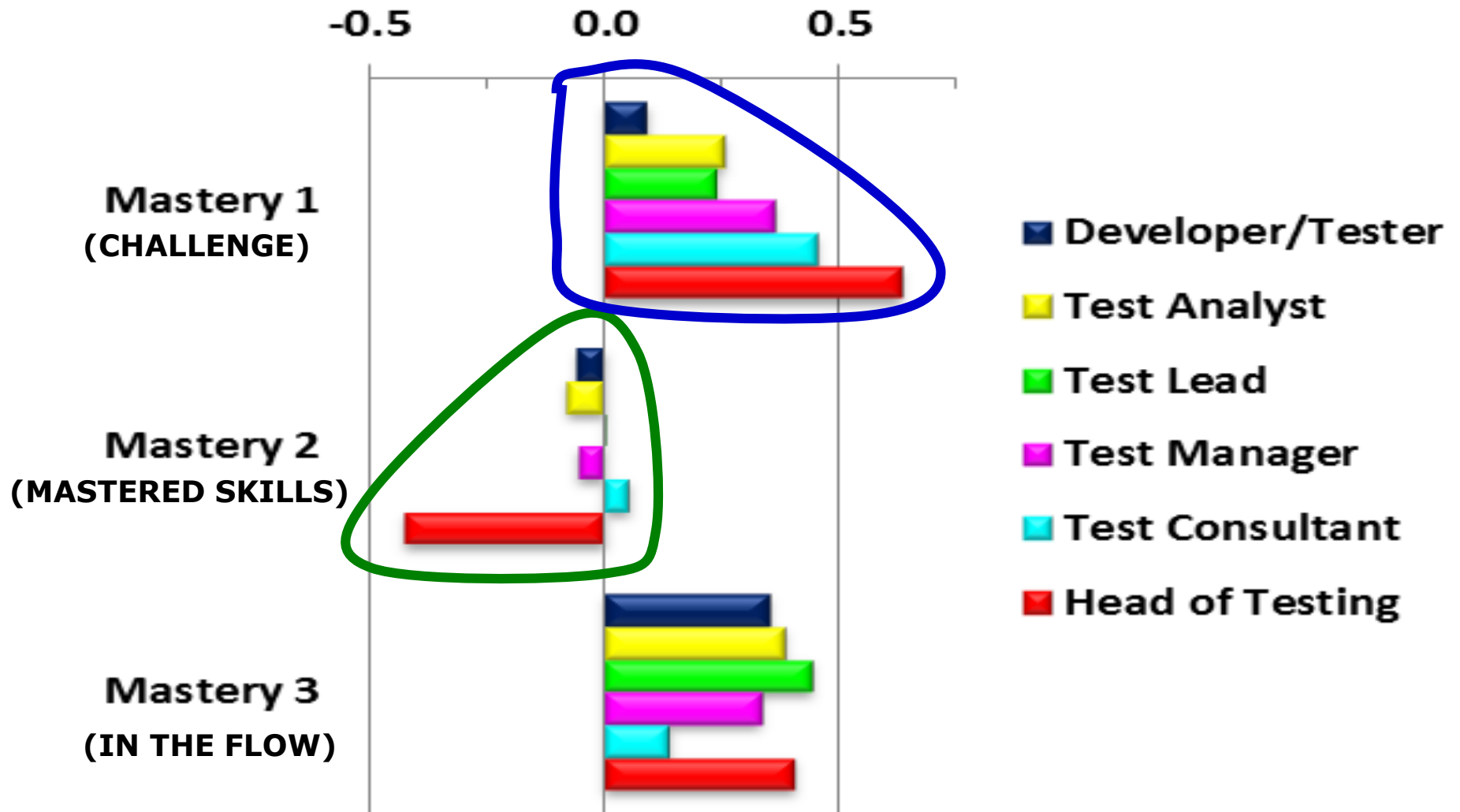


Daniel Pink's MAP

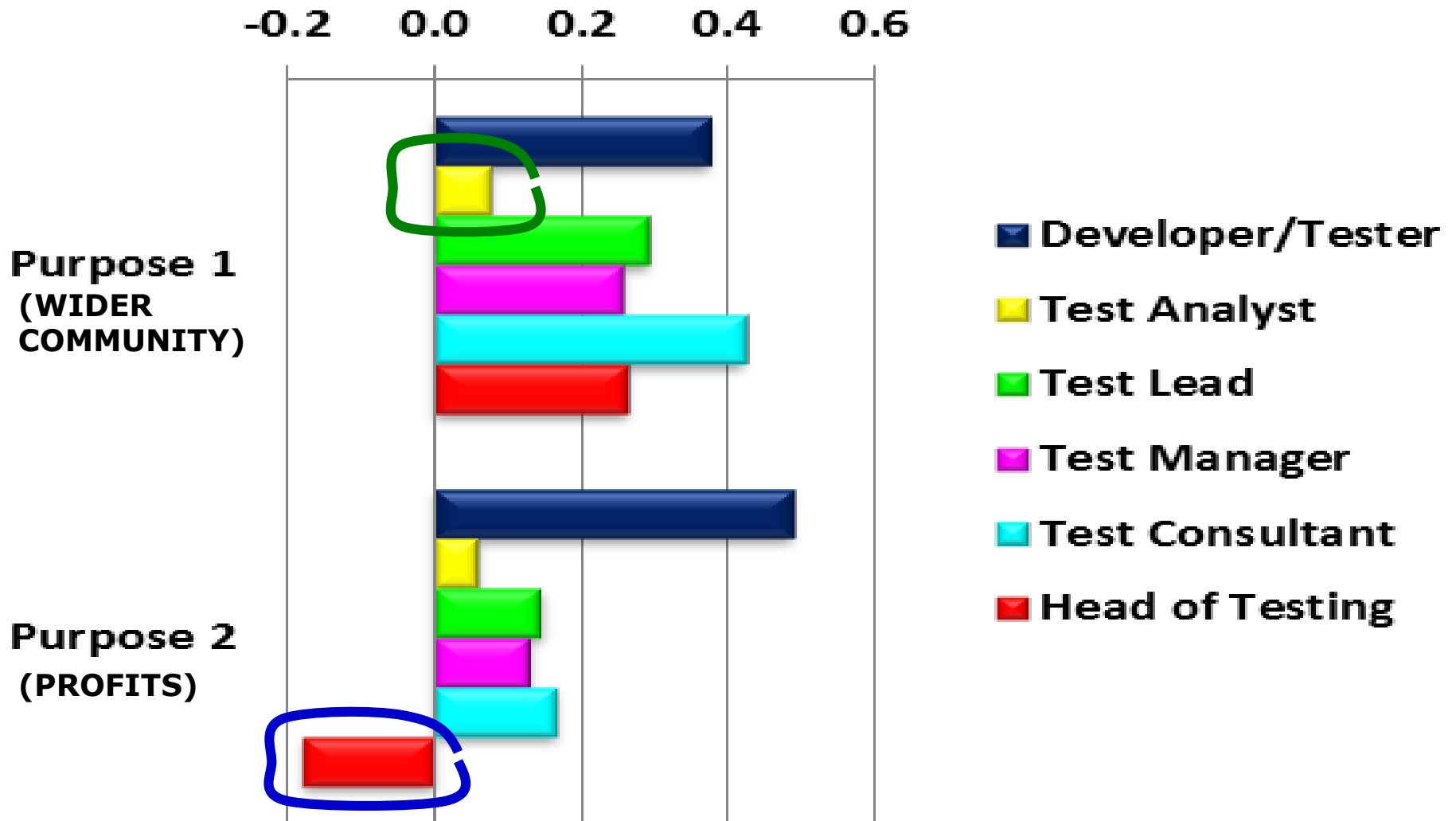
- Daniel Pink's Motivation 3.0



