# Motivated or Motivating? What sort of tester are you?

**Stuart Reid**

# Scope

- Introduction to Motivation
- Outline of the Motivation Survey
- Survey analysis and results
  - Do existing theories work for testing?
  - What factors correlate best with motivation?
  - What is the best combination?
  - 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

# Multi-faceted - Motivation

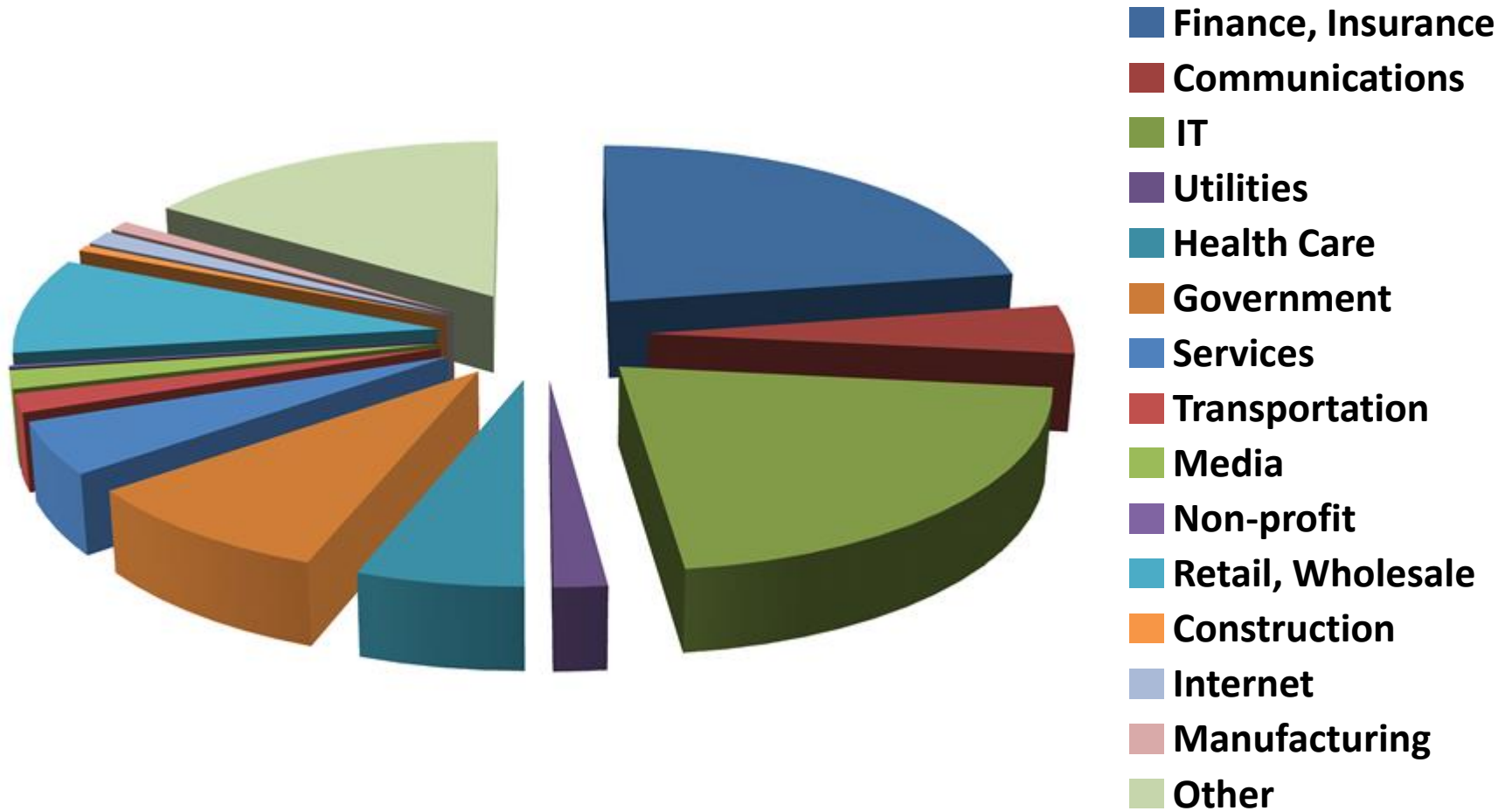# Investigation Approach

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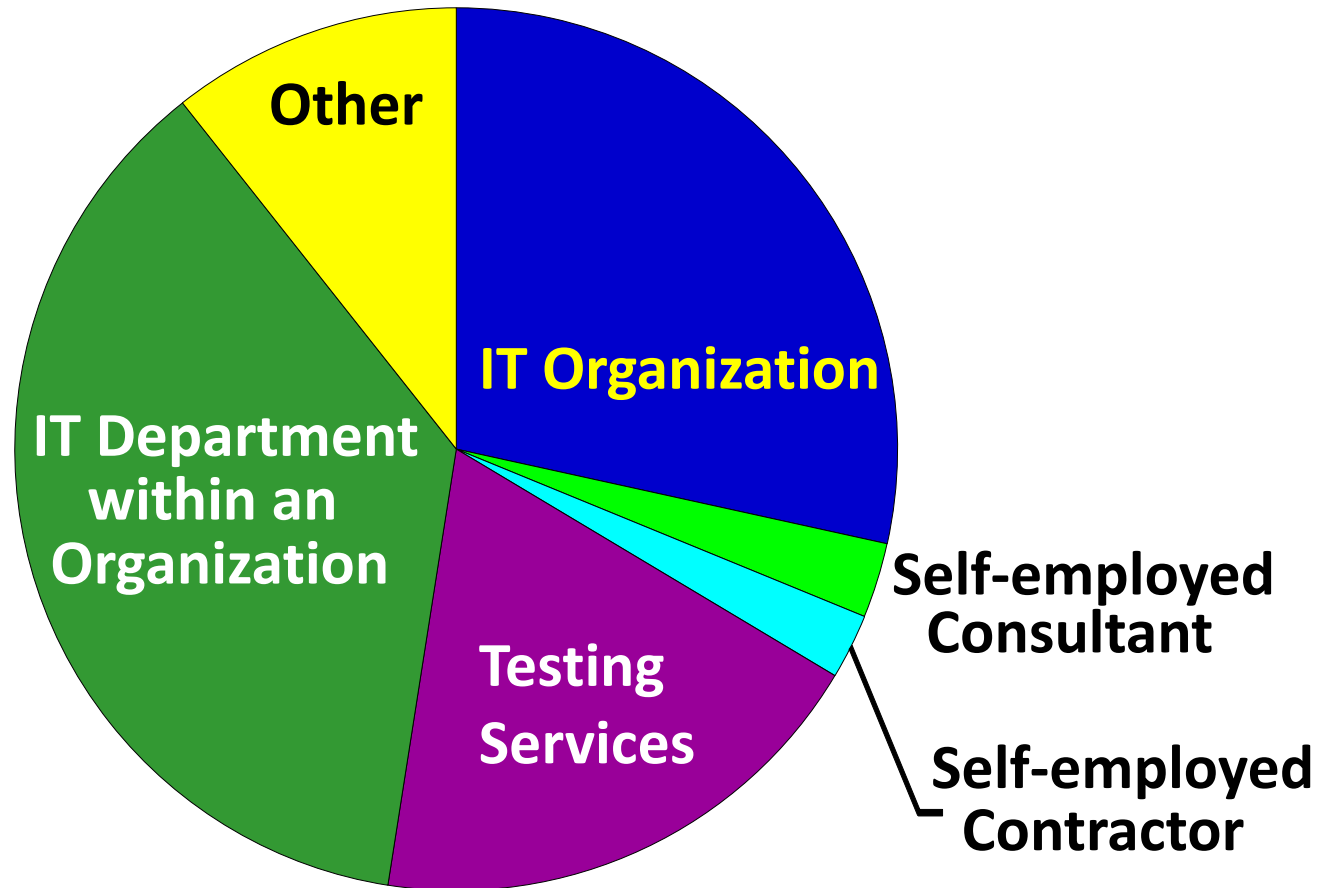- **Thanks to Tafline Murnane**
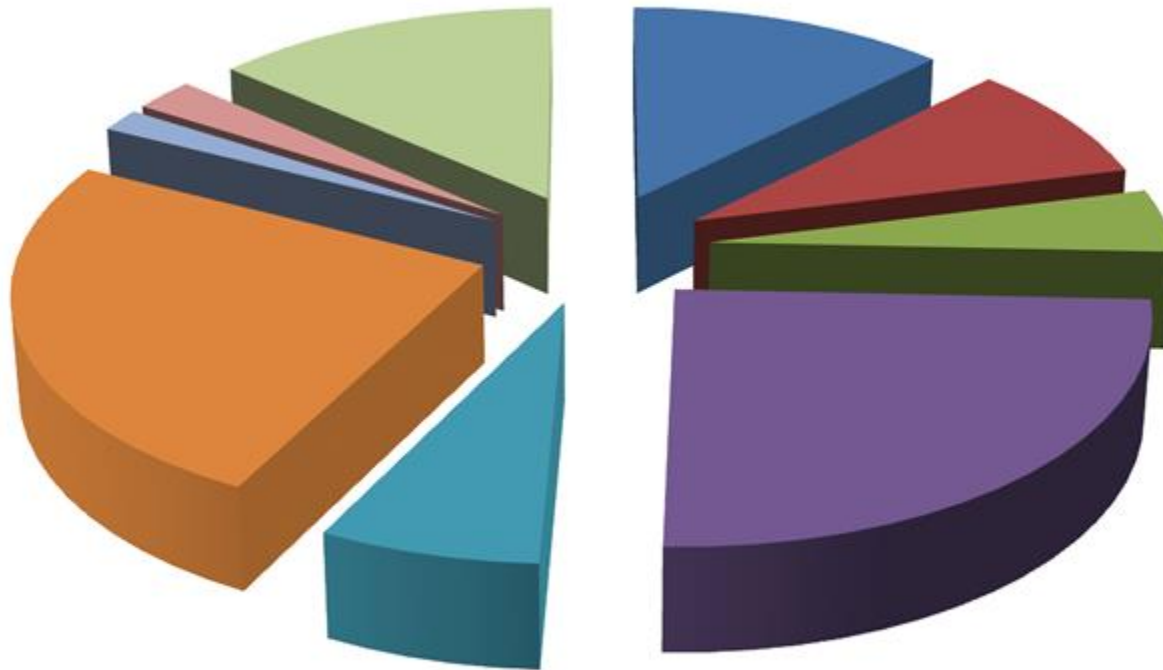  - KJ Ross – Australia
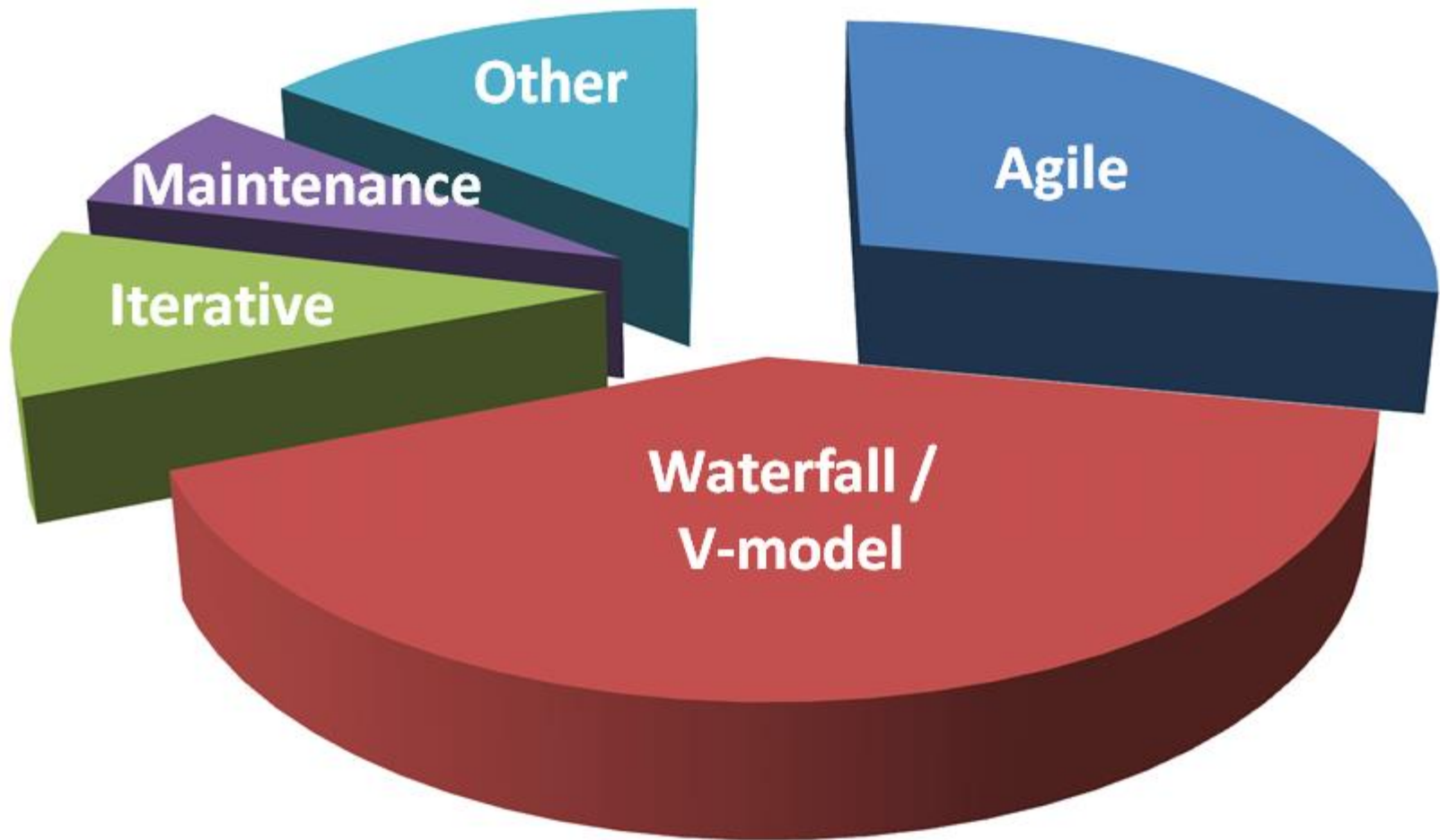
# Respondents by Region

