

# Niche Update

## Special points of interest:

- Predicting Safety Attitudes
- Outsourcing Impacts on Financial Performance and Permanent Employees
- Standard Niche Ability Tests go online
- Assessment Crossword

## Predicting Safety Outcomes from Assessments

Niche Consulting conducted research within a large NZ company who employed people in safety critical roles. While we endeavoured to get accident and near miss data from the organisation this was not readily available, so we had to use alternate ways to measure safety behaviours and attitudes. The foundation for designing this project was some key research on safety attitudes and behaviours, which is summarised as follows:

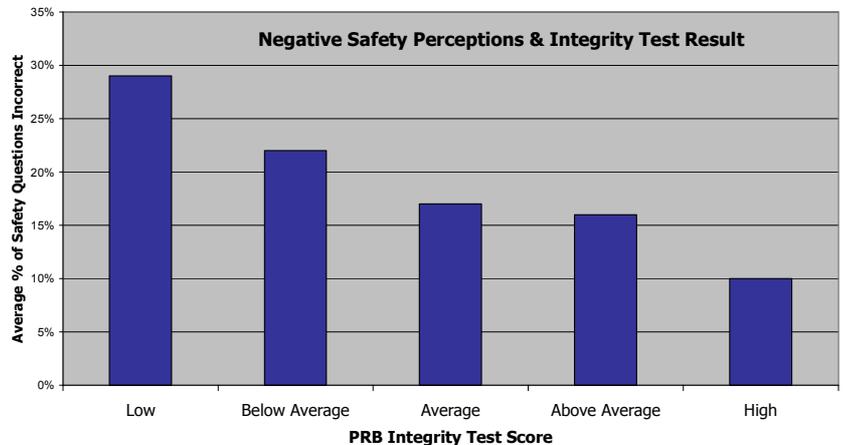


1. Research by Mullen (2004) showing why people acted unsafely and that their perceptions and attitudes to safety could predict how safely they would act.
2. Extensive research showing the integrity testing links to counter-productive work behaviours in employees. Acting unsafely is a counter-productive behaviour.
3. Several research studies showing that some of the Big Five personality traits: Conscientiousness, Emotional Stability and Agreeableness – were linked to safety behaviours and accidents.

The research involved over 100 supervisors and we looked at whether we could predict safety attitudes with some psychometric assessment tools.

### Personnel Reaction Blank

The individuals completed a survey about their safety attitudes, the PRB integrity test and a big five personality assessment.



We found that supervisors with Low integrity test scores were almost **3 TIMES** more likely to have negative perceptions and attitudes about safety than those with High scores, and almost **2 TIMES** more likely than those with Average to High Scores.

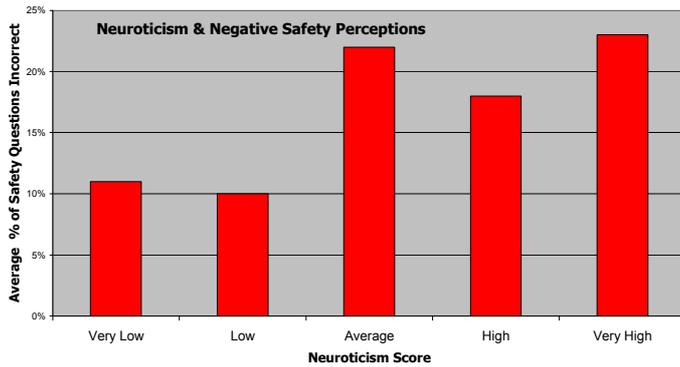
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## Big Five Personality Results

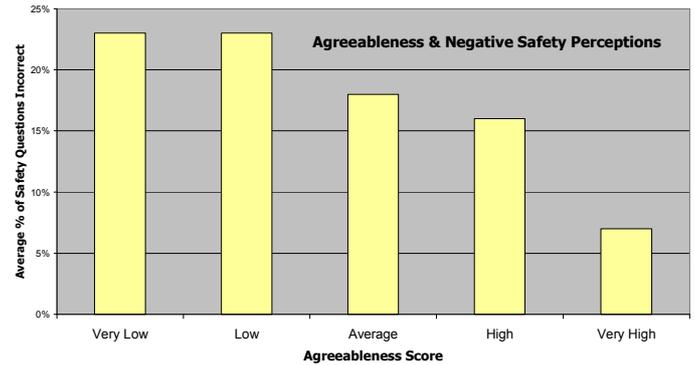


### Neuroticism

The Neuroticism scale measures Emotional Stability. The higher the score on this scale the less emotionally stable an individual is. Our study found that supervisors with Average, High or Very High Neuroticism test scores were over **2 TIMES** more likely to have negative perceptions and attitudes about safety than those with Low or Very Low scores.

