

# Australia's future aged care workforce: personality matters

White Paper by:  
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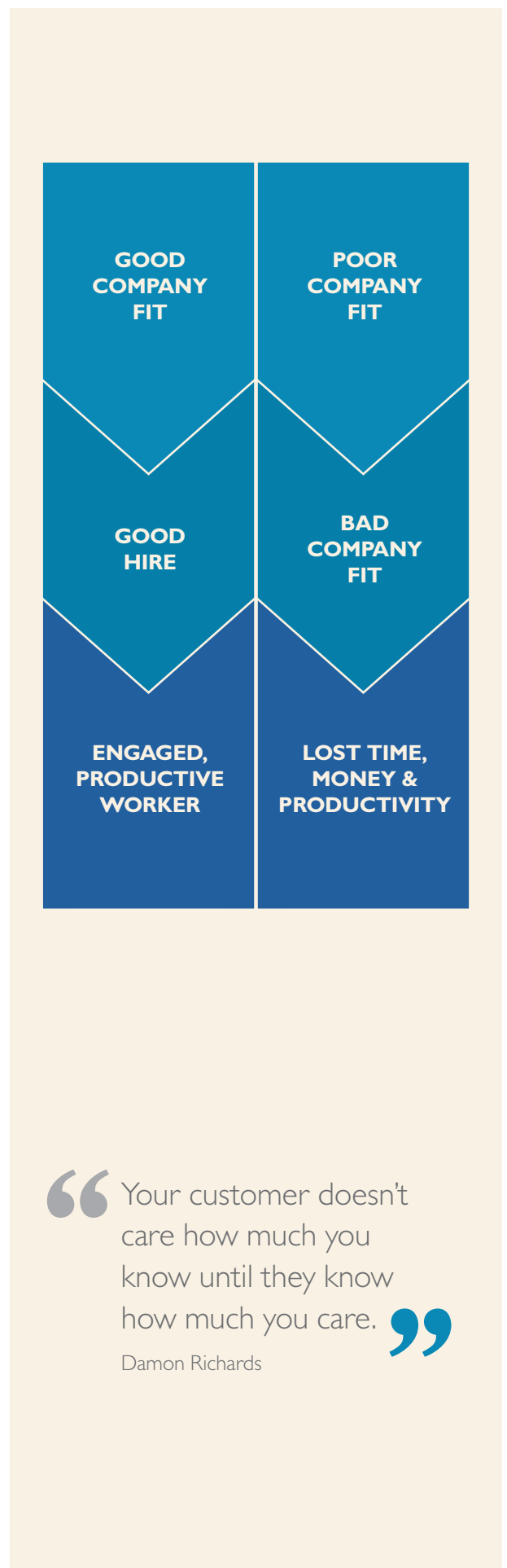
# Introduction and Purpose of the Study

Health Care workers in the aged and disability sectors have been an important part of the workforce and also constitute a major part of expenditure in these sectors. With a rapidly ageing population, and the introduction of the NDIS (National Disability Insurance Scheme) it can be comforting to know that the right people are working in these sectors looking after vulnerable clients and are assisting in their care. It's not only important to have individuals with the right skillset caring for our ageing and disabled populations, but having those with the right personality and motivation to be in this type of role is equally important. **Employees are much more likely to be motivated, engaged and committed to delivering high-quality care if their personality is a good fit with the organisational culture and role expectations.**

According to Gordon (2014) personality traits describe the relatively stable characteristics that influence behaviour. By gauging a person's unique resources, these traits ultimately demonstrate the way in which they behave on a daily basis (i.e. resistance to stressful situations or the degree to which someone is comfortable with social interaction). **It's important to go beyond what a person can do and gain insight into what they are likely to do.** In a sense, measures of ability can provide information regarding maximum performance (i.e., what they are capable of doing) while personality gives you the extra knowledge of likely typical performance (i.e., what they will do) on the job. The reality is that many employees do not perform at maximum potential on a day-to-day basis. However, we often see typical behaviour (behaviour driven by their personality type).

The integration of personality assessments into the personnel selection process (Salgado, Viswesvaran, & Ones, 2001) is prominent in many industries and research has continuously demonstrated the validity and utility of such measures for predicting job performance (Barrick & Mount, 1993; Schmidt & Hunter, 1998). In particular, the use of job-relevant personality inventories that can be linked to job success has been suggested to increase face validity of the selection measure and to reduce potential discrimination during the selection process (Howard & Howard, 2001). Other more recent research (Heller, Watson, Komar, Min, & Perunovic, 2007; Slatcher & Vazire, 2009) also supports the use of workplace-specific personality tools to assess how someone is likely to approach their work.

