

Whitepaper

weirdly

Assessments and Org Psych:

Candidate Work Readiness



By Jamie McEwan
MSc (*Org Psych*), BSc (*Psych*)

Executive Summary

Goal: Identify which candidates are most ready to enter the workforce, with a focus on entry-level workplace expectations.

Outcome: Analysis confirms Weirdly's assessment is effective in identifying people with a high level of work readiness; defined as a combination of resilience, growth, resourcefulness and openness. Validation, reliability and bias checks are all statistically sound.

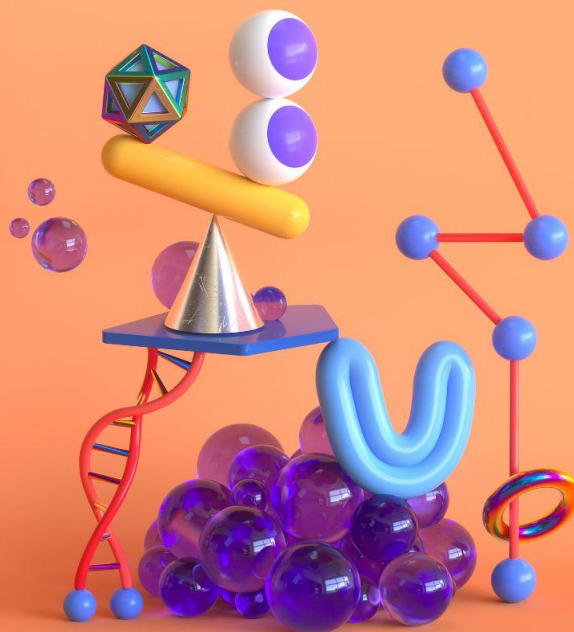
Work readiness has become an increasingly pressing concern of our high volume customers. While entry level positions typically gain the highest volume of applications, they are also the most prevalent role-type and have the highest turnover. So getting decisions right at this stage can have a significant impact on the time and cost of recruitment.

To support these decisions, Weirdly created an assessment that would increase recruiters

confidence in the hiring of new entry-level employees.

The following report outlines the creation and validation of our Work Ready assessment.

Our analysis of testing data shows the assessment has satisfactory criterion and construct validity. Reliability is satisfactory and bias checks ruled out the possibility of any influence of age or ethnicity on results.



Method

Identifying the key attributes to make up a work readiness score took a number of steps. Weirdly customers were surveyed, entry-level job advertisements and position descriptions were analysed, and the resulting findings were distilled into four overarching attributes along with accompanying definitions and descriptors.

The four attributes established to constitute work readiness were:

- **Work Ethic and Responsibility**
- **Follow Instructions**
- **Health and Safety**
- **Teamwork and Inclusion**

As with all Weirdly assessments, most questions were sourced from the Weirdly question database using the attribute definitions. The Weirdly question database is organised by a number of constructs, which are, for the most part, organisational values or preferred soft-skills. These constructs and questions have been defined and validated by Weirdly and our customers across years of testing and usage. Additionally, a small number of new questions were created to fill gaps in order to satisfy the need for high content validity of the assessment.

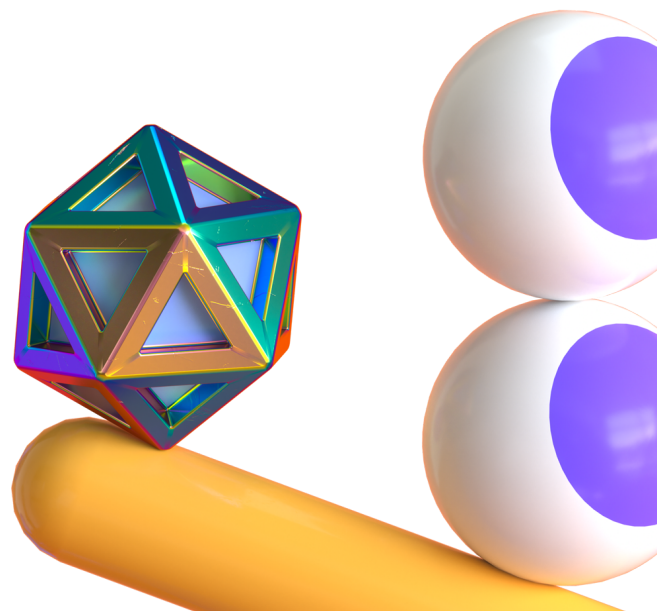
Over 3,000 Australia and New Zealand residents completed the assessment for testing and all received percentile-based

feedback on their results across the four attributes.