# Industry Sectors



- Finance, Insurance
- Communications
- IT
- Utilities
- Health Care
- Government
- Services
- Transportation
- Media
- Non-profit
- Retail, Wholesale
- Construction
- Internet
- Manufacturing
- Other
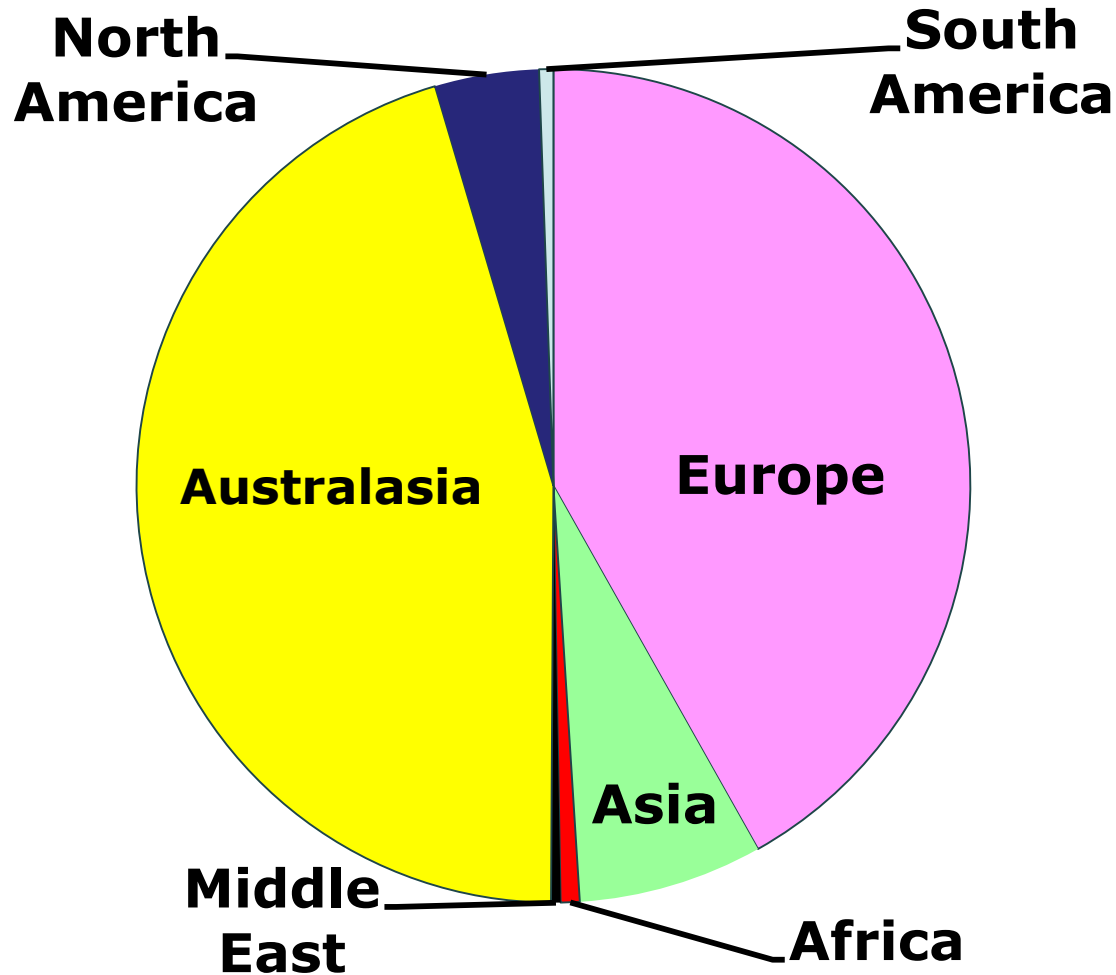
# Organization types

# Testing Roles

# Life Cycles

# 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

# 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...
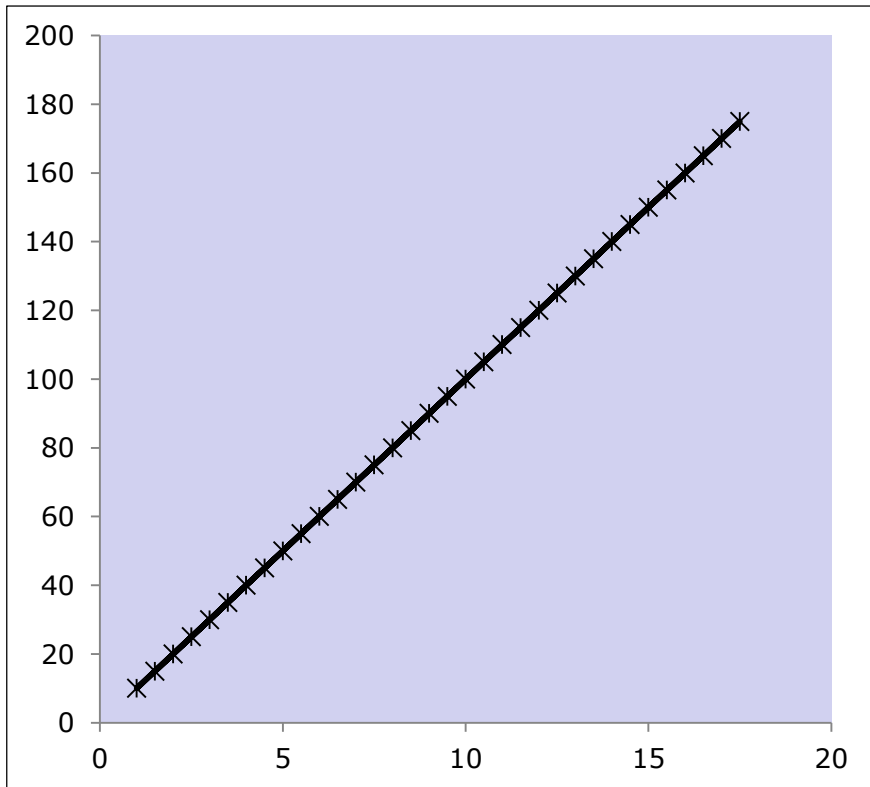
- **MPS =** $\dfrac{(V + I + S)}{3} * A * F$
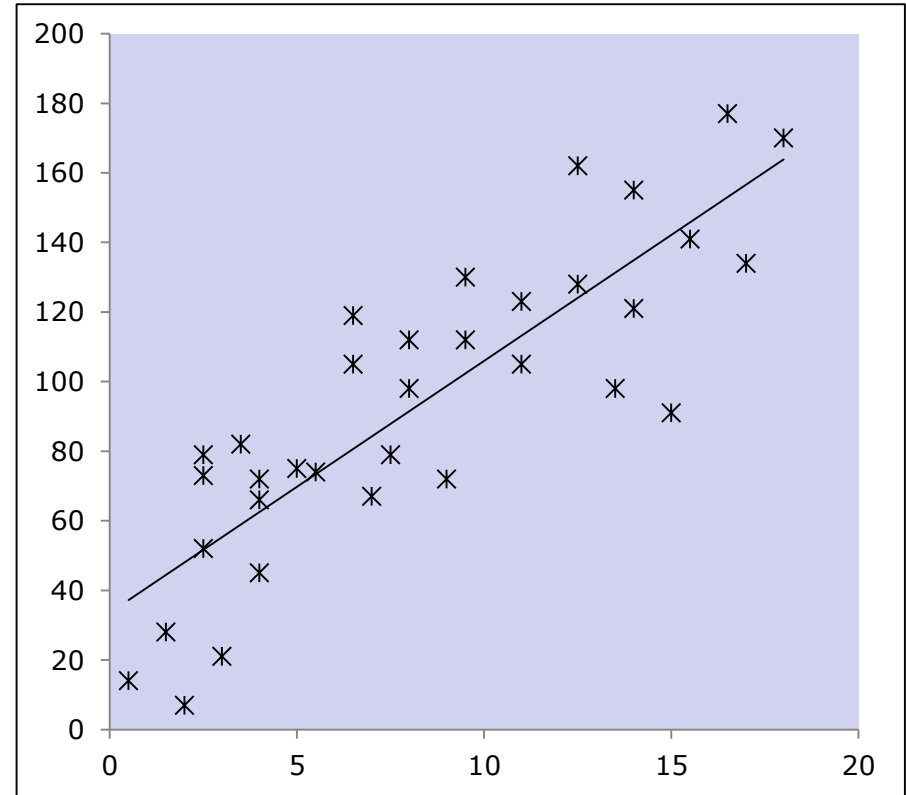
...and then calculate your MPS