This paper is specifically focused on the Australian Aged Care Sector, which has grown significantly as part of the continuing shift in employment towards services industries. If anything the demand for aged care and disability support professionals is projected to accelerate over the coming five years; consequently, being able to more effectively and efficiently select health care workers is becoming increasingly important. **Meeting the growing need for such workers could potentially be a problem if we are not equipped with the right tools to select and develop the right workers.** Newly joined with Pearson TalentLens to conduct a study examining the relationships among performance ratings, assessment centre results and Workplace Personality Inventory II scores for individuals in the Australian Aged Care sector with an ultimate goal of validating these tools for the effective selection and development of health care providers. Background information on the Australian Health Care and Social Assistance (HC&SA) Industry along with key findings, practical implications and future research will be discussed in this paper.

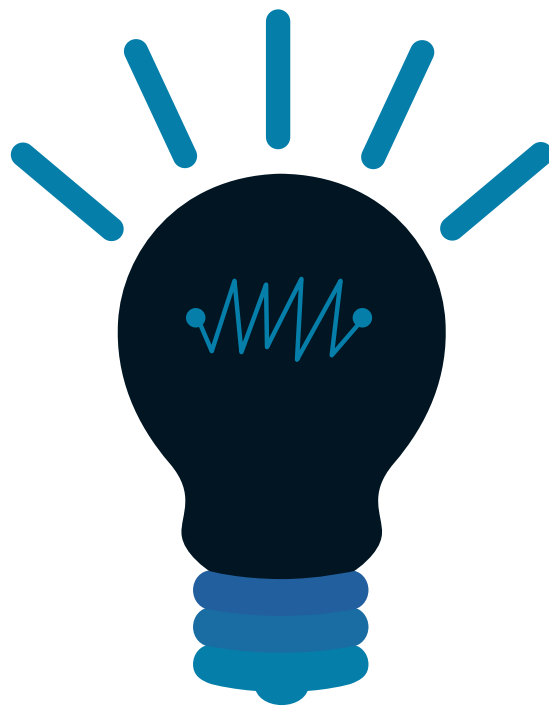


# Highlights from the Australian Health Care and Social Assistance (HC&SA) Industry

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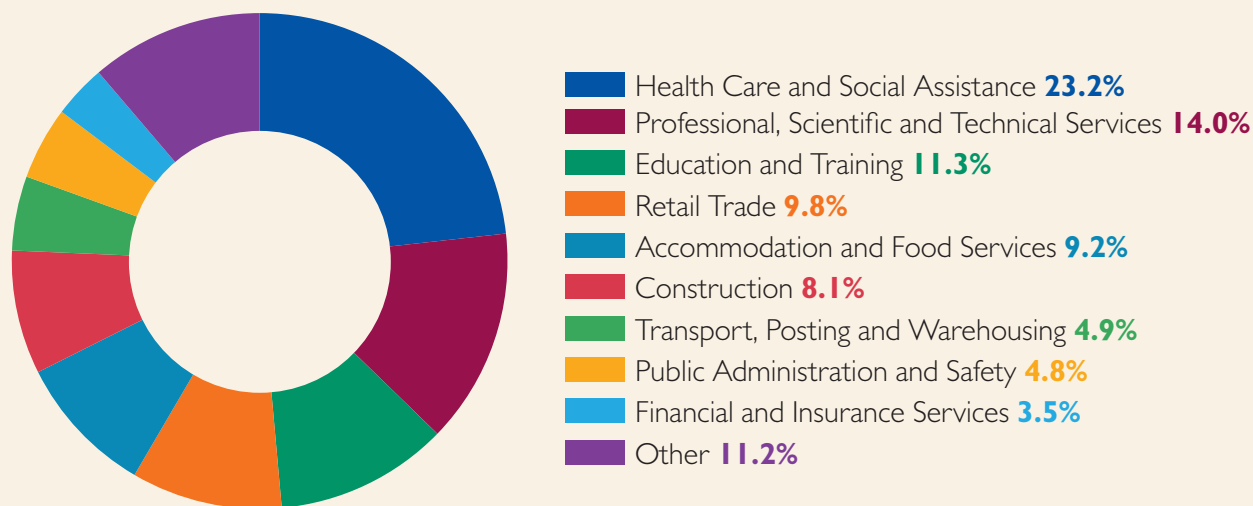
The Australian Government Department of Employment Industry Outlook Report identifies **HC&SA** (in which Aged Care is one of eight sectors) **as the largest employing industry in Australia**, with more than 1.4 million people (or 12.3 percent of the total workforce) as of May 2014. The Aged Care sector (also referred to as Residential Care Services) is in fact the second largest contributor to employment in the HC&SA industry after the Hospitals sector, employing 16.7 percent of the industry workforce as of May 2014.

➤ According to the 2016 Industry Employment Projects report (see Figure 1) provided by the Australian Government Department of Employment, **HC&SA is projected to make the largest contribution to employment growth** (increasing by 250,200 workers), **over the next five years due, in part, to** strong contributing factors such as the implementation of the National Disability Insurance Scheme, **Australia's ageing population**, and increasing demand for childcare and home based care services.