Participants ranged in age from 15 to 69 and were 70% female, 25% male and 2% gender diverse (3% did not disclose gender). Average time to complete was 8 minutes and the mean score was 75.8% with a standard deviation of 9.6.

Participants also responded to a number of related survey questions around stress and work experience. In addition, most had completed additional assessments offered by Weirdly, including Adaptability (N=2904), Customer Service (N=2188) and Organisational Values (N=878~488), analysis of which are included in this report.

While self-report assessments are not always perfect predictors of behaviour, the validation results discussed below indicate that the assessment has strong validity indicators that give us confidence that it is an effective measure.



Attribute	Definition	High Descriptor	Low Descriptor
Work Ethic and Responsibility	Being reliable and honest, taking responsibility.	A strong understanding of what attitude and behaviours are required to be an effective employee.	Still developing an understanding of what it is to be a trustworthy employee. Likely to thrive best when being closely managed.
Follow Instructions	Doing what is expected and sticking to the plan.	Able to be trusted to do what is expected at all times. Not likely to be distracted or go off-course.	May not yet be able to follow instructions consistently so would benefit from working closely with more experienced colleagues.
Health and Safety	Always respecting and following health and safety rules and policies.	Takes the time to understand all Health and Safety rules and behaves accordingly. Completes all necessary paperwork and happily attends all H&S meetings. May be suitable to roles with lead H&S responsibilities.	Not yet fully aware of the importance of Health and Safety, so may require training or support in this area. Most likely suitable for work that has very limited H&S responsibilities.
Teamwork and Inclusion	Working productively with others, communicating well and being inclusive.	At their best working alongside others. Likely to be conscientious and contribute well to the group. Also respects the need for an inclusive approach to hiring and creating teams.	At their best working independently. Likely to be focused on their own work, which may come at the cost of their awareness of their colleagues' work. Less likely to respect an inclusive recruitment approach.

Work Ready Assessment Validation

Analysis of the relationships between Work Ready data and self-report data indicates that the **Work Ready assessment has strong construct validity**, which is the need for evidence that shows the assessment is measuring what is claimed to be measuring.

Simply put, the people who score the highest on this Work Ready assessment are the ones with the most work experience.

This confirms that the Work Ready assessment measures familiarity with the workplace and the important attributes that contribute towards being effective in entry level roles.

In addition, analysis is also provided on the relationships between Work Ready data and recruitment outcomes and additional measures. These findings support the success of the Work Ready assessment and are discussed below.

“First Job” Applicants

Weirdly hypothesised that people applying for their first job are likely to score lower the rest of the participant group. All participants self-reported whether or not they were currently applying for their first job, which was used to perform independent samples T testing with the Work Ready assessment and its four measured attributes. This testing found significant differences in scoring between these two groupings, confirming the hypothesis.

T scores (p<.001)	“First Job” Applicants
Work Ready	24.14
Work Ethic & Responsibility	9.25
Follow Instructions	3.55
Health & Safety	7.64
Team & Inclusion	6.17

In fact, whether or not a candidate was applying for their first job had a large effect (Cohen’s d=0.88) on their Work Ready assessment score. **This indicates that it is likely to be a true measure of work practice knowledge as is the stated goal for the assessment.**

Level of Work Experience

Weirdly also hypothesised that people with more work experience would score increasingly higher on the Work Ready measure. Using participant's self-reported years of work experience, an analysis of variance confirmed the hypothesis, with significant differences in scores on the Work Ready assessment between these groups: $F=70.3, p<.001$.