# Perceived Motivation
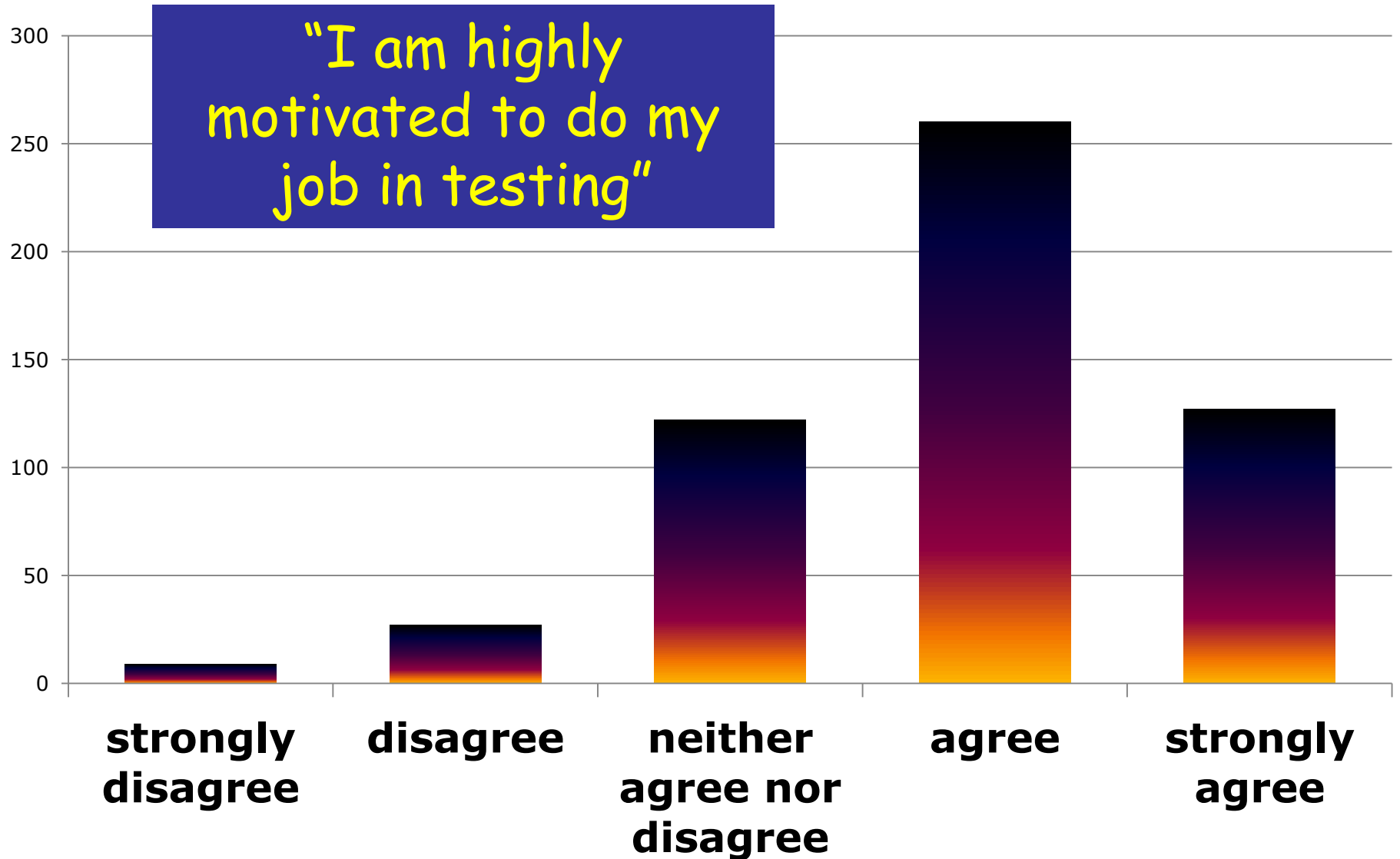
# Pearson's Correlation Coefficient

r = 1

r = 0.85



r = +0.70 or higher
Very strong positive relationship

# Pearson's Correlation Coefficient

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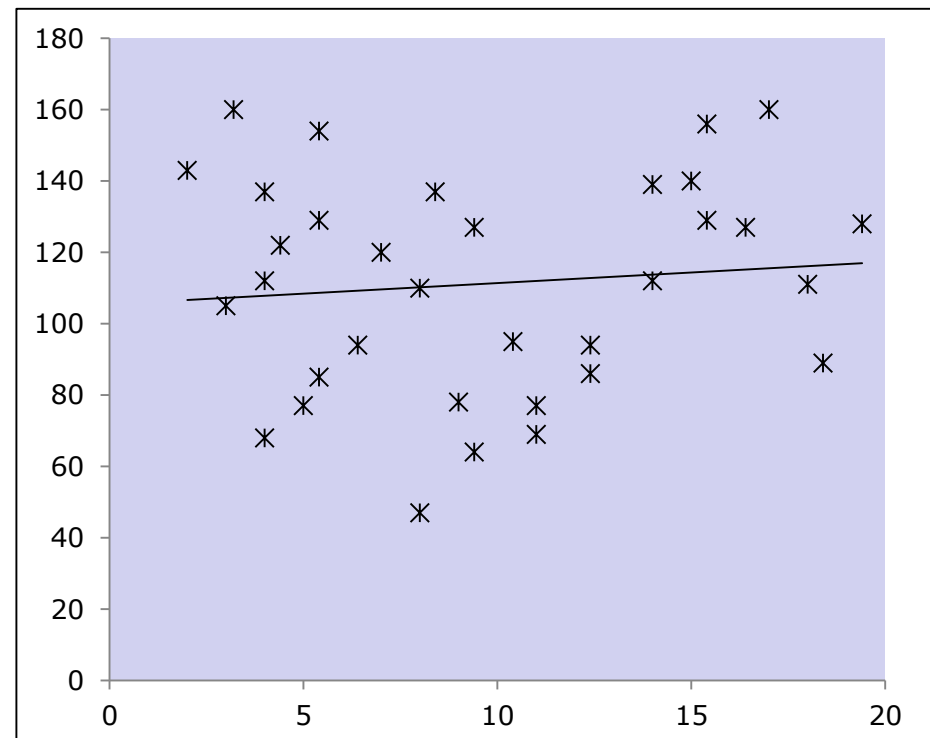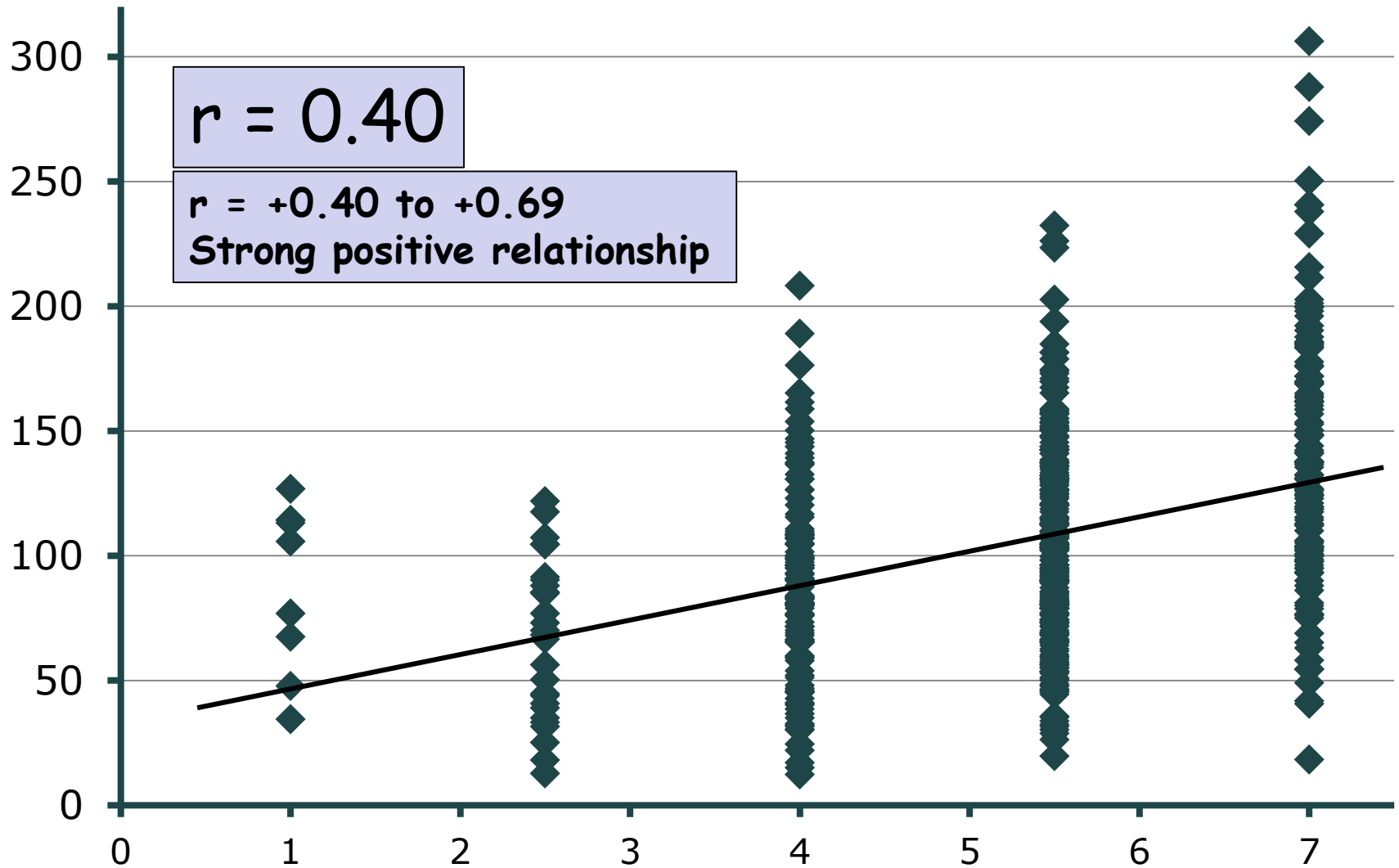
r = 0.25
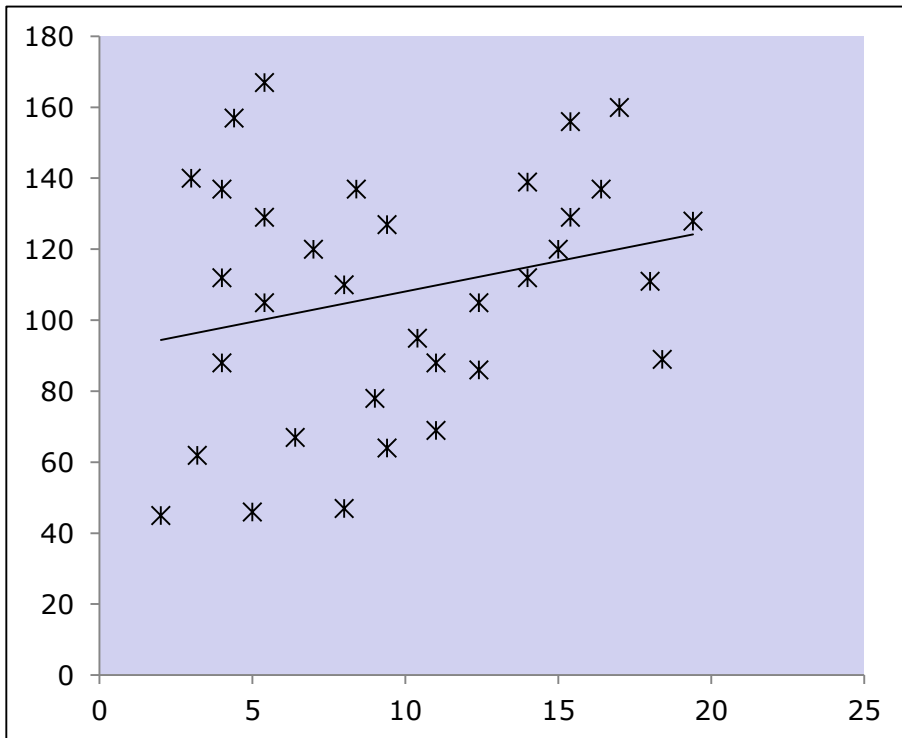
r = 0.10