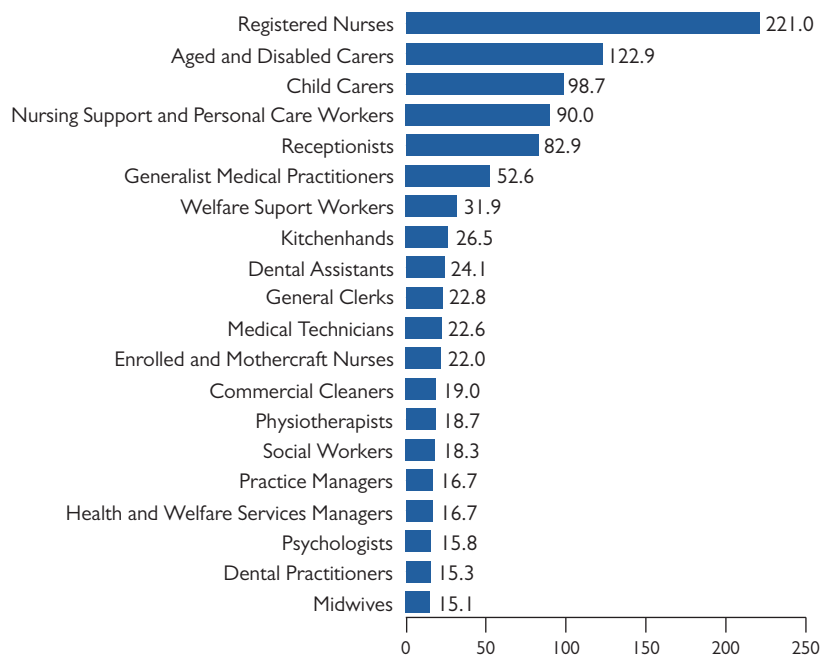
# Highlights from the Australian Health Care and Social Assistance (HC&SA) Industry

**Figure 1.** Share of projected employment growth, by industry<sup>1</sup> – five years to November 2020



Source: Australian Department of Employment, 2016 *Employment Projections to November 2020*

**Figure 2.** Main employing occupations in the Health Care and Social Assistance industry ('000)



Source: ABS Labour Force Survey, four quarter average, custom data request, 2013.

## Industry Highlights



In 2013, the largest employing occupation in the HC&SA industry by far was Registered Nurses with 221,000 workers followed by Aged and Disabled Carers with 122,900 workers.

<sup>1</sup> 'Other' consists of Administrative and Support Services; Rental, Hiring and Real Estate Services; Other Services; Arts and Recreation Services; Information Media and Telecommunications; Wholesale Trade and Electricity, Gas, Water and Waste Services. Agriculture, Forestry and Fishing; Mining and Manufacturing are excluded from the chart as they are not projected to grow over the five years to November 2020.

# Key Workforce Issues Facing the Aged Care Sector



The number of Australians expected to use Aged Care services each year will more than triple to about 3.5 million by 2050. The workforce required to deliver these services will need to grow from 300,000 to 800,000. [1]



According to research by RMIT, staff turnover within the sector is currently at 25% a year and this is set to worsen as the sector's ageing workforce (average median age 48) retire. [2]



According to the Stewart Brown Financial Performance Survey 2015, care costs (the largest share of which is staff cost) have increased 65.4% since 2007. [3]



Consumer choice will drive behaviour for customers to consider personality and likeability in their buying behaviour, leading to a predicted growth in demand for softer skills over qualifications and experience. [4]



In 2013 the government axed the \$1.2 billion Labor scheme to increase pay of aged care workers. [5]



In January 2015 the government commissioned an audit of funded Aged Care workforce programs to inform the development of a workforce strategy for the sector. This has been delayed and the workforce strategy is in limbo. [6]



The Mid Year Fiscal and Economic Outlook 2015 -2015 announced that the government planned to achieve savings of \$595 million over four years through reduced investment in health workforce programs (with many programs ceasing to operate). [7]

[1] Productivity Commission: Caring for older Australians

[2] RMIT: Attracting and retaining Australia's aged care workers

[3] Stewart Brown: Aged care financial performance survey 2015

[4] Deloitte: How consumer directed care is reshaping the community care sector

[5] The Australian: Coalition axes scheme giving wage rises to aged care workers

[6] Australian Ageing Agenda: Frustrations rise over workforce

[7] LASA: 2015-2015 MYEFO, the bare facts

# Description of the Study

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**Participants.** This study involved 258 job candidates with Newly in the Australian Aged Care sector. They were categorised into four different job types: **Personal Care Assistant** (n=206); providing assistance in the home and helping clients with personal care needs and daily activities; **Nurse** (n=26); **Health Services Assistant** (n=23) working in an Aged Care facility, usually in support roles to carers; **Youth Support Worker** (n=2) providing support to youths in Residential Care, e.g. wards of the state. The sample consisted of 27% males and 73% females with a variety of ethnic backgrounds (37% Asian/Pacific Islander, 33% White, 14% Black, 12% Other, 4% Multiracial, and 2% Hispanic/Latino) and a wide distribution of years in occupation, education level and age, going up to 69 years..