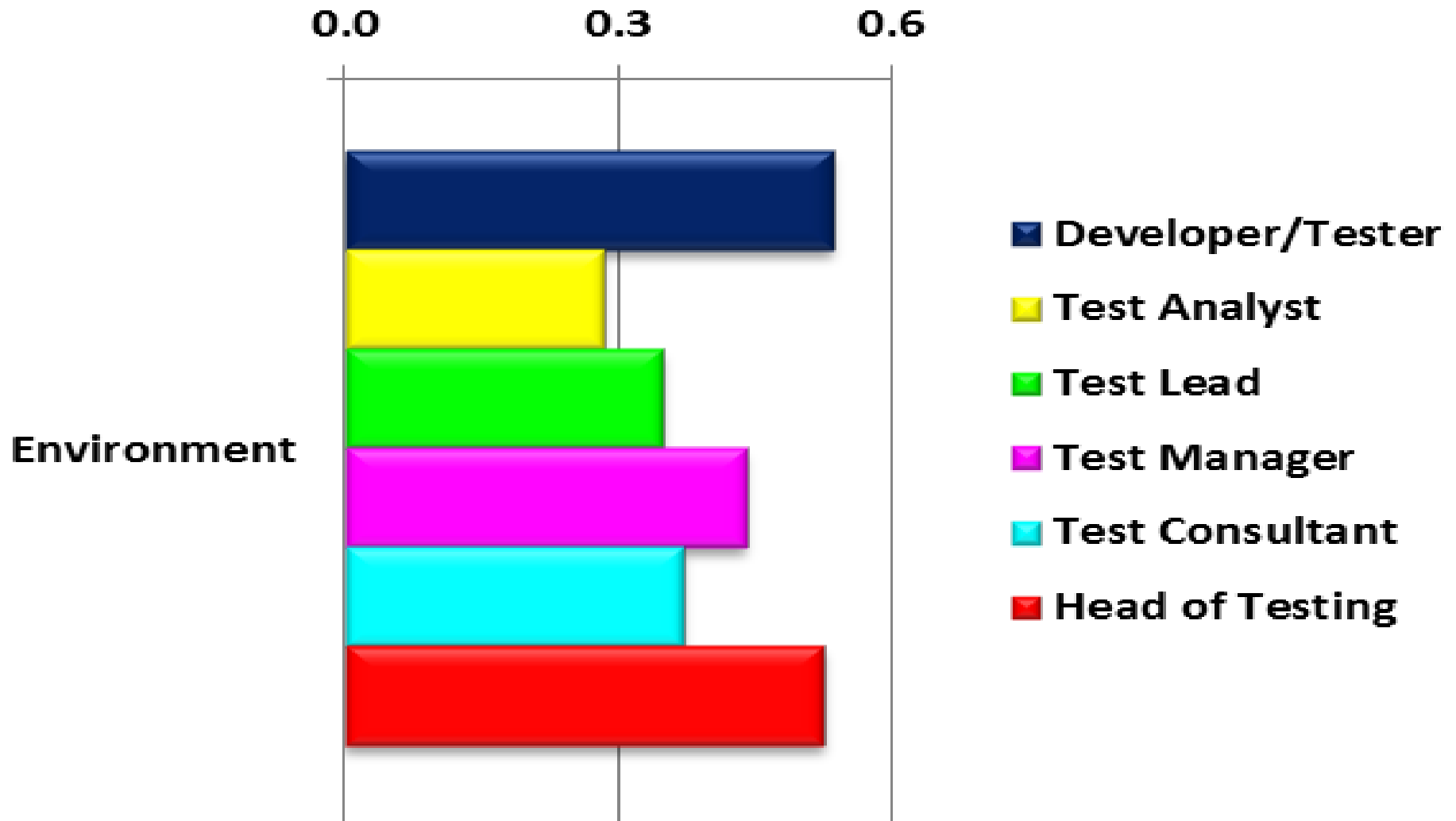
Mastery



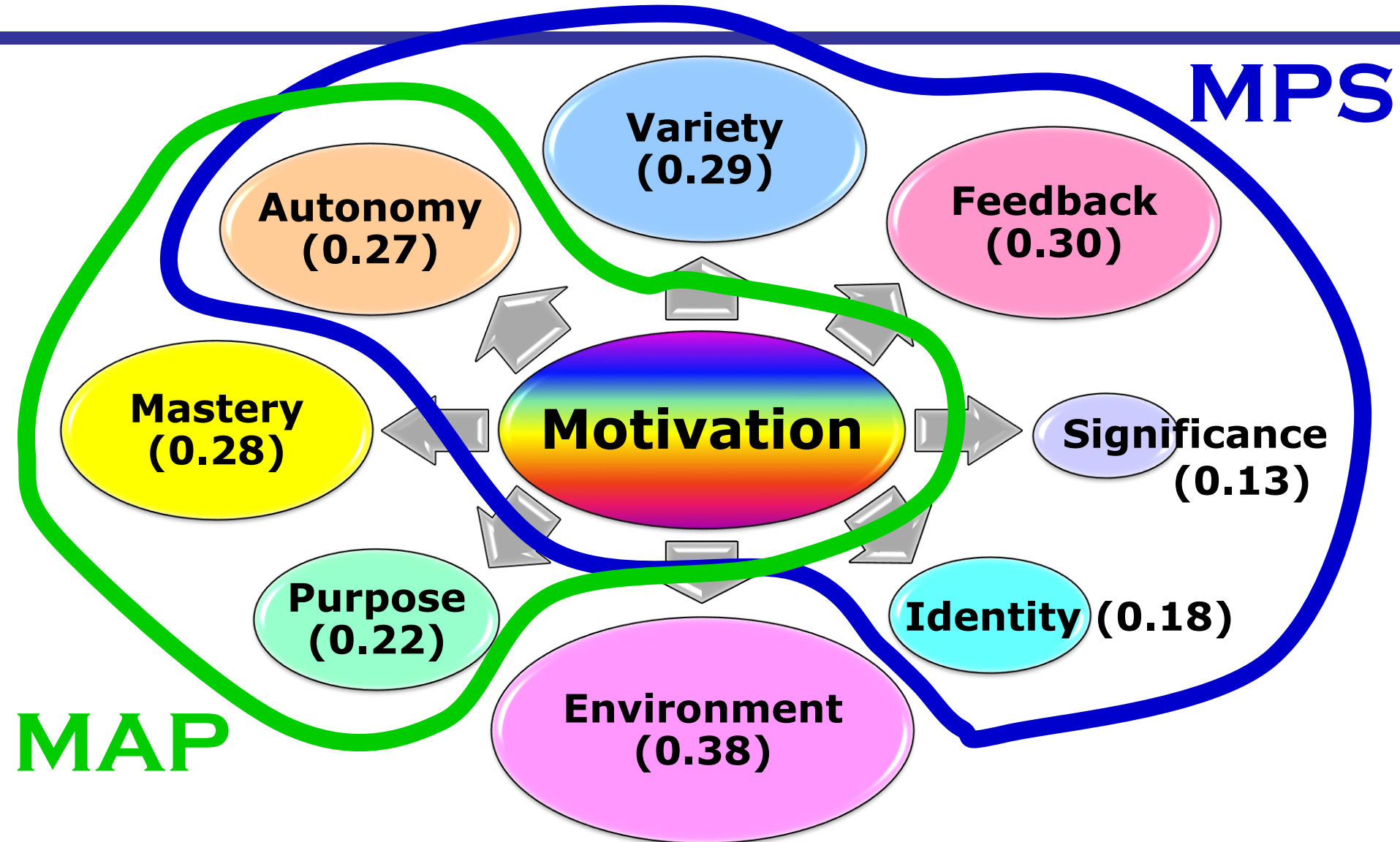
Purpose



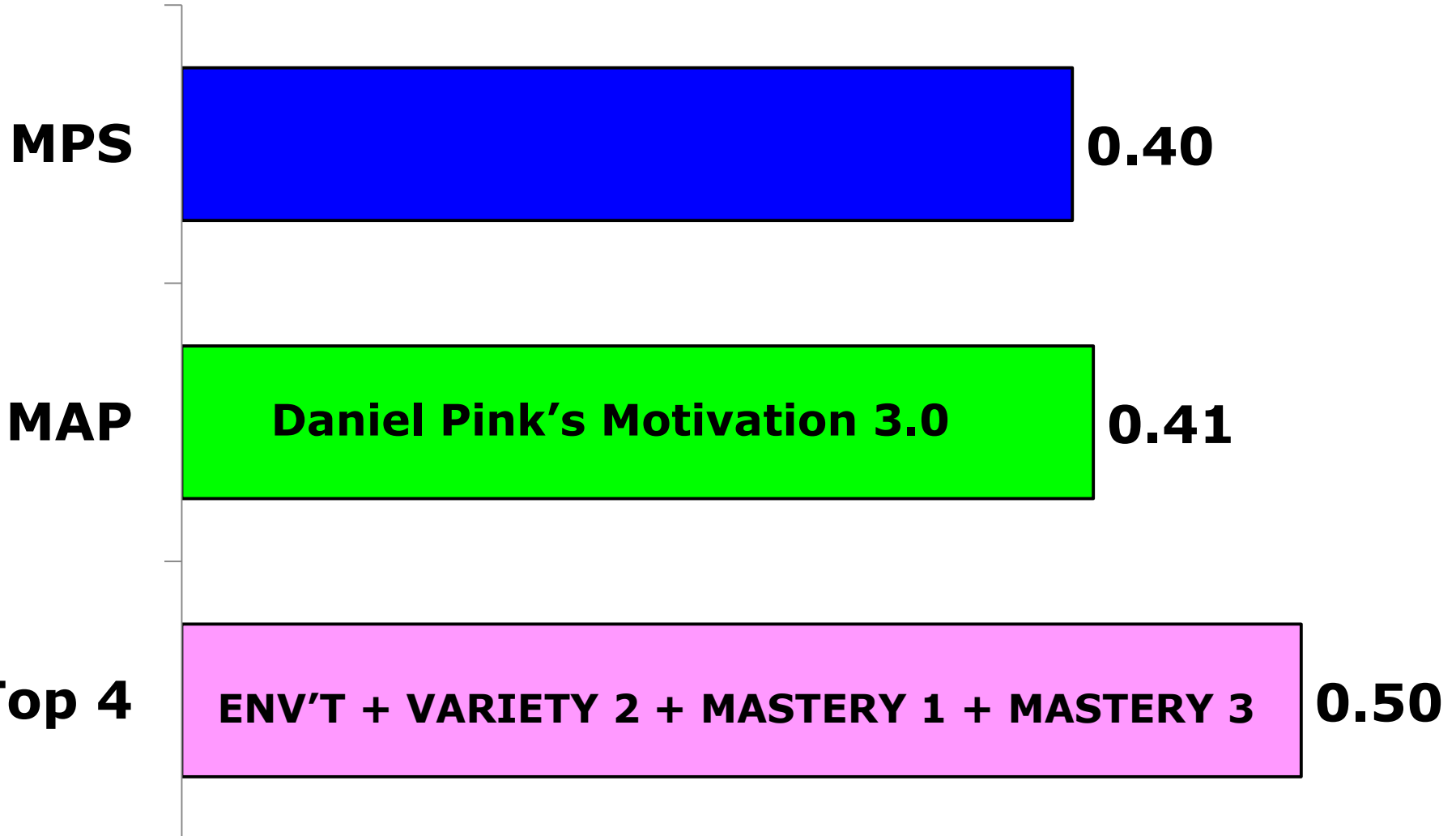