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

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

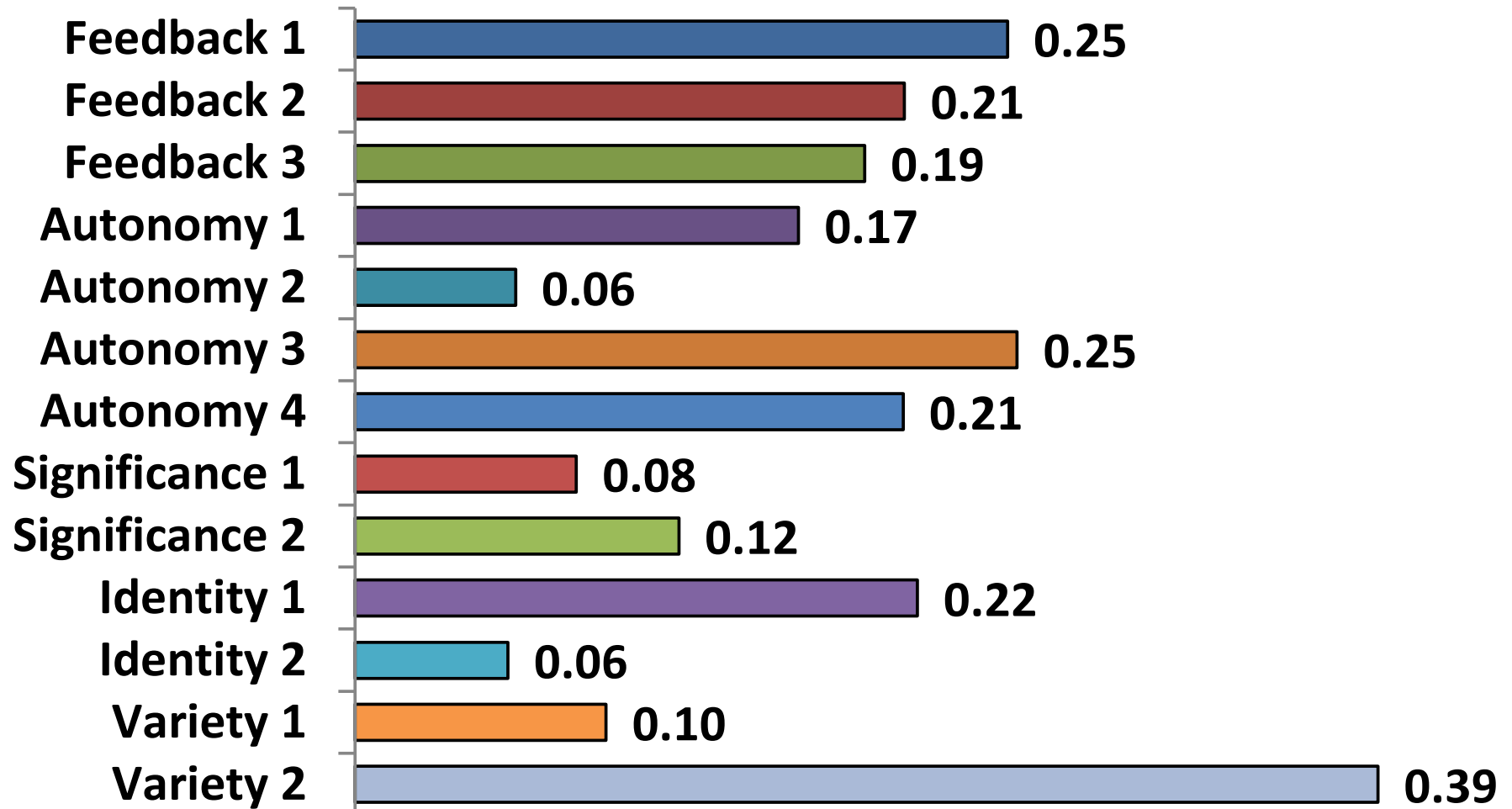# MPS & Perceived Motivation



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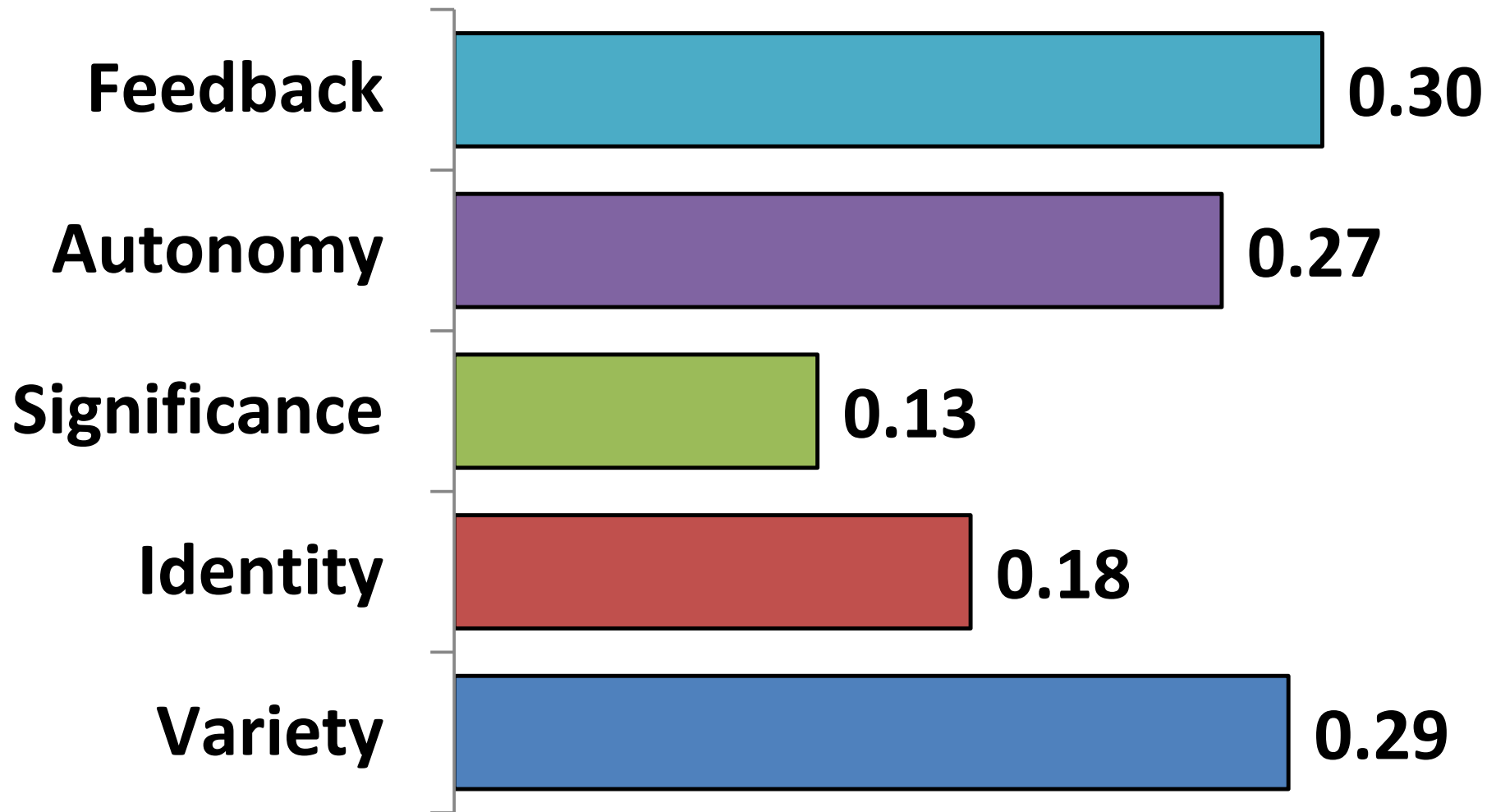
r = +0.40 to +0.69
Strong positive relationship