**Procedure.** The individuals were first phone screened and then, if successful, invited to participate in an assessment centre, which consisted of three exercises. These were

- a Language Literacy and Numeracy (LL&N) test measuring English comprehension and numerical skills
- a Group Exercise measuring teamwork skills, communication skills, leadership and followership skills as well as their clinical knowledge
- a structured interview measuring concern for others, rule following, integrity, comprehension, and clinical knowledge.

If unsuccessful in the assessment centre, candidates did not move forward in the process. If successful in the assessment centre, candidates were invited to take the **Workplace Personality Inventory II** (which will be discussed in more detail in the next section), asked to supply two work-related referees and if successfully assessed in all these put forward to providers for employment in the Aged Care sector. Some candidates were not picked up by employers or had gained work with another employer before receiving an offer, and a few unsuccessful and replaced.

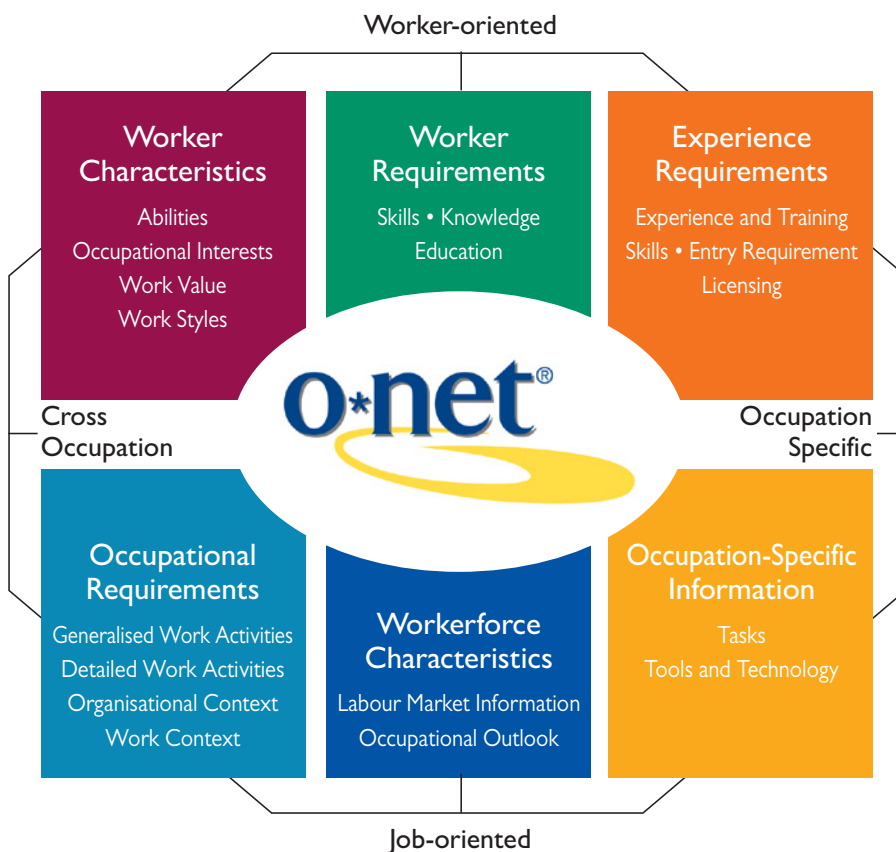
Of the 258 candidates, there were 234 candidates with LL&N scores, 233 candidates with Group scores and 233 candidates with Interview scores. All of these candidates had personality scores.

Based on an assessment made by Newly staff or a manager at the Aged Care facility, candidates that were placed into a role were categorised as high performers or low performers. There were a total of 29 candidates with job performance ratings and complete data for the assessment centre and personality assessment with 11 rated as poor performers and 18 rated as top performers.

# Description of the Study

**Personality Measure.** As mentioned previously, employers want to be sure to hire individuals who are not only a good fit for the company culture but also a good fit for the role so they can retain them long-term. A measure of personality can be used to define someone's typical approach to their everyday life, and it reflects how an individual is likely to behave in normal situations. The Workplace Personality Inventory II (2013) was used in this study to assess some of the softer skills that are needed when selecting health care professionals. This particular personality assessment is based on work-style taxonomy and is endorsed by the US Department of Labor's Occupational Information Network which is known as O\*Net.

## Department of Labor's Occupation Information Network



### Dept. of Labor

**wanted to...** Identify a comprehensive set of work styles that describe important job requirements.

### So they...

Selected work styles based on scientific literature—behaviours that correlate with job performance (e.g., dependability, persistence)

The tool is easy to interpret and the questions are work-relevant. The Workplace Personality Inventory II is designed to measure sixteen work styles or **work-related personality traits** that are important to job success in a wide range of occupations. These 16 workstyles collectively identify the 6 drivers of performance: Achievement, Interpersonal, Social Influence, Self Adjustment, Conscientiousness, and Practical Intelligence.



# Description of the Study

## Workplace Personality Inventory Drivers of Workplace Performance



The purpose of the 6 drivers is to organise the 16 work styles into easy to reference themes and to help identify potential patterns or strengths and weaknesses.