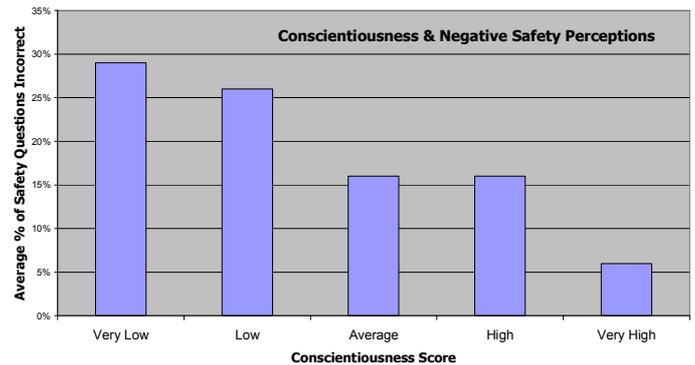
### Agreeableness

Our study found that supervisors with Very Low or Low Agreeableness test scores were over **3 TIMES** more likely to have negative perceptions and attitudes about safety than those with Very High scores, and over **1.5 TIMES** more likely than those with High to Very High Scores.



### Conscientiousness

Our study found that supervisors with Very Low Conscientiousness test scores were nearly **5 TIMES** more likely to have negative perceptions and attitudes about safety than those with Very High scores, and almost **2 TIMES** more likely than those with Average to Very High Scores.



Our study found we can predict more positive safety attitudes with the use of psychometric assessment tools. These findings are in line with previous research, though our research also shows transferability to safety critical roles in the NZ context.



We have shown a robust integrity test or personality measure can predict useful information about safety attitudes and perceptions in individuals. Of the many strategies an organisation can utilise to reduce workplace incidents, accidents and near misses – one of the easiest to implement is to ensure the organisation selects new personnel who are predisposed to displaying safety conscious attitude. By using well designed and robust assessment tools that predict safety attitudes when selecting safety critical personnel, an organisation should have strong utility gains in the area of workplace safety.

*Braithwaite & Grabosky (1995) found that serious violations of rules were the cause, contributed to the cause, or exacerbated the effect of 33 out of 39 multiple-fatality coalmine disasters, in the US, UK and Australia. The willingness of employees to follow the rules, rather than ignore or rebel against them, is critical in intrinsically dangerous jobs.*

## Outsourcing - Impacts on Staff and Financial Performance

There has been discussion of late in the media around outsourcing and its potential for cost-saving in these cost conscious times. Findings around the impact of outsourcing on those working in these non-permanent roles have been surprisingly mixed. It appears to be a very complex area with so many factors involved including the a wide range of contingent work plus how it is managed from an organisational perspective.

### 1. Research on the Financial Advantages of Outsourcing

The cost savings from the use of temporary workers in organisations have been only marginal in some studies (Geary, 1992). Martinez-Sanchez et al. (2007) found in a survey of over 150 Spanish firms that there was no relationship between the level of labour outsourcing and measures of financial, innovation or company performance. They also found that too much outsourcing actually produced less production cost savings. So the expected financial gains from outsourcing may be at times be over stated.

### 2. Research on the Impacts of Outsourcing on the Employees

Davis-Blake et al. (2003) found from a national sample of employers that were using both temporary agency and fixed-term contract workers that there was a negative impact on the permanent employees' manager-employee relationship. Changing the workforce dynamics impacted negatively on permanent employees in the following three areas, and they tended to hold their managers responsible for these negative changes:

1. Higher Responsibility levels
2. Lower Job security
3. Fewer Opportunities

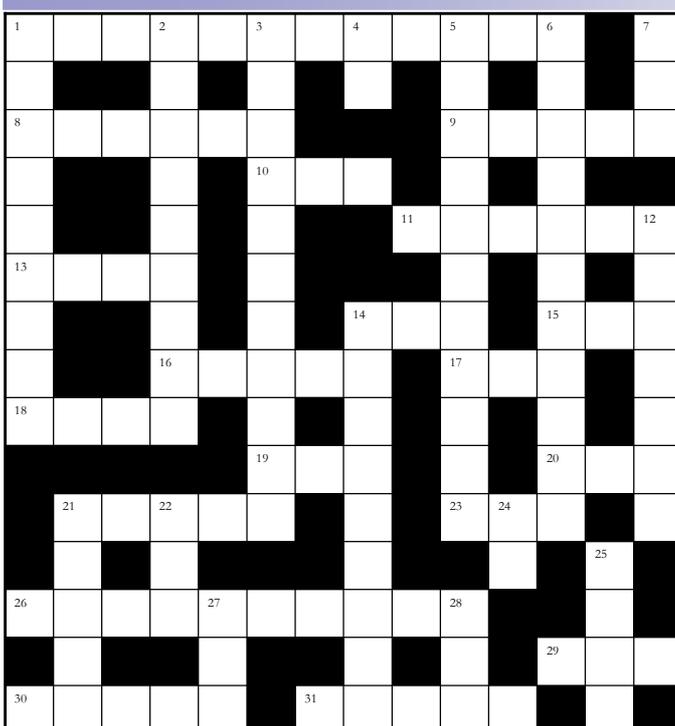
There were marked differences in permanent employee reactions to temporary agency workers versus fixed-term contractors.