# MPS & Perceived Motivation
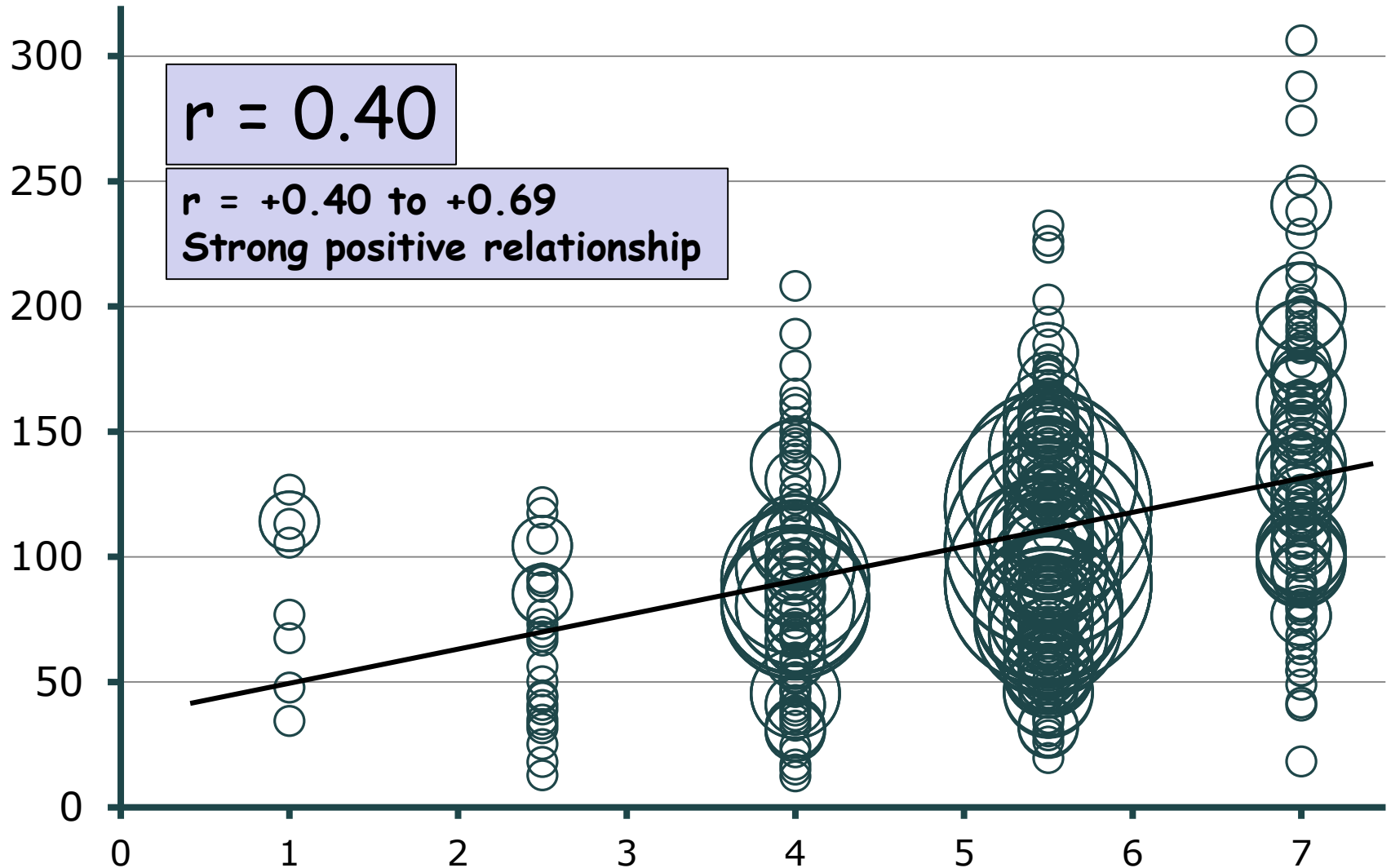
# MPS Factors

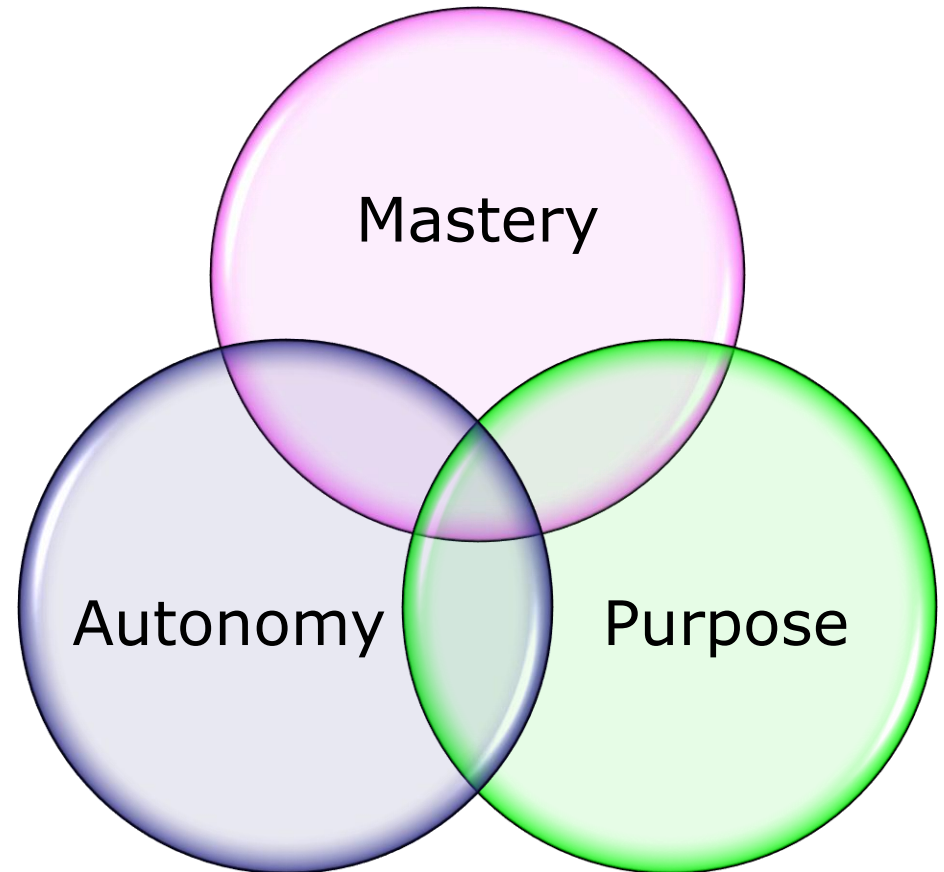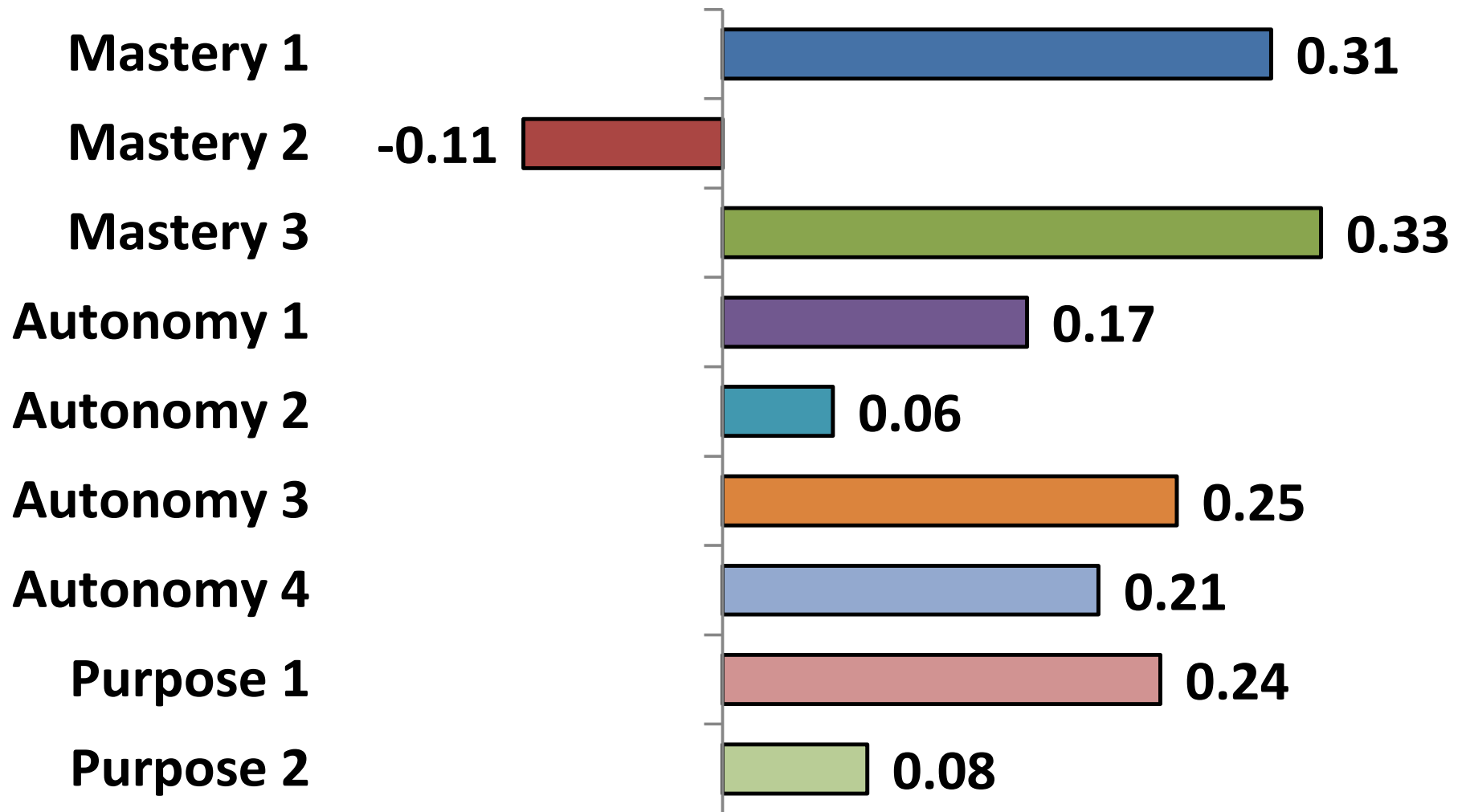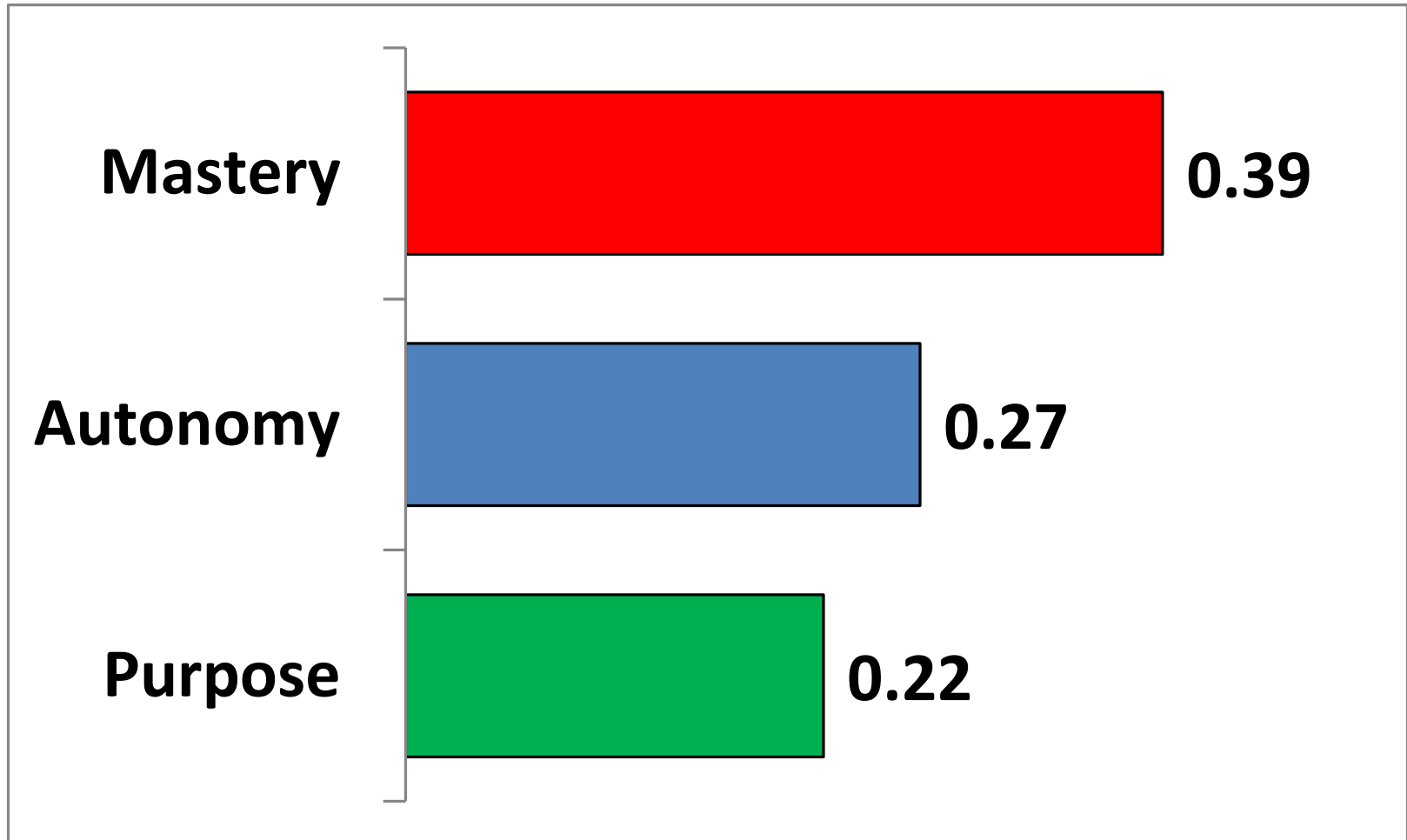# MPS Characteristics
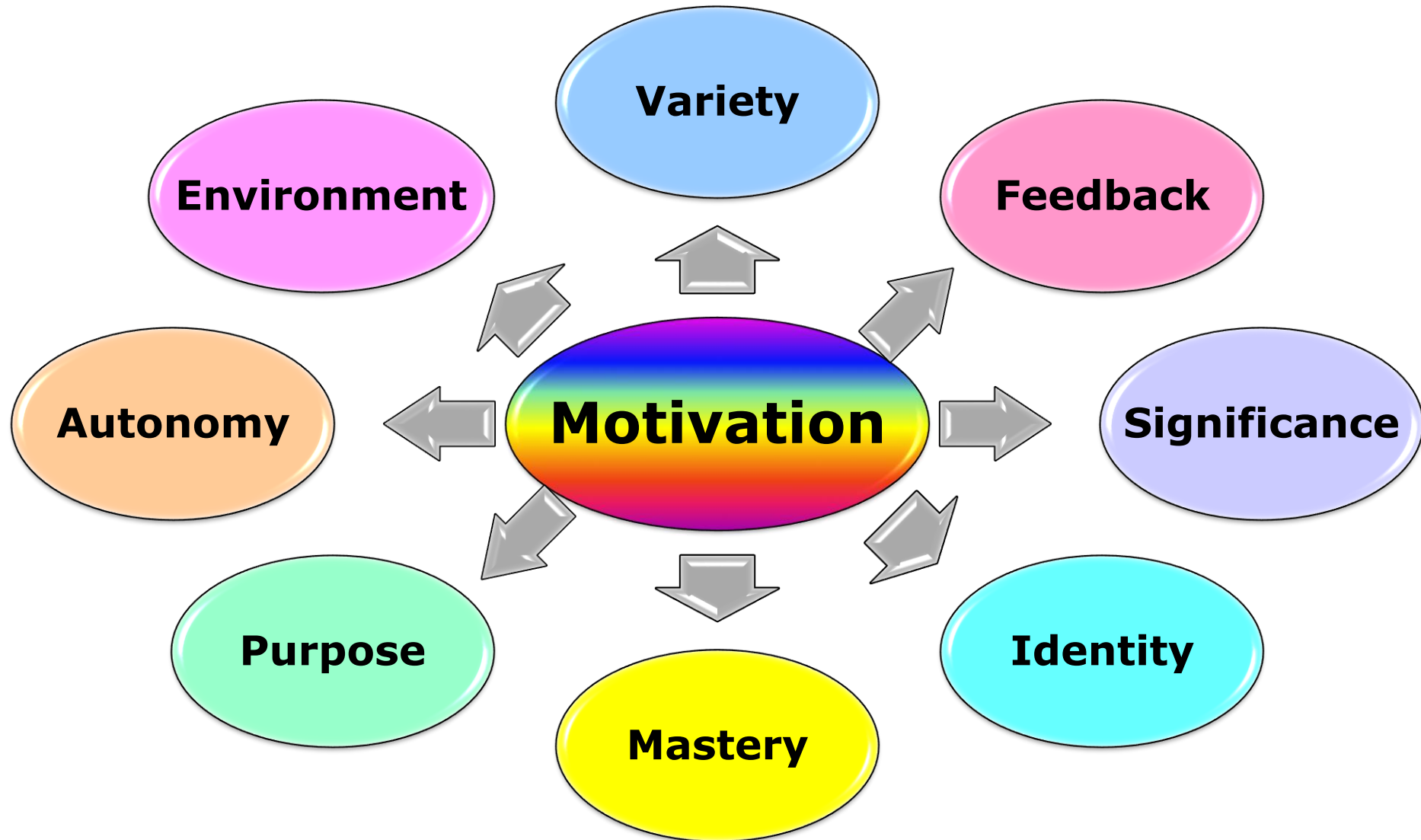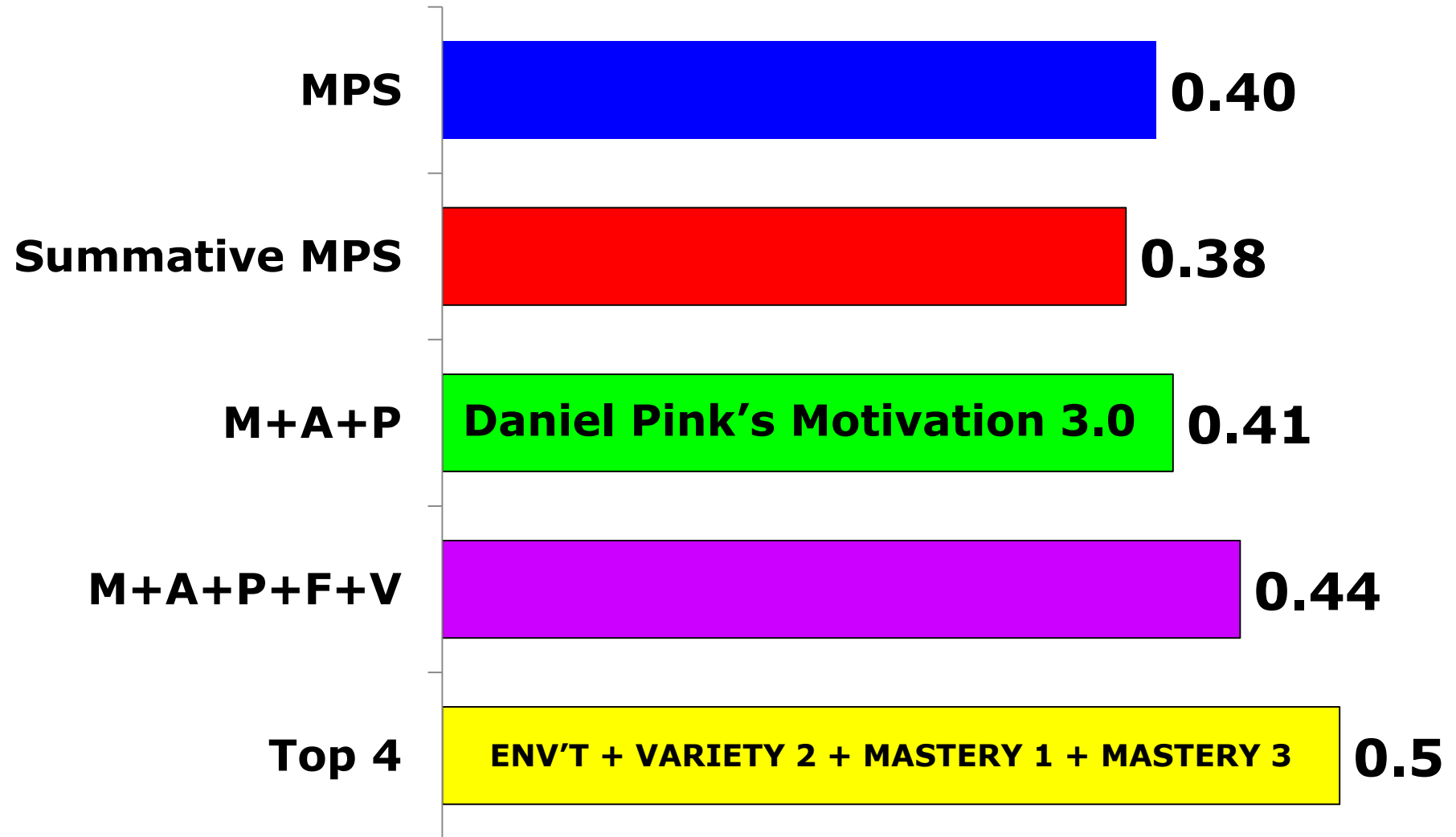
# Daniel Pink's MAP