These significant differences were found across all four attributes:

ANOVA ($p<.001$)	Work Experience
Work Ready	$F=74.2$
Work Ethic & Responsibility	$F=14.3$
Follow Instructions	$F=6.03$
Health & Safety	$F=14.2$
Teamwork & Inclusion	$F=14.6$

Candidate Success

Weirdly hypothesised that candidates with high Work Readiness scores would be more likely to progress through the recruitment process. This is because employers' recruitment processes are expected to successfully measure and assess which candidates are likely to be effective in the new role. The Work Ready assessment is also

designed to assess success in the employment environment, so a correlation across these variables was expected.

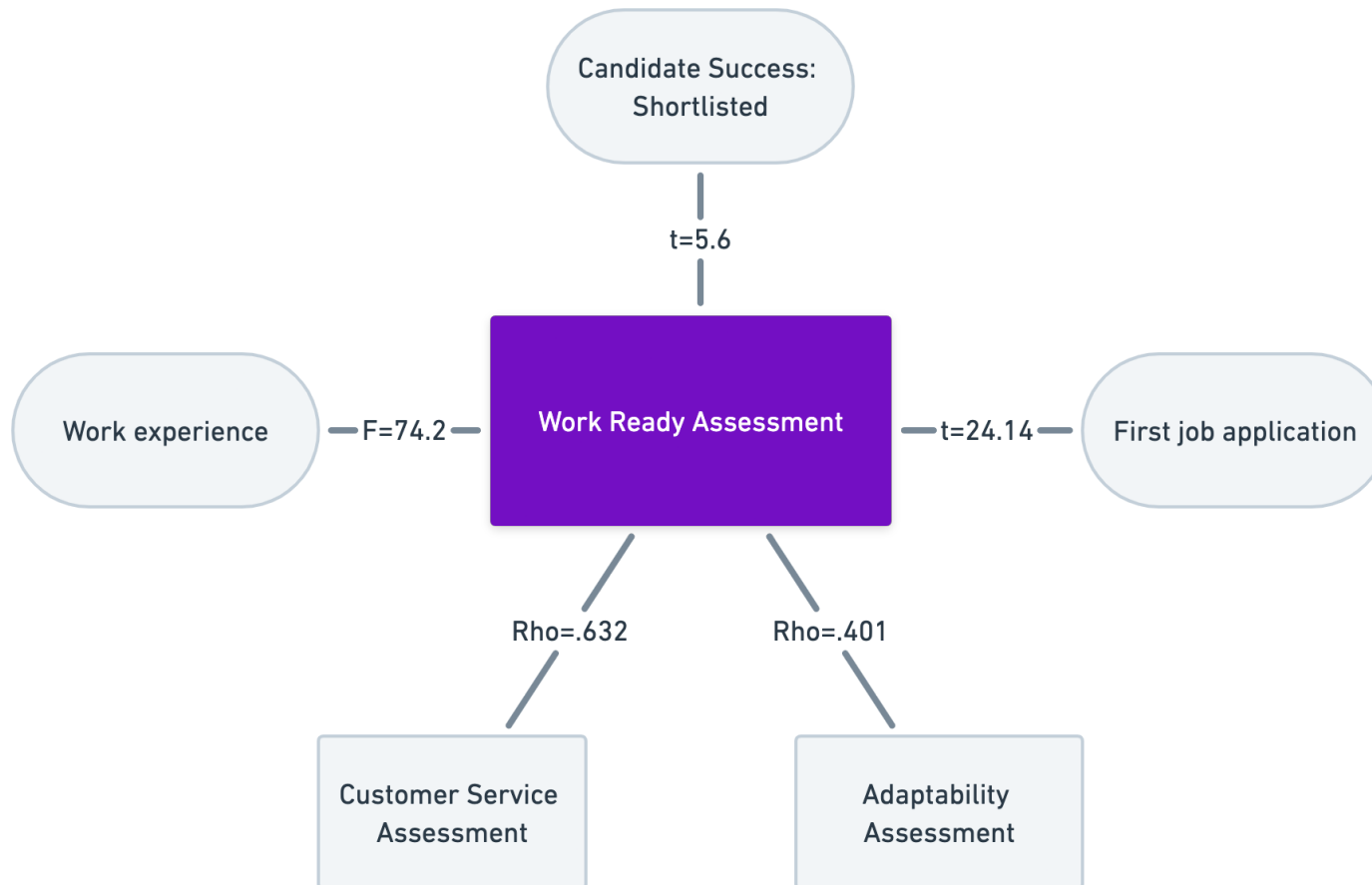
This was confirmed for the overall Work Ready assessment score and, in addition, it was confirmed with three of the four measured attributes too.