Environment



Multiple Motivation Factors



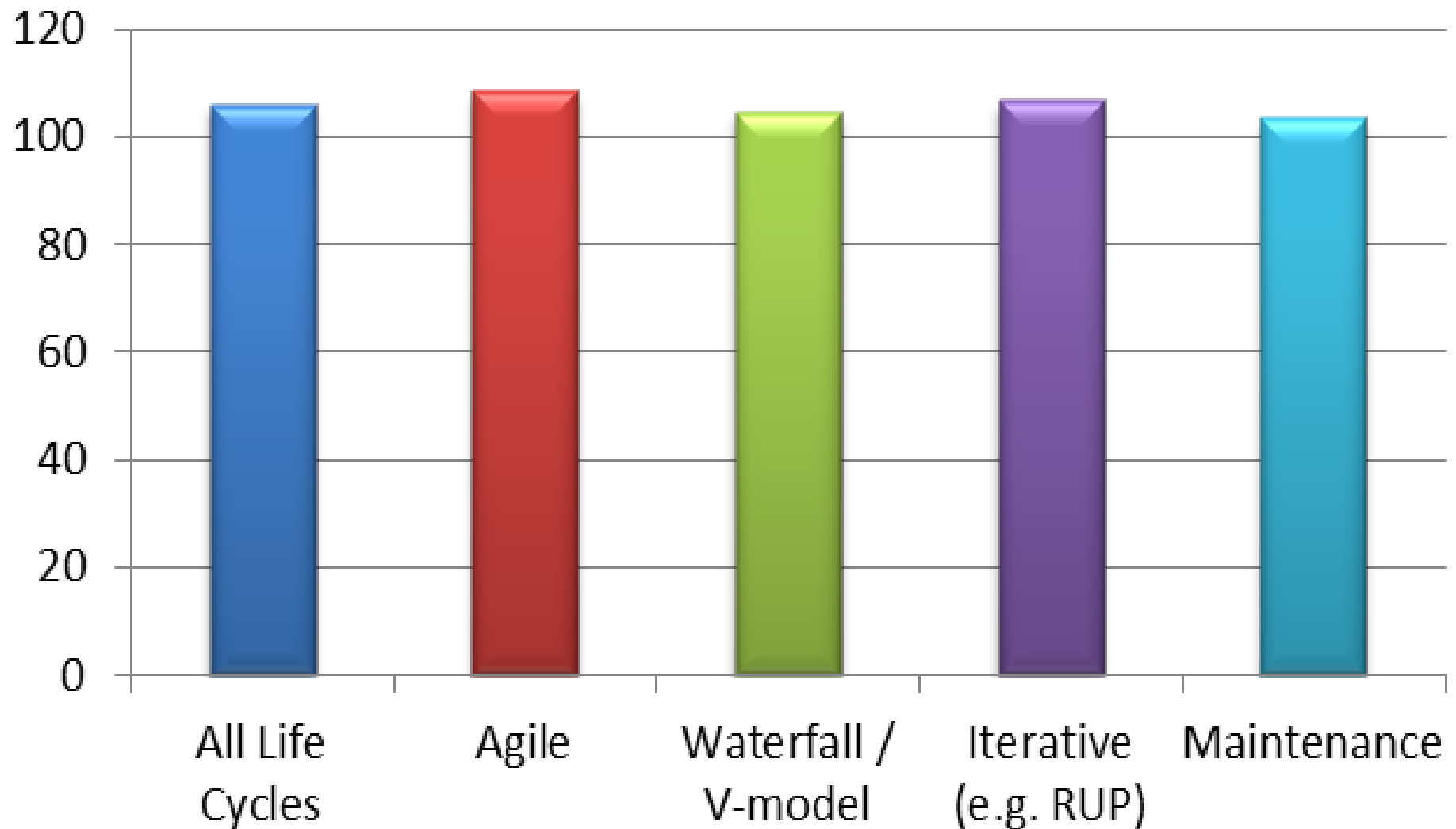
MPS and MAP and Top 4



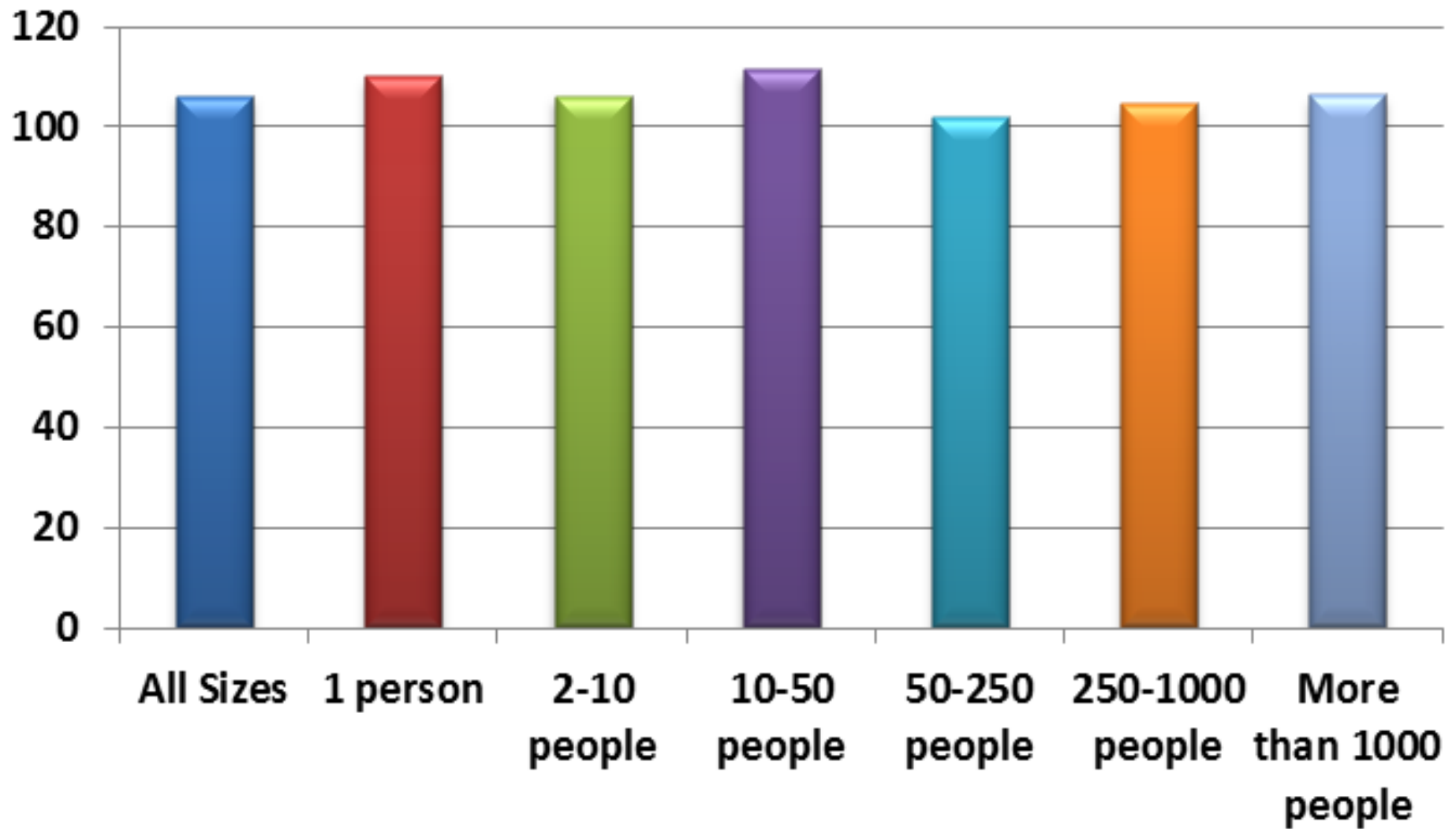
What (De)Motivates Testers?

	Motivating	
#1	Challenges	17%
#2	Feedback & Appreciation	15%
#3	Making a Difference	15%
#4	Team & Work Env't	10%
#5	Money	7%
#6	Meeting Targets	7%
#7	Autonomy	5%
#8	Management	5%
#9	Training / Career Path	4%
#10	New Technology	3%