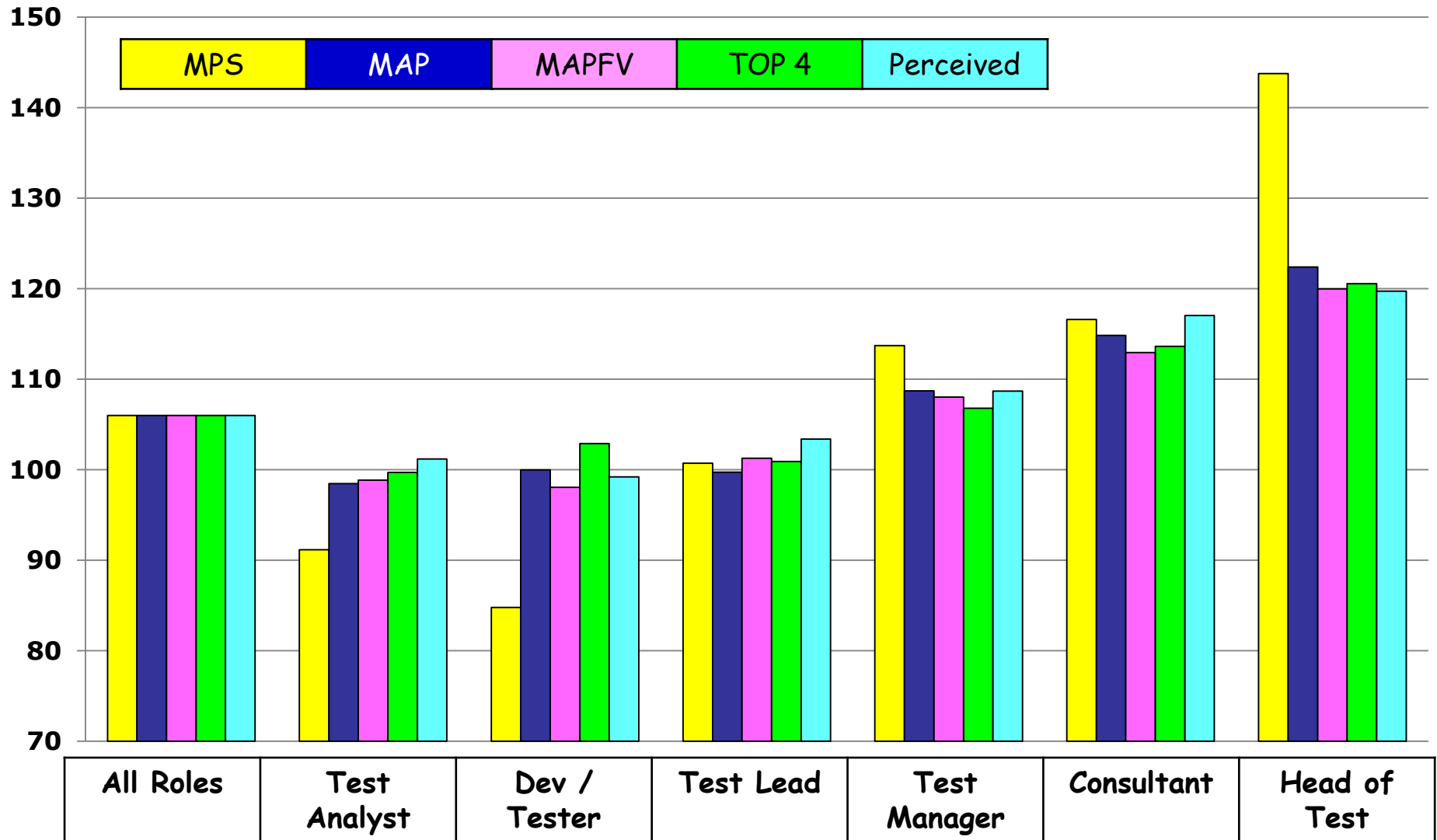- Daniel Pink's Motivation 3.0

# MAP Factors

# MAP Characteristics
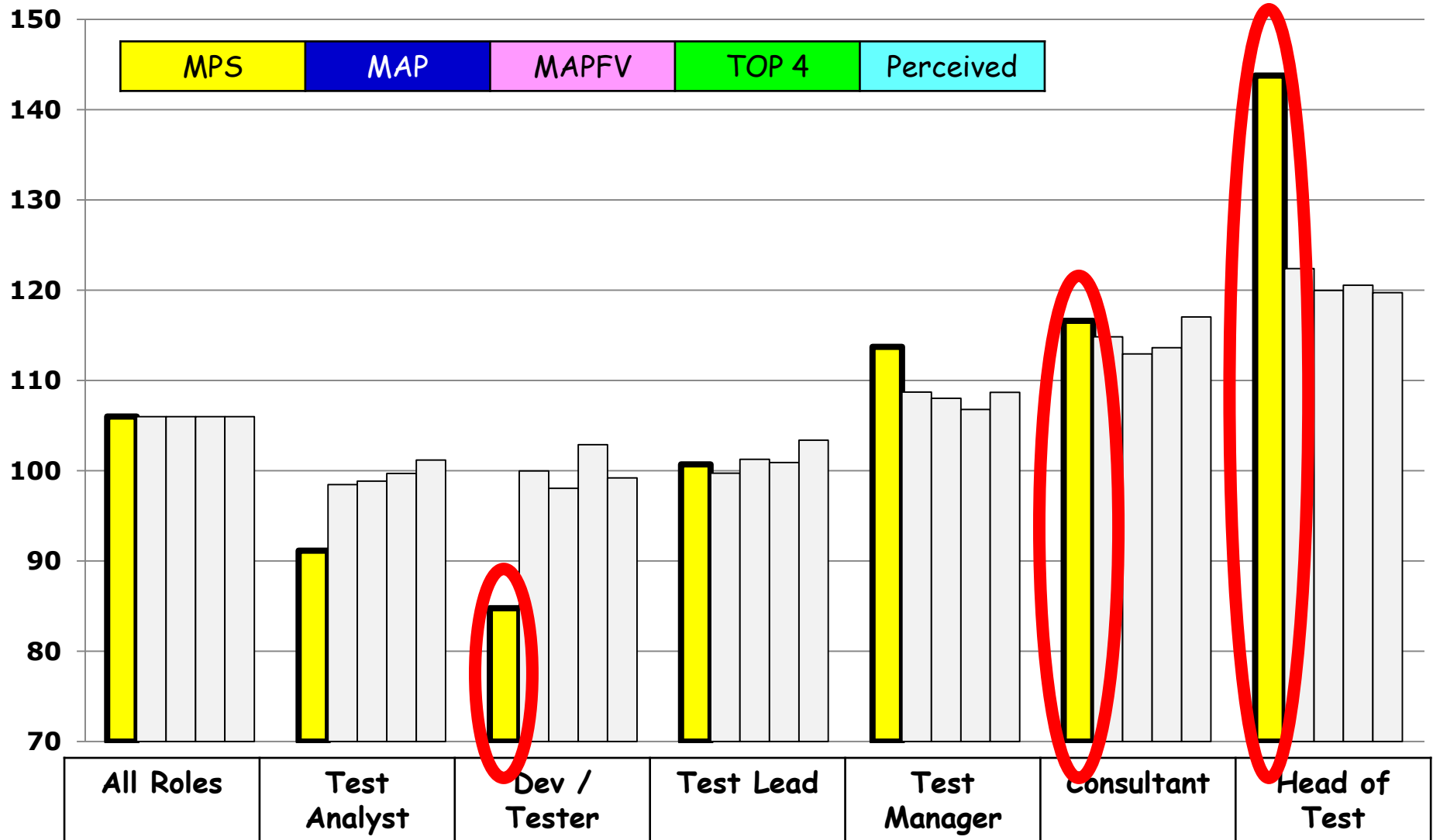
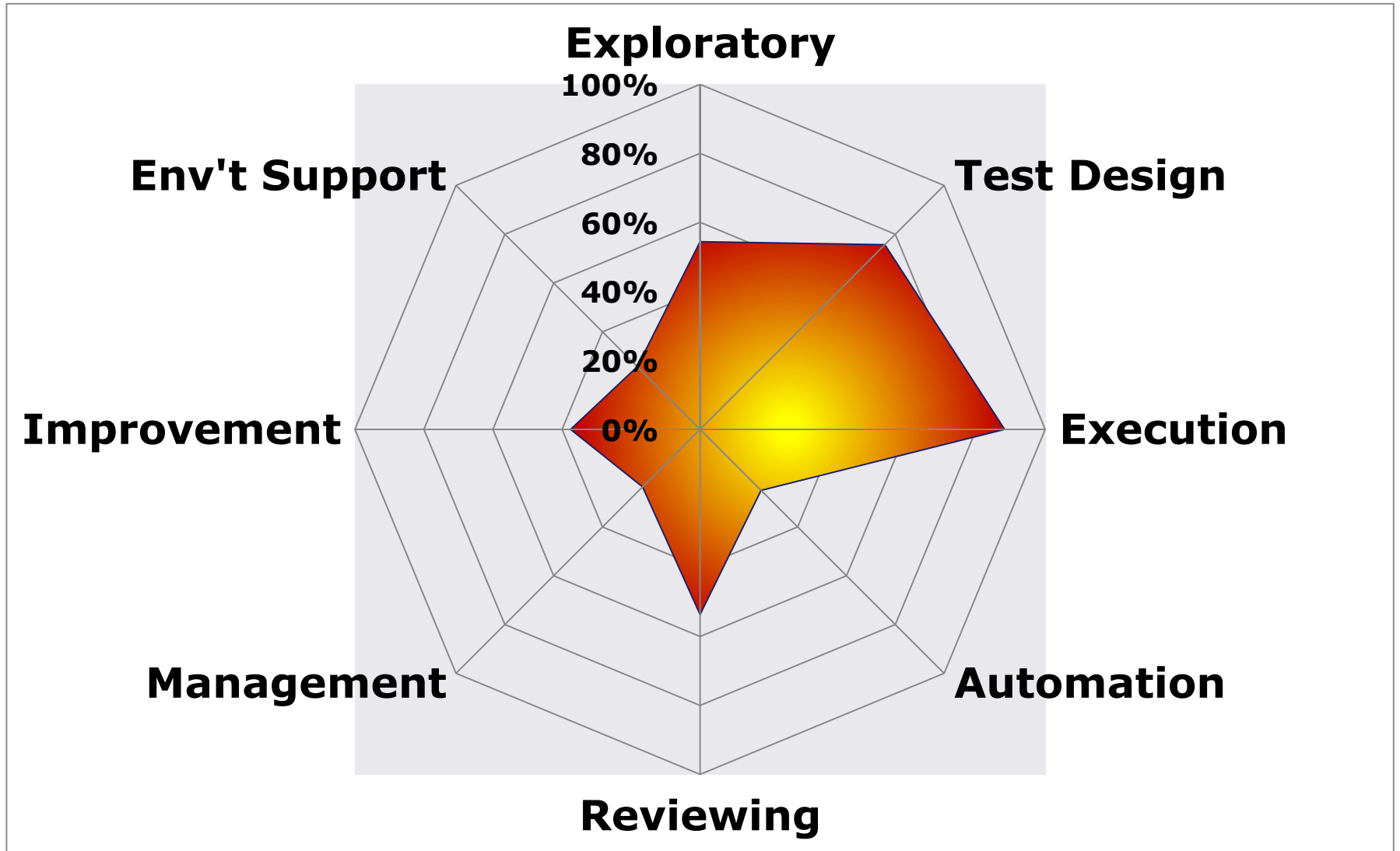# Integrating Theories