T scores	Shortlisted Candidates`
Work Ready	5.60, $p<.001$
Work Ethic & Responsibility	5.04, $p<.001$
Follow Instructions	-
Health & Safety	3.65, $p<.001$
Teamwork & Inclusion	4.5, $p<.001$

Because this analysis is with a real-world outcome rather than a self-report or parallel assessment, these results, in addition to confirming our hypothesis, **also indicate that the Work Ready assessment has some predictive validity of candidate success.**

This is a powerful finding that could be used in conjunction with other inputs to provide hiring decision guidance.

Summary of key positive statistical relationships between the Work Ready assessment and validation points
(all reported statistics here are $p < .001$)



Organisational Values

As seen in the table below, **Work Ready results also positively correlated with many of Weirdly's organisational values assessments**. These are core Weirdly assessments used by organisations to measure candidate suitability and fit. The biggest correlations that overall Work Ready scores had were with Integrity (0.459), Creativity (0.458) and Achievement (0.431).

The most notable finding *within* the attribute correlations is the 0.500 between Teamwork & Inclusion and Integrity. This was likely found because much of the Integrity value assessment looks at how the subject interacts with their peers. Lastly, the lack of significant correlations between the value of Bold and Work Ready scores (and three of the attributes) is positive to see because bold measures risk-taking and experimentation, which is at odds with much of the Work Ready assessment.

Rho Correlations (p<.001)	Achievement	Bold	Creativity	Curiosity	Impact	Integrity
Work Ready	0.431	-	0.458	0.345	0.362	0.459
Work Ethic & Responsibility	0.360	-	0.375	0.309	0.226	0.292
Follow instructions	0.307	-	0.400	0.329	0.217	0.293
Health & Safety	0.278	-	0.225	0.191	0.231	0.290
Teamwork & Inclusion	0.321	0.125	0.444	0.281	0.405	0.500

Additional Weirdly Assessments

Weirdly has also produced assessments for Customer Service Preparedness and Adaptability, and the hypothesis in relation to the Work Ready assessment was that it would have weak positive correlations with both.

Work Ready scores were indeed found to have significant positive correlations with both assessments; the correlation with the Customer Service assessment was rho = 0.632 and with the Adaptability assessment it was rho = 0.401.

Rho Correlations (p<.001)	Customer Service Assessment	Adaptability Assessment
Work Ready	0.632	0.401
Work Ethic & Responsibility	0.546	0.283
Follow Instructions	0.389	0.239
Health & Safety	0.371	0.221
Teamwork & Inclusion	0.548	0.365

Bias Checks

Ethnicity

Confirming that the measure has no ethnicity bias for the Australia region, an independent samples T test of Work Ready scores by ethnicity showed no statistically significant differences between indigenous and non-indigenous participants.

$t=0.958$, $p=0.169$, Cohen's $d=0.07$

Gender

ANOVA of Adaptability scores by gender showed a small significant difference in scores, with females slightly outscoring males (female mean=76.6, male mean=74.7).

ANOVA: $F=4.71$, $p<0.001$

- Female - Male: $t=4.58$, $p<0.001$
- Female - Gender Diverse: $t=4.36$, $p=0.02$
- Male - Gender Diverse: $t=-2.76$, $p=0.26$

Reliability

Cronbach's alpha = 0.71, which indicates that the assessment has good reliability and is internally consistent to a satisfactory level.