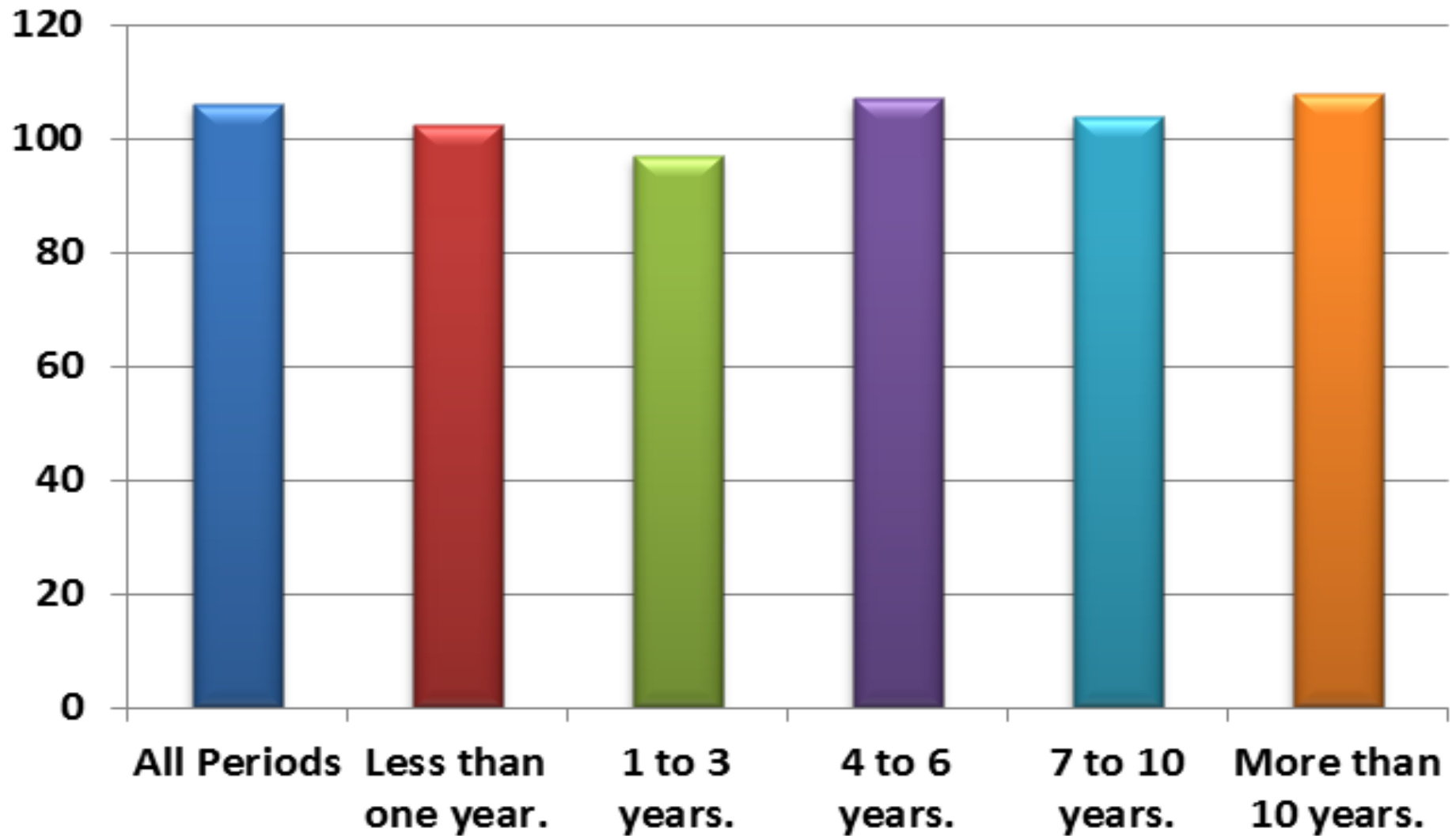
Different Life Cycles...



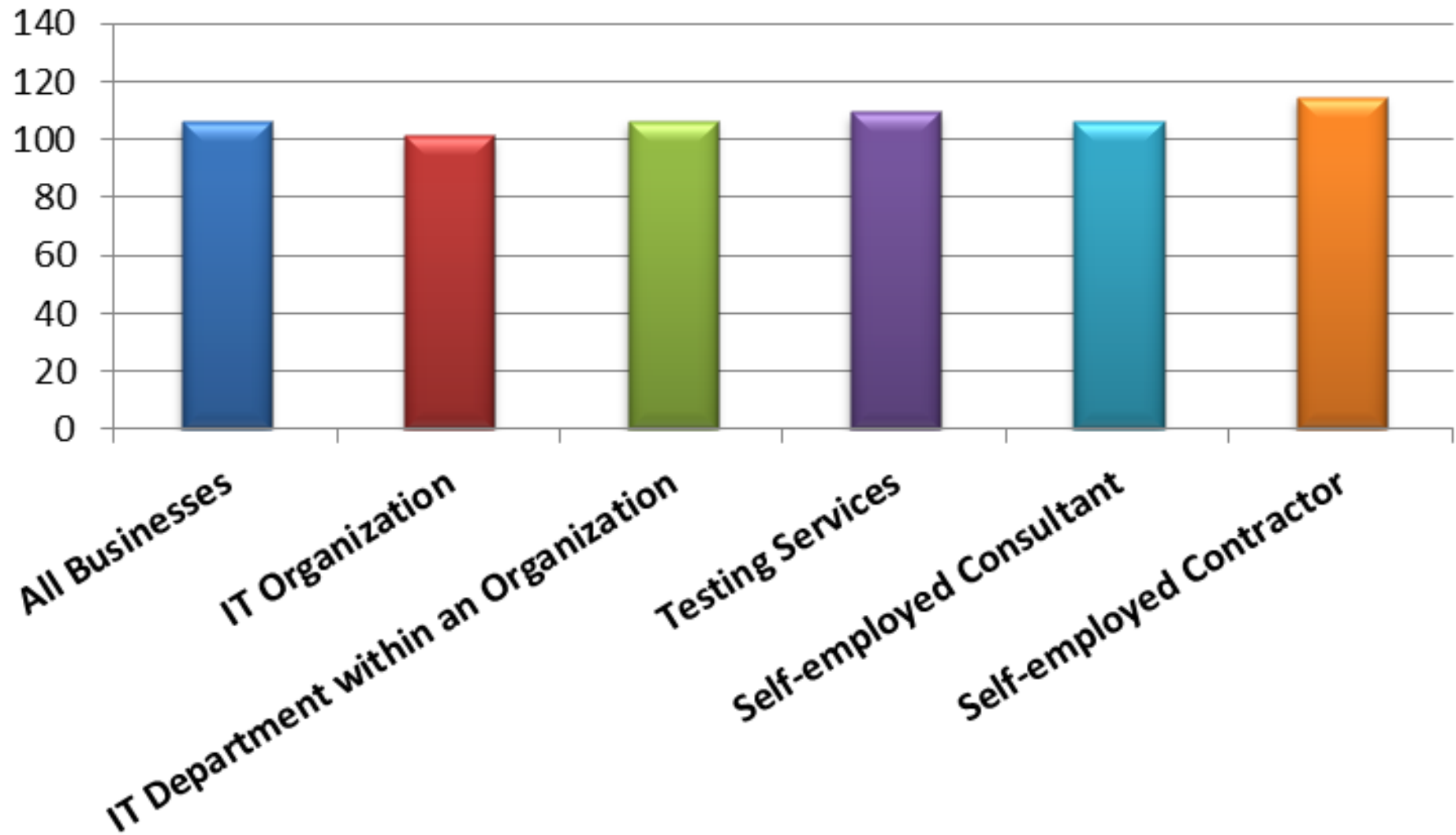
Different Organization Sizes...