# MPS and MAP and MAPFV and...

# Different Roles…

# Different Roles…

# Specified Variety - Test Analyst

# Different Jobs…
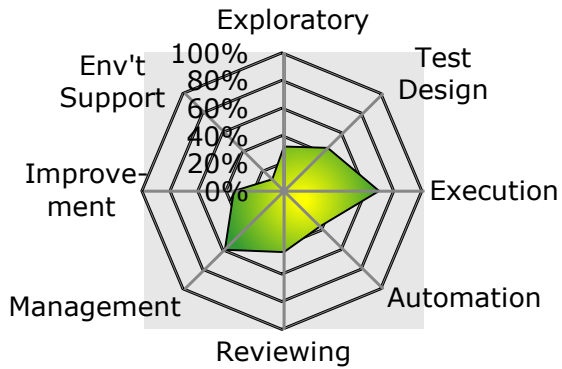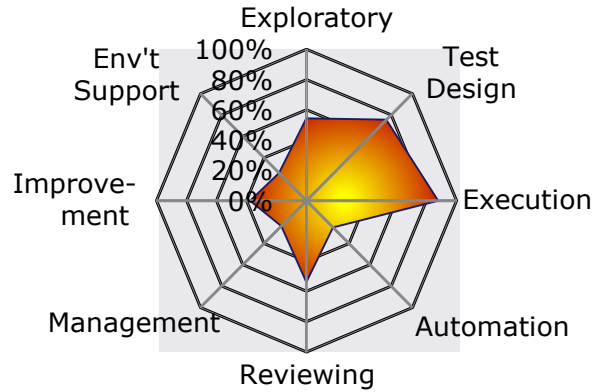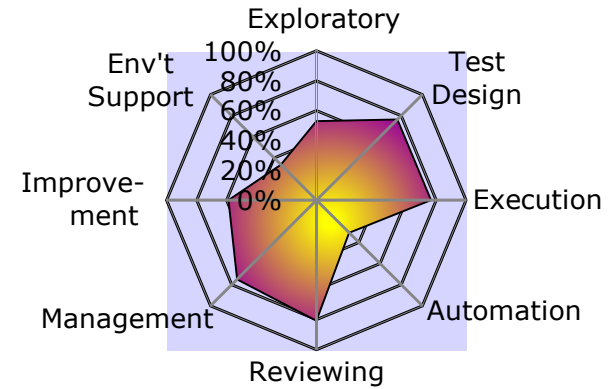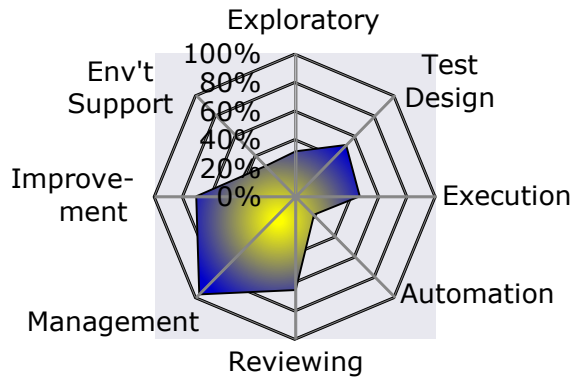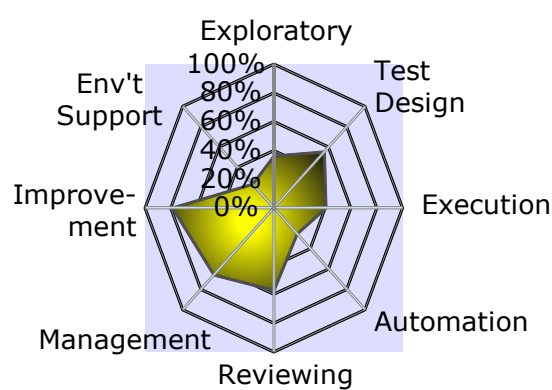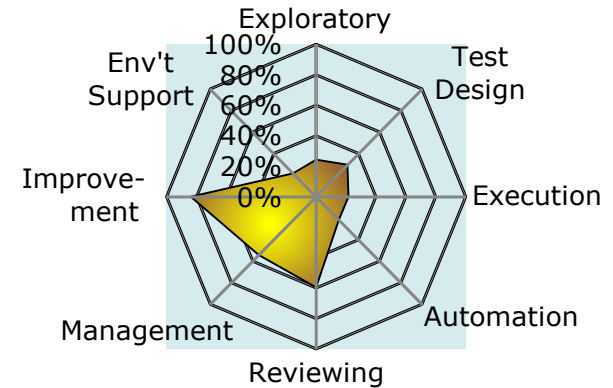
# Different Life Cycles...
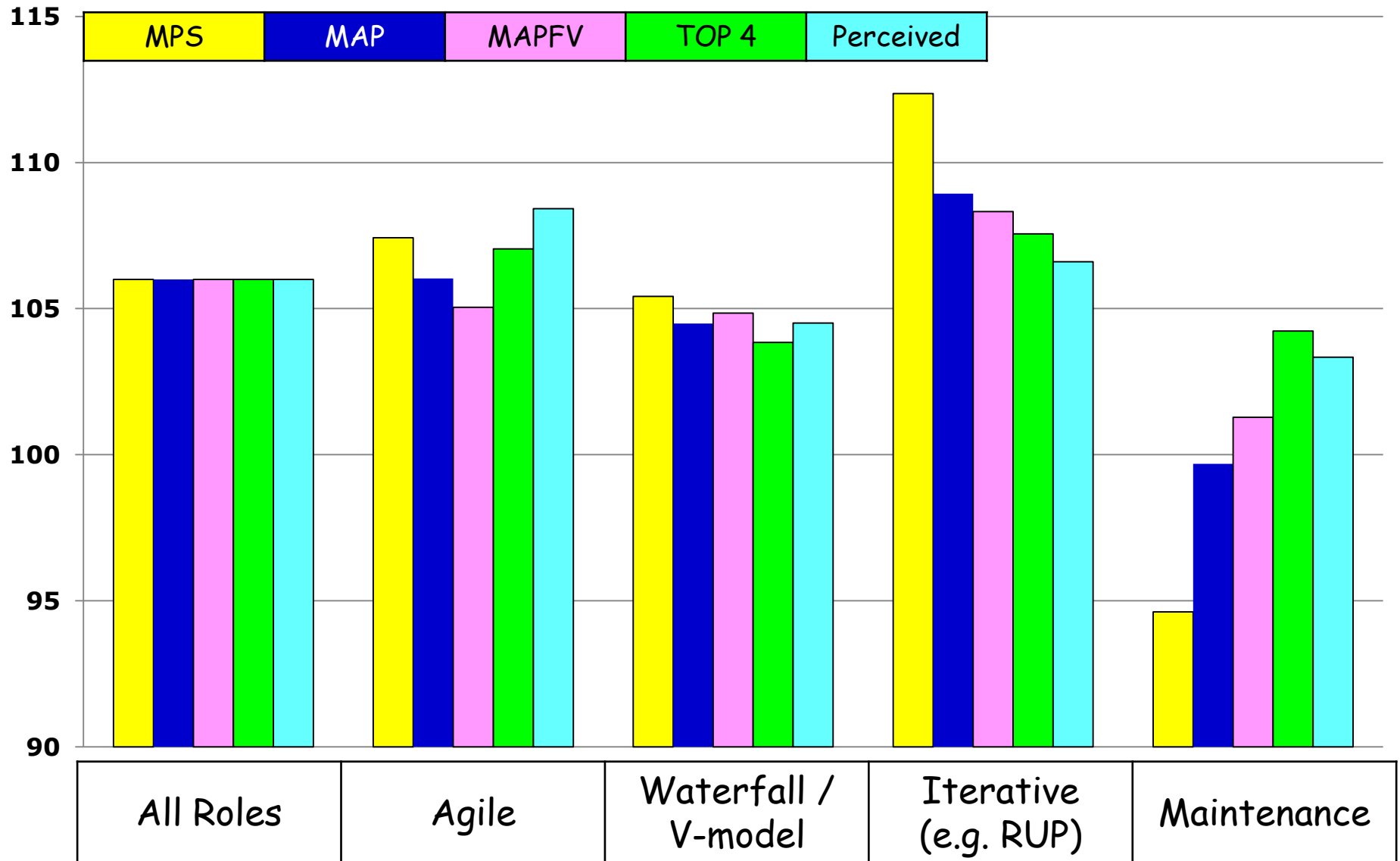
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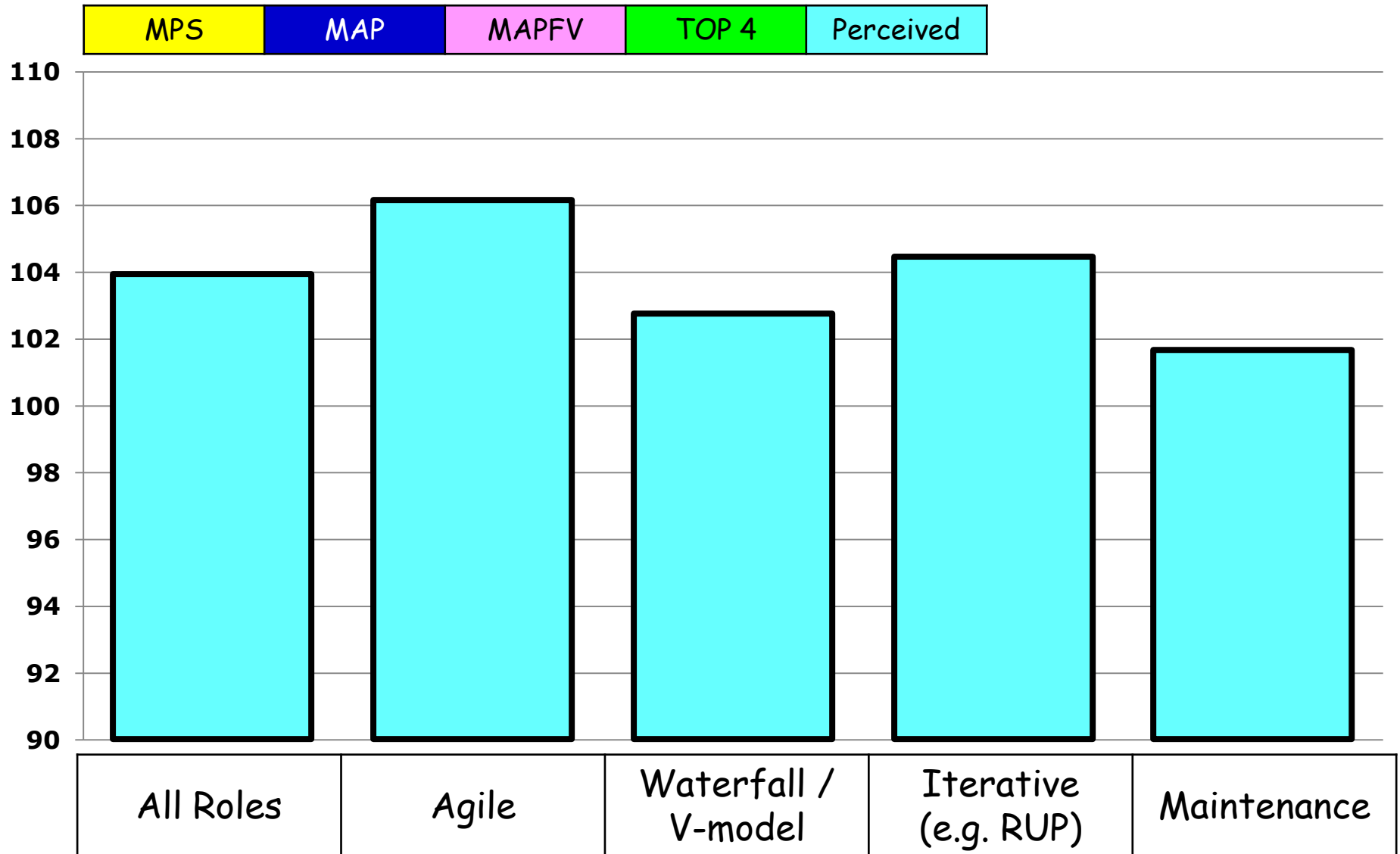
# Different Organization Sizes…
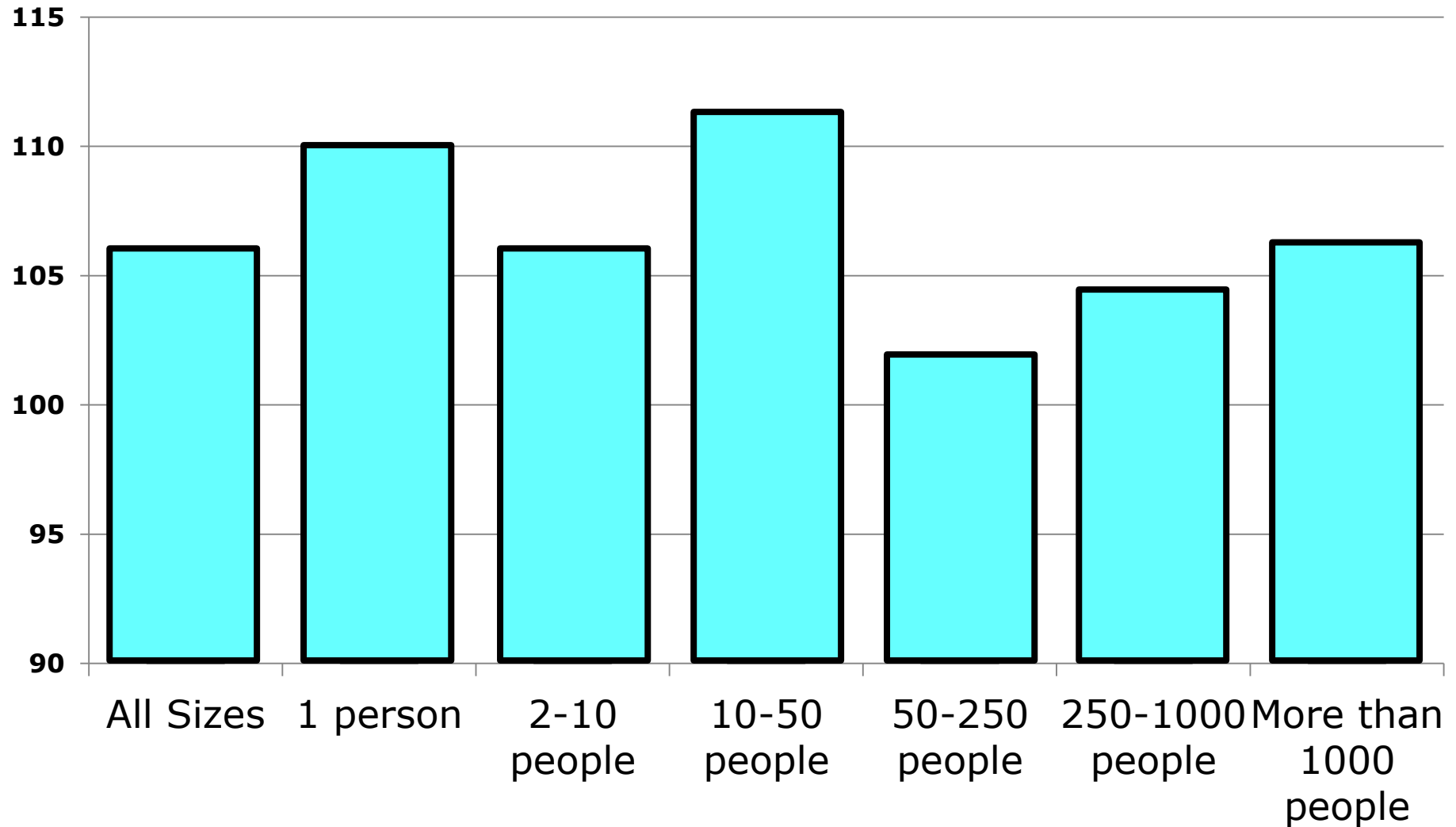
# Different Experience Levels…
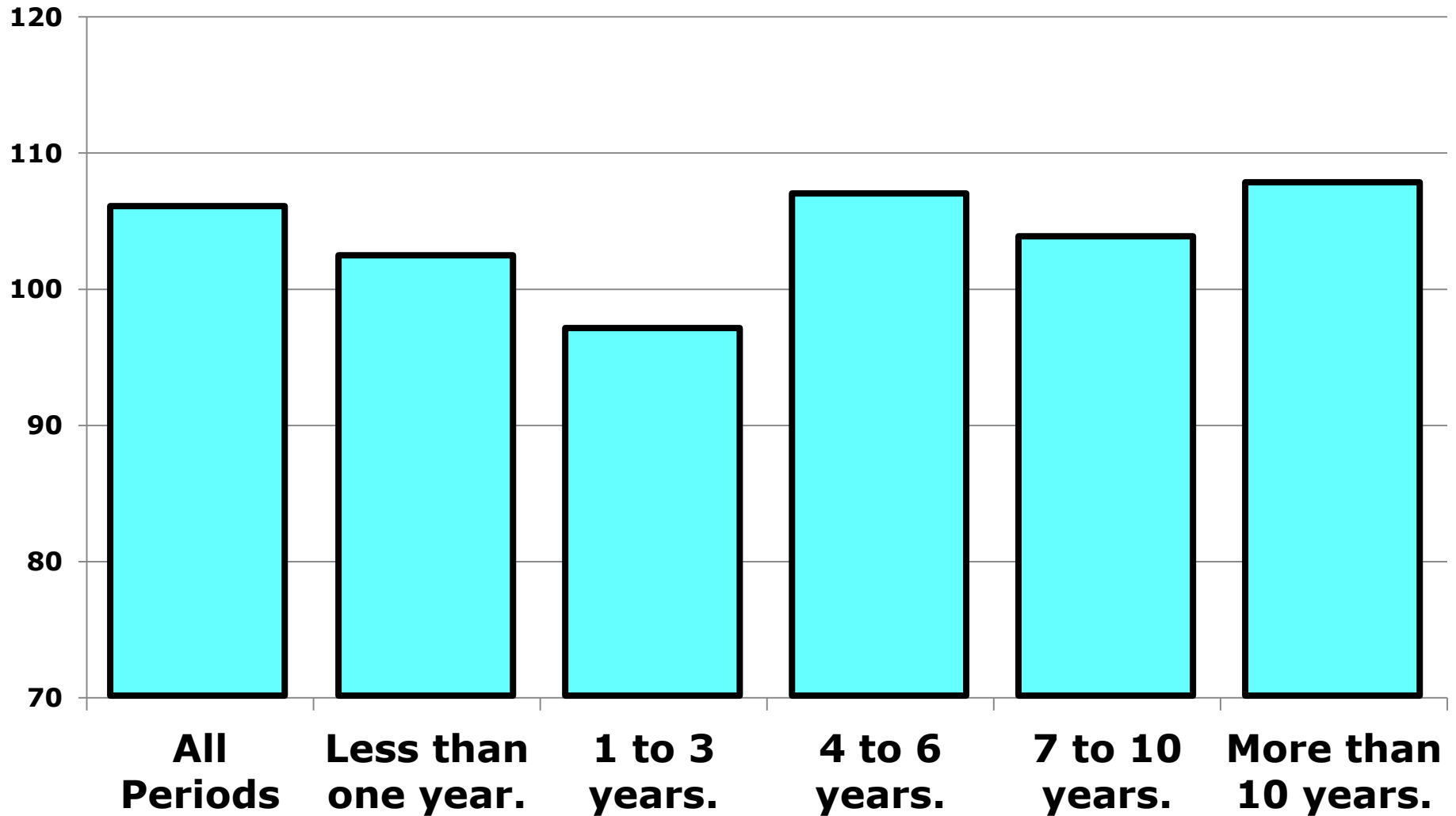
# Different Organization Types...
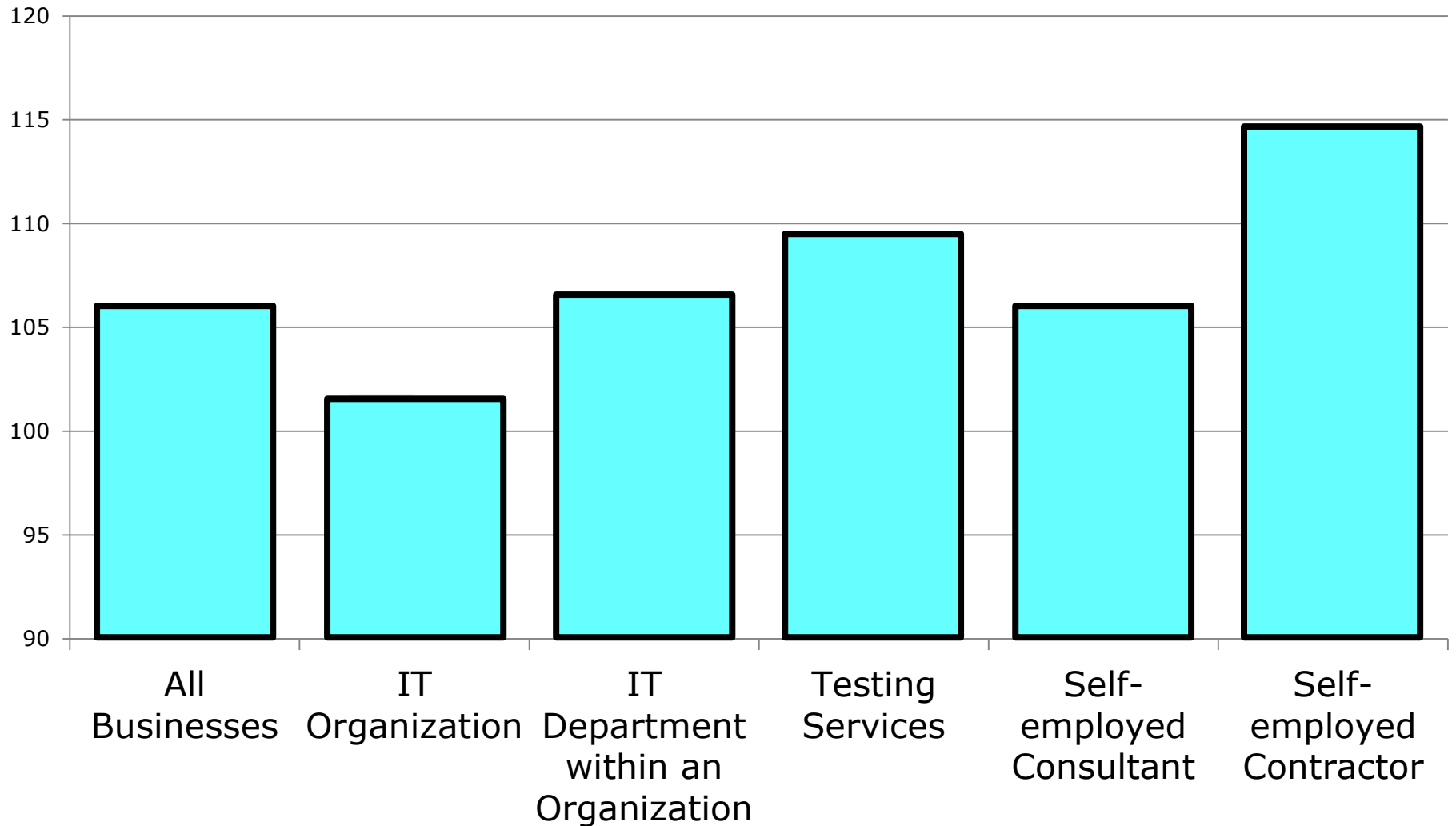
# What Motivates Testers?