In essence, the Workplace Personality Inventory II:

- ✓ **Evaluates employee work-styles** to predict how people approach their work, and
- ✓ **The Work styles themselves complement ability assessments** to provide important information about job performance above and beyond cognitive ability

The assessment has 192 work-relevant items and each Work Style, or scale, is assessed through approximately 12 items per scale describing a behaviour. For each item, the participants will rate the extent to which they agree with the statement on a four-point scale ranging from strongly disagree to strongly agree.

A score for each Work Style is computed based on the candidates' responses to the questions associated with that scale. Some of the many benefits of using this particular personality assessment include the following:

- **Work Relevant:** Questions are clearly related to the workplace and seen as "face valid" by candidates and scales link to O\*NET.

- **Does not Discriminate Against those with Disabilities:** Clear delineation between work-related personality and mental health assessments.
- **Easy to Interpret:** Results can be easily understood without reference to obscure psychological terms.
- **Reliable:** Designed to produce consistent, accurate and job-relevant results. The internal consistency estimates on the Workplace Personality Inventory II scales range from .73 to .85 with a median of .79, which shows good reliability of the assessment. The internal consistency estimates for the domain scales are also very good ranging from .86 to .92, with a median coefficient of .89.
- **Resistant to Faking:** Warning against faking and an "Unlikely Virtues" scale
- **Short Administration:** 30-35 minutes
- **Valid and Fair:** Designed to produce accurate and job-relevant results. By collecting test scores and criterion scores (which could be job performance ratings, grades in a training course, supervisor ratings or some other criterion of interest), one can determine how much confidence may be placed in using test scores to predict job success.

# Description of Study

## Predictive Validity Example

When looking at the relationship between the Workplace Personality Inventory II scales and on-the-job performance of 49 leaders in a large urban health care,

- Results clearly show that domain scores significantly correlated to on-the-job performance of the incumbents.
- Four of the six domain scales correlated .30 or higher while three of the six domain scales correlated .28 or higher.
- Achievement, Practical Intelligence, and Social Influence were most highly related to the incumbent's potential to excel at higher levels within the organisation.

WPI-II Domain	Job Performance Indicator	Validity Coefficient
Achievement	Achievement-Related	.44**
	Behaviours	
	Overall Performance	.29*
	Overall Potential	.28
Conscientiousness	Conscientiousness-Related	.30*
	Behaviours	
	Overall Performance	.14
	Overall Potential	-.08
Interpersonal	Interpersonal-Related	.15
	Behaviours	
	Overall Performance	.16
	Overall Potential	-.24
Practical Intelligence	Practical Intelligence-Related	.41**
	Behaviours	
	Overall Performance	.44**
	Overall Potential	.27
Self Adjustment	Self Adjustment-Related	.30*
	Behaviours	
	Overall Performance	.28*
	Overall Potential	.12
Social Influence	Social Influence-Related	.17
	Behaviours	
	Overall Performance	.06
	Overall Potential	.39**

**Analyses.** Descriptive statistics were used to describe the basic features of the data in the study and summarise the sample. Correlations were used to look at the relationships between the variables in the study such as assessment centre scores and personality scale scores. Independent-sample *t*-tests were conducted to compare personality and assessment centre scores in low performers versus top performers as well as to compare personality and assessment centre scores for Nurses and Personal Care Assistants (PCAS).

# Results

## Personality and Assessment Centre Correlations

Significant Correlations with LL&N	
Measure	Correlation Coefficient
Independence	.19**
Practical Intelligence Domain	.17**
Cooperation	.15*
Initiative	.15*

Significant Correlations with the Interview	
Measure	Correlation Coefficient
Group Exercise	.32**
LL&N	<b>-.16*</b>
Innovation	<b>-.13*</b>

Note: \* $p < .05$ ; \*\* $p < .01$ .



The Language Literacy and Numeracy (LL&N) test had significant positive correlations with Independence, the Practical Intelligence Domain, Cooperation and Initiative meaning that higher scores on this exercise were associated with higher scores on these personality scales.



The Interview had a significant positive correlation with the Group exercise meaning those with higher interview scores tend to have higher Group exercise scores.



The Interview had significant negative correlations with the LL&N test and Innovation meaning that higher scores on the Interview were associated with lower scores on these two measures.

## Job Performance Rating Correlations

Results indicated several significant positive correlations with job performance ratings.

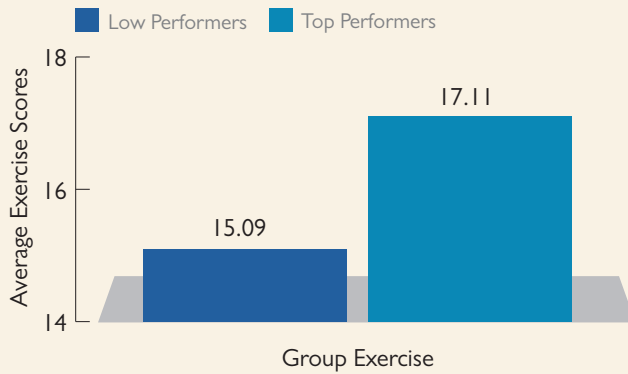
Significant Correlations with Job Performance	
Measure	Correlation Coefficient
Unlikely Virtues	.50**
Conscientiousness Domain	.50**
Rule Following	.47**
Self Adjustment Domain	.44*
Attention to Detail	.42*
Dependability	.42*
Group Exercise	.42*
Adaptability/Flexibility	.41*
Stress Tolerance	.39*

Note: \* $p < .05$ ; \*\* $p < .01$ .