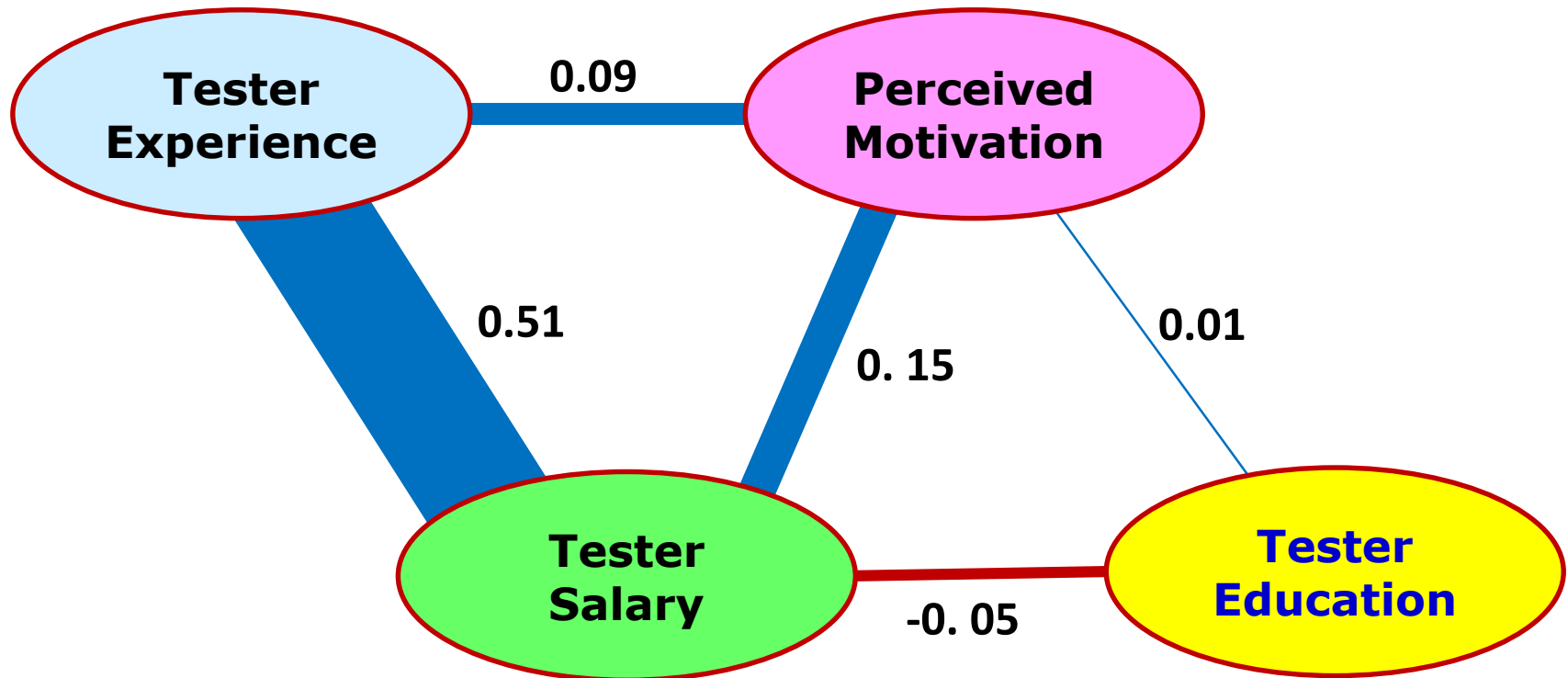
Different Experience Levels...