# What Demotivates Testers?
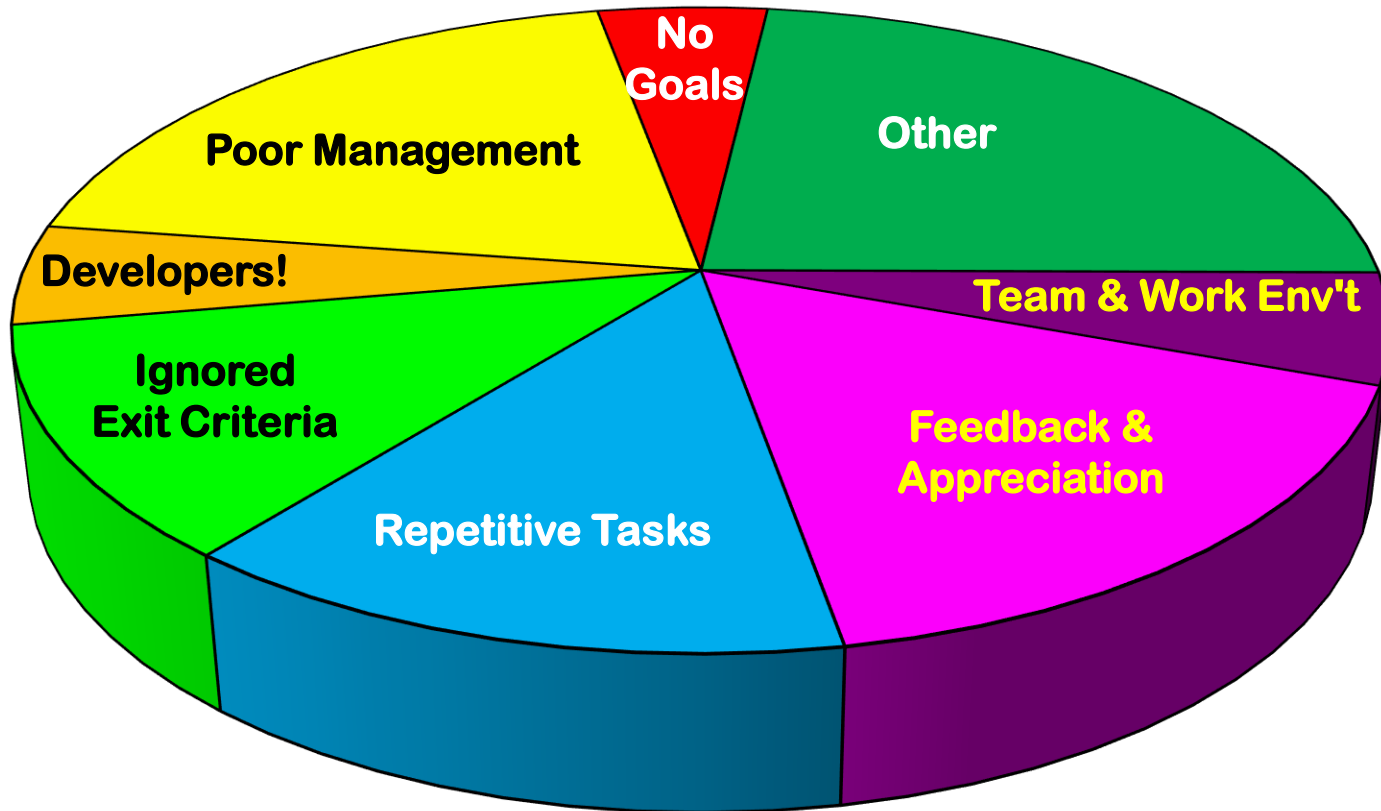
# How Do You Motivate?
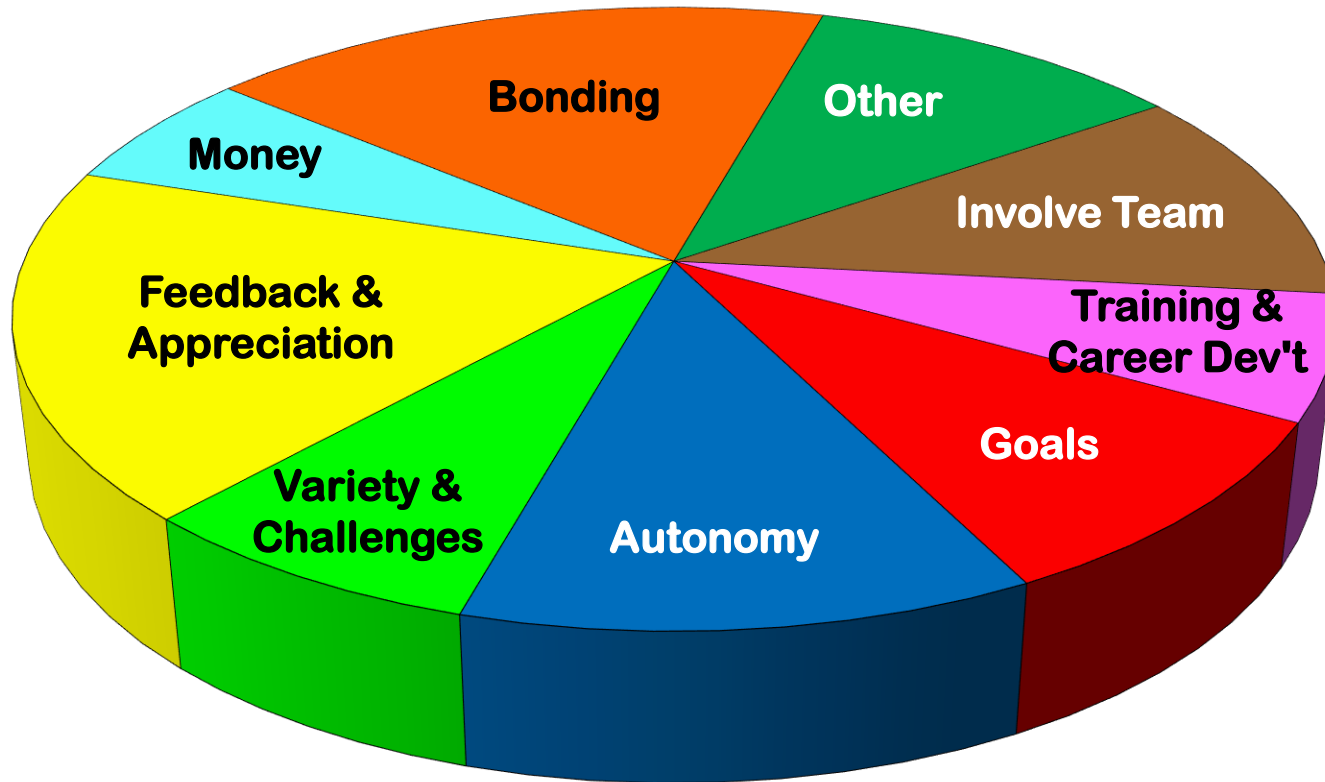
# Conclusions

- Testers are special
  - we can improve on the generic motivation theories
- Please try to use the most influential factors
  - ENV'T + VARIETY + MASTERY + FEEDBACK + AUTONOMY
- Not all testers are the same
  - Don't treat everyone working in testing the same
  - We need to consider 'smarter' approaches to the motivation of testers



- Thanks to Tafline Murnane for helping me to collect the data
  - And don't blame her for my analysis and conclusions ☺

# Thanks for listening

# Any Questions?

More information 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) |