# Results

## T-tests: Top Performers vs. Low Performers on Assessment Centre Exercises

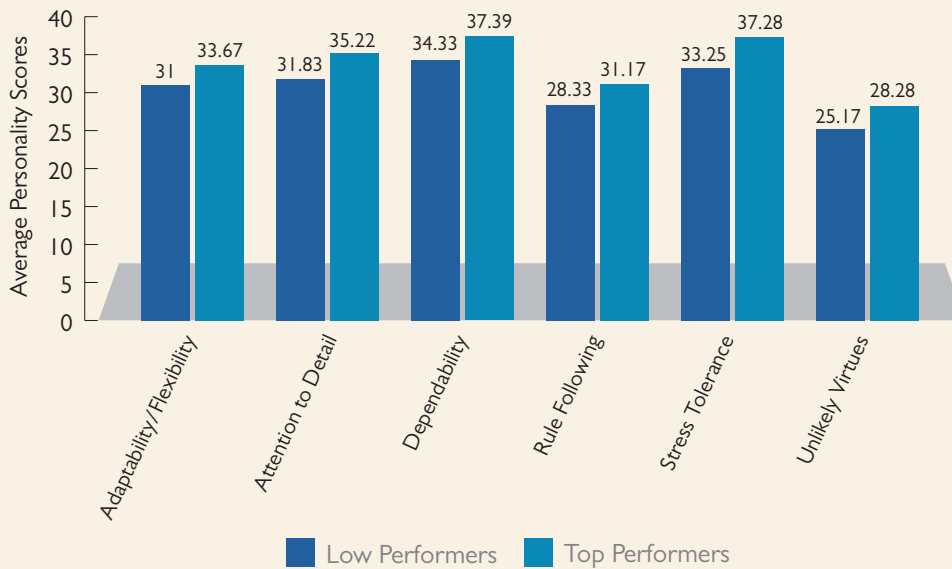
### Significant Assessment Centre Mean Differences



- Results showed a significant difference in Group Exercise scores for low performers ( $M=15.09$ ,  $SD=2.879$ ) and top performers ( $M=17.11$ ,  $SD=1.676$ );  $t(27)=-2.399$ ,  $p=.024$  with top performers having higher mean scores.

## T-tests: Top Performers vs. Low Performers on Personality Scale Scores

### Significant Scale Score Mean Differences



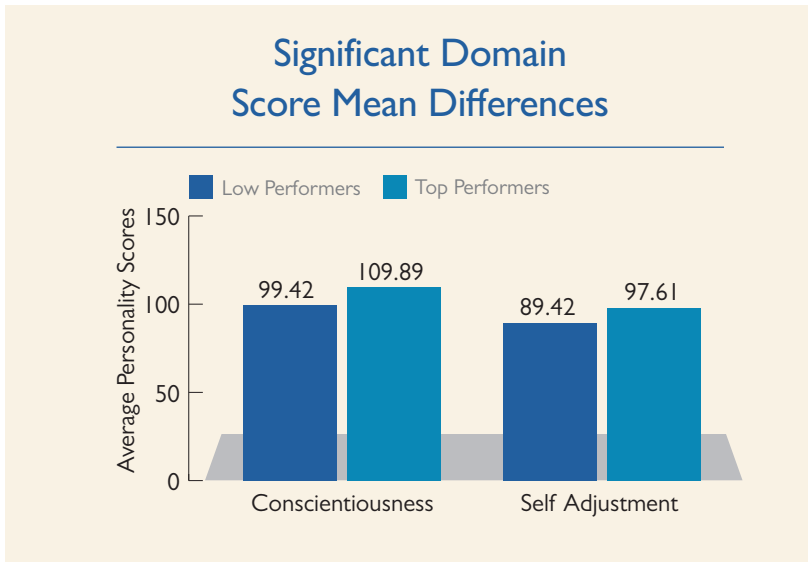
- ✓ There was a significant difference in Adaptability/Flexibility scores for low performers ( $M=31.00$ ,  $SD=2.629$ ) and top performers ( $M=33.67$ ,  $SD=3.254$ );  $t(28)=-2.366$ ,  $p=.025$  with top performers having higher mean scores.
- ✓ There was a significant difference in Attention to Detail scores for low performers ( $M=31.83$ ,  $SD=3.589$ ) and top performers ( $M=35.22$ ,  $SD=3.735$ );  $t(28)=-2.472$ ,  $p=.020$  with top performers having higher mean scores.
- ✓ There was a significant difference in Dependability scores for low performers ( $M=34.33$ ,  $SD=2.498$ ) and top performers ( $M=37.39$ ,  $SD=3.775$ );  $t(28)=-2.460$ ,  $p=.020$  with top performers having higher mean scores.
- ✓ There was a significant difference in Rule Following scores for low performers ( $M=28.33$ ,  $SD=3.888$ ) and top performers ( $M=31.17$ ,  $SD=3.878$ );  $t(28)=-2.784$ ,  $p=.010$  with top performers having higher mean scores.