- ◆ Use of temporary workers (usually lower level roles) increased turnover and reduced loyalty to the company in permanent workers.
- ◆ Use of fixed-term contractors (usually more skilled & specialised) did not impact on the above measures.



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## Assessment Crossword



**HINT:** Most of the words in the crossword (but not all) are related to assessments, statistical techniques or business:

### Across

1. Psychological (12)
8. Solid (6)
9. Significant (5)
10. Acronym for test (3)
11. Protection (6)
13. After that (4)
14. Acronym for test (3)
15. Cut (3)
16. Happen (5)
17. Group (3)
18. Depend (4)
19. Make (3)
20. Smallest whole # (3)
21. Not telling the truth (5)
23. Japanese currency (3)
26. Data (10)
29. Utilise (3)
30. Instruct (5)
31. Deduce (5)

### Down

1. Staff (9)
2. The relationship between cause and effect (9)
3. Subcontracting (11)
4. People Intelligence (2)
5. Consistency of a test (11)
6. Statistical relationship (11)
7. Connect (3)
12. Someone who gives in easily - scale name from SPQ (7)
14. Measure (9)
21. After some time (5)
22. Acronym for testing theory related to responses (3)
24. For example (2)
25. Assessment (4)
27. Charged atom (3)
28. Observe (3)

## Outsourcing - Impacts on Staff & Financial Performance ~ Continued from Page 3

If organisations don't take care of employee needs when employing contingent labour then this can have a negative impact on the health of workers and over time on the firms that hire them (Sheriden & Conway, 2001). In a NZ case study (Twinaime et al., 2006) a company moved to a model using contingent labour where they still had core permanent employees but also employed temporary agency staff and contractors.



The researchers found that core employees felt that they now had:

1. Low job security
2. Pressure on them to extend their work hours
3. Lower remuneration expectations
4. Additional burdens of training & supervising the temp workers

Their organisational commitment however, seemed to increase, as often has been shown to happen with decreased job security.

Overall, while the research is mixed in the results of outsourcing on financial performance there is clear evidence that it does have the potential to negatively impact the permanent workforce's well-being and attitude towards the organisation. As such, care is needed to when implementing large scale outsourcing in a company to minimise the negative impacts on the permanent employees.

### The following things can be done to assist in the transition to and use of non-permanent workers:

- ◆ Managers be more active in creating cultures that optimise the benefits of contingent employment strategies such as encouraging the cross-pollination of knowledge.
- ◆ Creating a more open and less hierarchical organisational culture which will minimise feelings of threat for both kinds of workers.
- ◆ Minimising permanent workers' perceptions of job insecurity through, for example, reassurance and communication.
- ◆ Hiring temporary staff not just to minimise costs but also for positive reasons such as taking on specialised skills or easing the workload of permanent staff – and communicating this to staff.
- ◆ Assist and support non-permanent workers to manage their employment strategies more effectively in such areas as continued training and career planning.
- ◆ Providing opportunities for temporary staff to take on permanent roles – they are likely to perform at higher levels which will continue for some time once hired permanently.

## Niche Standard Ability Tests Go Online

Almost all our ability tests can now be delivered online, though they still need to be supervised. For those who use our standard battery of ability tests (below), these can now be delivered online and the test makers have done equivalence studies, to ensure the versions are comparable with the paper and pencil versions.

- ◆ EAS1 ~ Verbal Comprehension
- ◆ EAS6 ~ Numerical Reasoning
- ◆ EAS7 ~ Verbal Reasoning
- ◆ Wonderlic ~ IQ test

This change also makes it easier for those who want to do the administration in-house of these ability tests - no more running around with a stopwatch, the computer aids with standardisation of the testing conditions.



### Crossword Answers:

1. psychometric 2. causation 3. outsourcing 4. eq 5. reliability  
6. correlation 7. tie 8. robust 9. large 10. spq 11. safety 12.  
yielder 13. next 14. cpi 15. axe 16. occur 17. lot 18. lean 19.  
net 20. one 21a. lying 21d. later 22. irt 23. yen 24. eg 25. test  
26. statistics 27. ion 28. see 29. use 30. train 31. infer

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