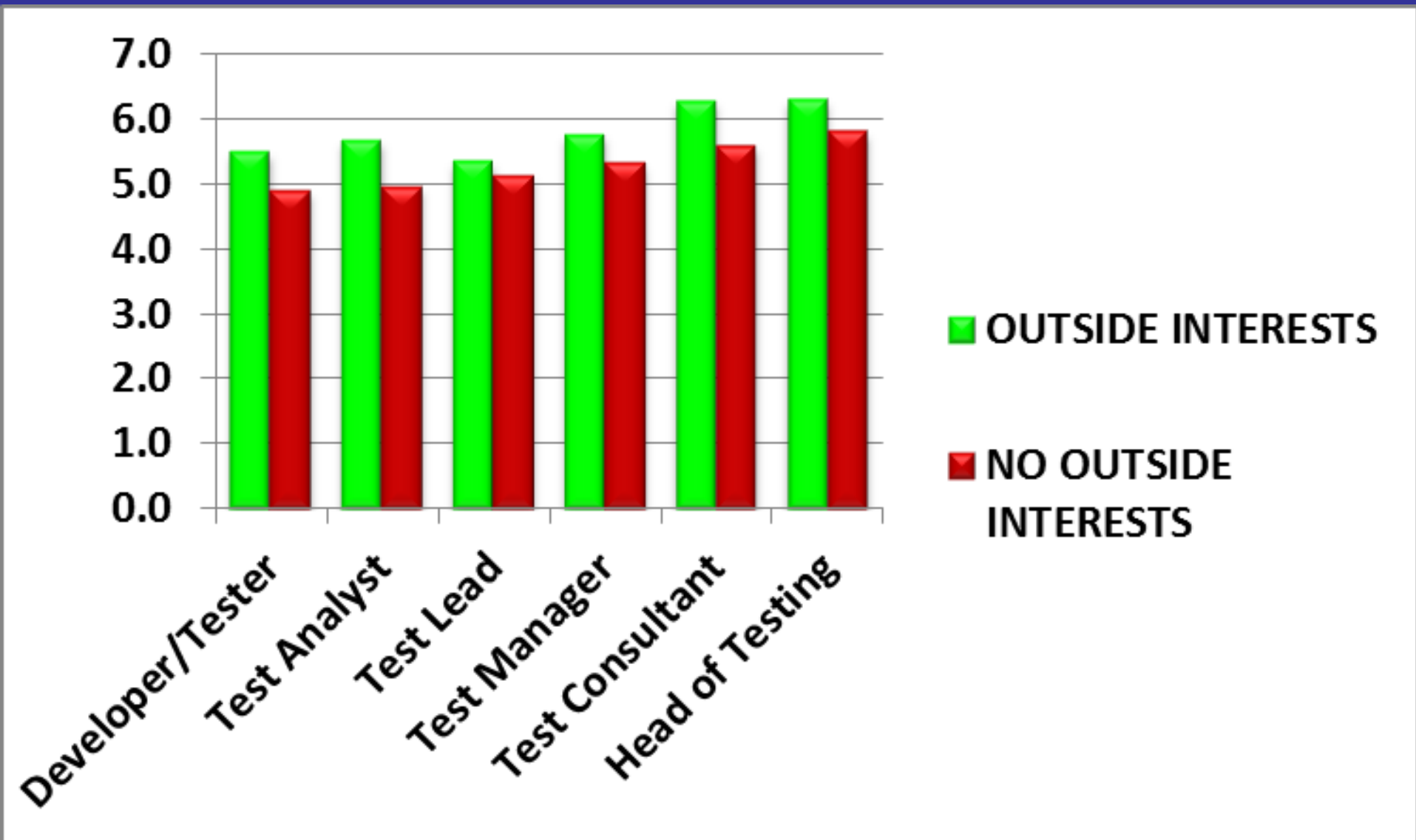
Different Organization Types...



Salary, Experience & Education



Outside Interests?



Conclusions

- Testers are special
 - we can improve on the generic motivation theories
- Not all testers are the same
 - We need to consider 'smarter' approaches to the motivation of testers
 - Don't treat everyone working in testing the same
 - different roles require a different focus
 - choose the most influential factors for the individual tester
- Feedback and appreciation both improves motivation and decreases demotivation
- Please compare yourself to the benchmark data to improve *your* motivation

Thanks for listening

Any Questions?

More information is available

– please email

sreid@testing-solutions.com

1	FEEDBACK 1	The work itself provides feedback on how well I am doing in my job. (POSITIVE)
2	FEEDBACK 2	My colleagues provide little or no feedback on how well I perform. (NEGATIVE)
3	FEEDBACK 3	My supervisor provides me with regular feedback on my performance. (POSITIVE)
4	AUTONOMY 1	Most of the time someone else decides what tasks I should do next. (NEGATIVE)
5	AUTONOMY 2	My job is flexible enough to allow me to decide which hours I work most days. (POSITIVE)
6	AUTONOMY 3	For most tasks I get to decide who I will work with. (POSITIVE)
7	AUTONOMY 4	I rarely get to choose the way that an activity is carried out. (NEGATIVE)
8	SIGNIFICANCE 1	My job is one that affects few other colleagues. (NEGATIVE)
9	SIGNIFICANCE 2	If not done well my job will have little impact on the project. (NEGATIVE)

10	IDENTITY 1	My job allows me to see projects through to completion. (POSITIVE)
11	IDENTITY 2	I often start tasks but then pass them on to colleagues before I finish them. (NEGATIVE)
12	VARIETY 1	My job comprises a relatively small number of different tasks. (NEGATIVE)
13	VARIETY 2	In my job I get the chance to work on many interesting projects. (POSITIVE)
14	MASTERY 1	My job does not challenge or stretch me. (NEGATIVE)
15	MASTERY 2	I have mastered most of the skills required to perform my job. (NEGATIVE)
16	MASTERY 3	I often become so engaged in my work that I forget the time. (POSITIVE)
17	PURPOSE 1	My job includes the opportunity to work for the good of the wider community (beyond my employer). (POSITIVE)
18	PURPOSE 2	My organization is primarily focused on increasing its profits. (NEGATIVE)
19	PERCEPTION	I am highly motivated to do my job in testing. (POSITIVE)
20	ENVIRONMENT	My work environment encourages me to perform my job better. (POSITIVE)