# Results

✓ There was a significant difference in Stress Tolerance scores for low performers ( $M=28.33$ ,  $SD=2.902$ ) and top performers ( $M=31.17$ ,  $SD=3.714$ );  $t(28)=-2.224$ ,  $p=.034$  with top performers having higher mean scores.

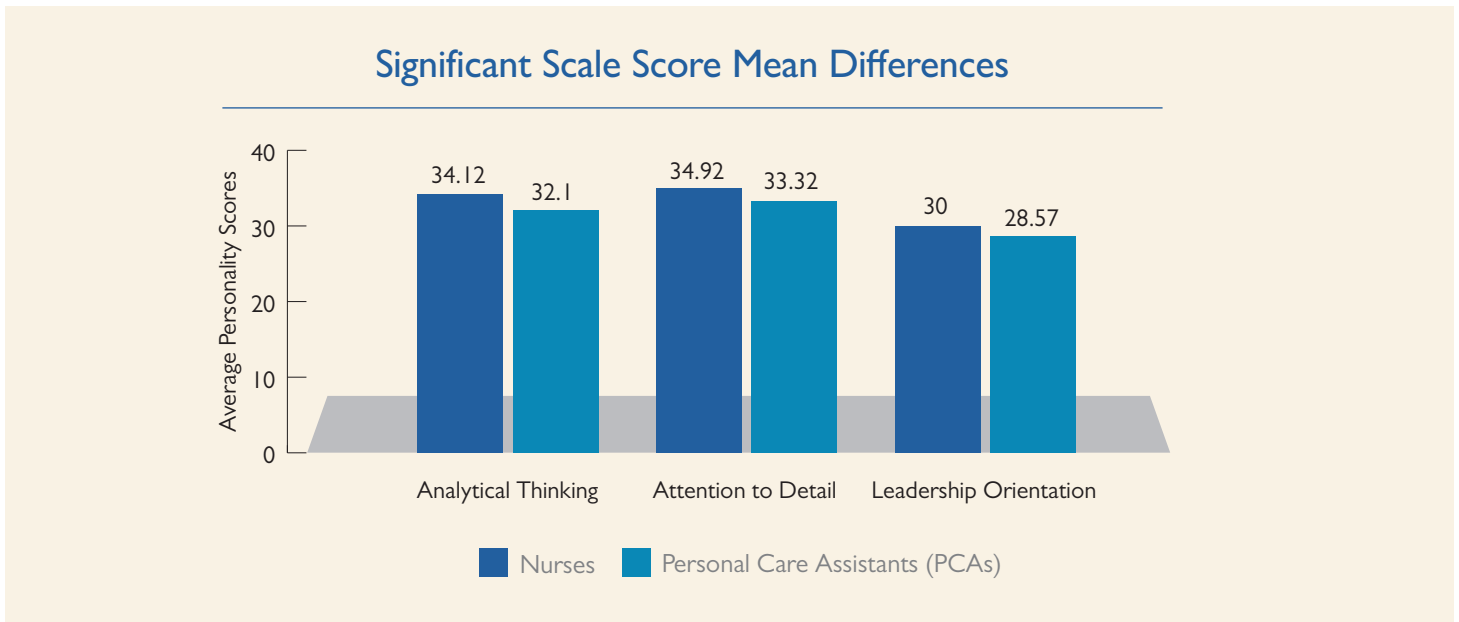
✓ There was a significant difference in Unlikely Virtues scores for low performers ( $M=25.17$ ,  $SD=1.946$ ) and top performers ( $M=28.28$ ,  $SD=3.121$ );  $t(28)=-3.068$ ,  $p=.005$  with top performers having higher mean scores.

## T-tests: Top Performers vs. Low Performers on Personality Domain Scores



- There was a significant difference in the Conscientiousness domain scores for low performers ( $M=99.42$ ,  $SD=8.867$ ) and top performers ( $M=109.89$ ,  $SD=9.474$ );  $t(28)=-3.041$ ,  $p=.005$  with top performers having higher mean scores.
- There was a significant difference in the Self Adjustment domain scores for low performers ( $M=89.42$ ,  $SD=7.192$ ) and top performers ( $M=97.61$ ,  $SD=9.319$ );  $t(28)=-2.573$ ,  $p=.016$  with top performers having higher mean scores.

## T-tests: Top Performers vs. Low Performers on Personality Scale Scores



✓ There was a significant difference in Analytical Thinking scores for Nurses ( $M=34.12$ ,  $SD=3.581$ ) and PCAs ( $M=32.10$ ,  $SD=3.574$ );  $t(230)=-2.713$ ,  $p=.007$  with Nurses having higher mean scores.

✓ There was a significant difference in Attention to Detail scores for Nurses ( $M=34.92$ ,  $SD=3.273$ ) and PCAs ( $M=33.32$ ,  $SD=3.462$ );  $t(230)=-2.237$ ,  $p=.026$  with Nurses having higher mean scores.

✓ There was a significant difference in Leadership Orientation scores for Nurses ( $M=30.00$ ,  $SD=3.335$ ) and PCAs ( $M=28.57$ ,  $SD=3.173$ );  $t(230)=-2.149$ ,  $p=.033$  with Nurses having higher mean scores.

# Discussion

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Overall, the results of the personality scales and the assessment centre exercises show some significant correlations. Despite the small sample for performance data, we did find several significant positive correlations with performance ratings. Overall, higher performance ratings were associated with higher scores on the Conscientiousness and Self Adjustment Domains in particular, within these Domains, the Rule Following, Attention to Detail, Stress Tolerance, Adaptability/Flexibility and Dependability Work Styles on the WPI II. The results from the Group Exercise in the Assessment Centre process (which measures teamwork skills, communication skills, leadership and followership skills as well as clinical knowledge) was also positively correlated with job performance ratings.

One interesting finding is the significant negative correlation between Interview scores and Innovation. This means that those with higher scores on this combined measure of concern for others, rule following, integrity, comprehension, and clinical knowledge are also likely to be more conventional than creative in addressing work-related issues or problems.

**The correlation between job performance and Unlikely Virtues does not necessarily carry any implications for candidate assessment. Higher percentile scores mean that the candidate was less likely to acknowledge common self-limitations and responded to questions more openly than most individuals in the selected norm group. The only reason for concern is when the scores are excessively high (e.g., 90th percentile or greater), which means there is a high probability of self-misrepresentation when completing the assessment.**

## Key Points . . .

Independence, the Practical Intelligence Domain, Cooperation and Initiative had the **highest correlations with the assessment centre exercises of all of the personality scales.**

Unlikely Virtues, the Conscientiousness Domain and Rule Following, respectively, had the **highest correlations with job performance.**

All significant mean differences in the personality scales and domain scores showed that **top performers exhibited higher scores than low performers on all of the scales.**

**The highest mean scores for the personality scales** were for Dependability, Stress Tolerance, and Attention to Detail, respectively. The highest domain scores were for Conscientiousness and Self Adjustment.

All significant mean differences between Nurses and Personal Care Assistants (PCAs) in the personality scores showed that **Nurses had significantly higher personality scores than PCAs.**

For Nurses and PCAs, **the highest mean scores were for Analytical Thinking, Attention to Detail and Leadership Orientation,** respectively.

# Conclusion

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The bottom line is that the person with the most knowledge for a given role is not always the best fit for the job... **personality does matter!** The findings with this sample of health care workers support the idea that there are certain characteristics that are related to successful performance in these particular health care roles with some being more important than others.

The fact that the significant personality differences in top performers and low performers as well as significant personality differences between those in different types of health care role means that these individuals are likely to approach their work differently. This type of information is useful in both employee selection and development as it provides information regarding, not what a person can do, but rather how a person is likely to approach their work, or what they will typically do. When hiring employees, organisations want individuals who are a good fit for the company culture but also a good fit for the role so that they can be productive, long-term employees. By understanding which personality scales are significantly related to job performance and are most critical to the particular role for which selection decisions are being made, employers will be better equipped to select the right candidates for a given role.

This study included a small sample of performance data and small samples in some of the roles which impacts the power to be able to identify significant differences in the data and predict job performance. Once we have more performance data, additional analyses can be performed to gain more information about correlations and group differences as well as gain more insight into how we can predict job performance based on personality and assessment centre scores.

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## About Us

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As the world's largest education company, with more than 40,000 employees in over 70 countries, **Pearson** is big enough to make change happen on a global scale, and we're dedicated to doing the right thing and inspiring others to do the same. TalentLens, a Pearson business, publishes scientific assessments that are used globally to hire and develop the 21st century workforce. Our instruments measure personality, critical thinking, problem solving, and a range of job skills to deliver data-driven insights that inform and clarify an organisation's human capital decisions. The Talent Assessment team is a part of the TalentLens group within Pearson Clinical Assessment. Learn more at [TalentLens.com](https://www.talentlens.com).

**Newly** is a fast growing digital marketplace, connecting aged care and disability support providers with high calibre care and support professionals. Newly's services have grown in response to the needs of the marketplace, assisting providers to overcome complex workforce challenges and gain a competitive advantage.

This paper was written by Keisha Phillips, Ph.D., Senior Research Director for Pearson Talent Assessment. The data was collected and prepared by Newly. Analyses of the data were performed by Kama Dodge, Senior Research Associate for Pearson Talent Assessment.