

Pre-hire predictive testing helps cannabis laboratories hire and retain high value employees.

Applying validated employee selection methods to improve talent acquisition and retention outcomes in cannabis laboratories.

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THE PROBLEM:

Cannabis laboratory employee turnover is:

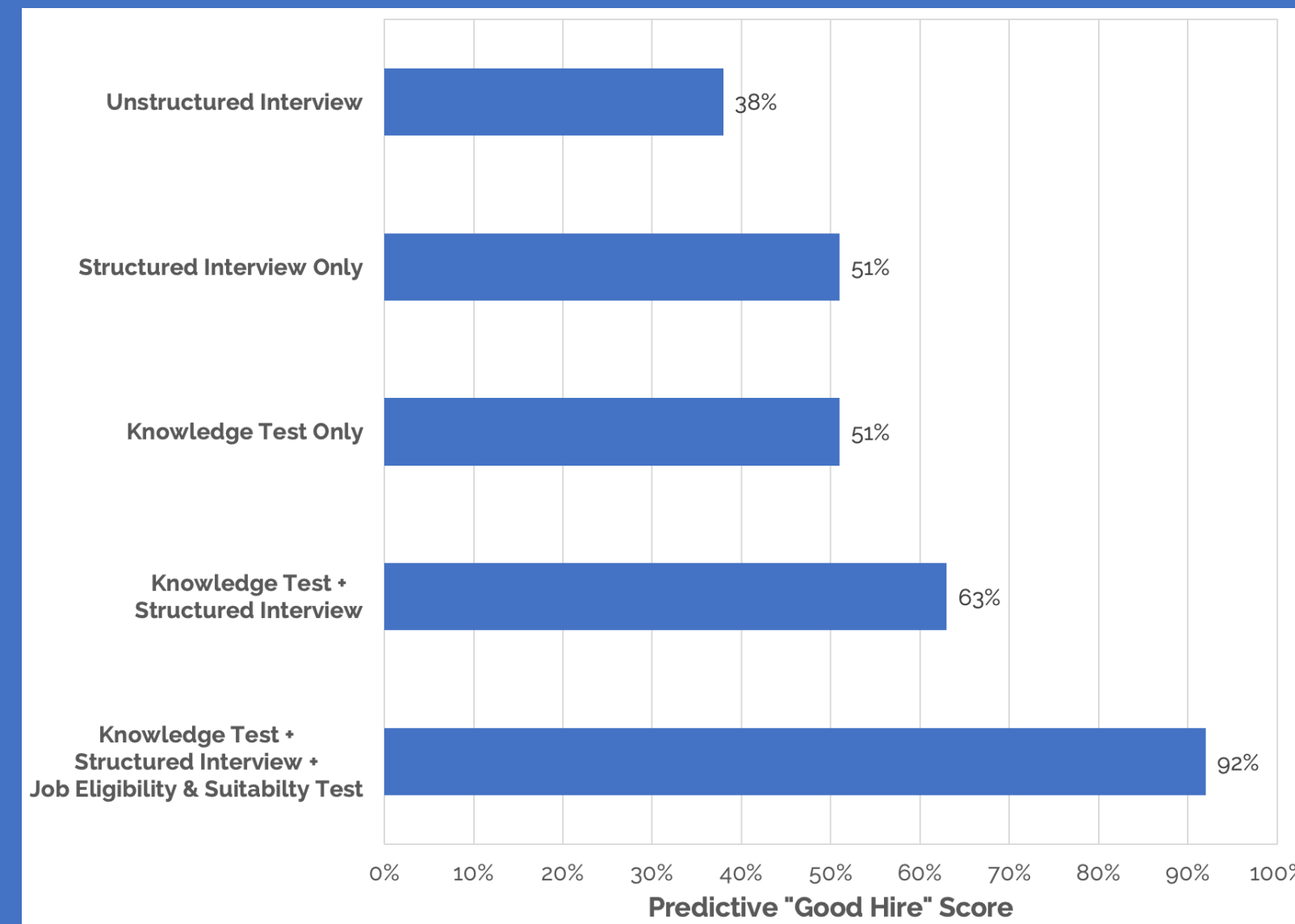
- Common
- Extraordinarily expensive
- Time consuming
- Harms internal culture
- Loses institutional knowledge

Most cannabis laboratories use employee selection methods (ESMs) that have very low predictive scores for job success (<40%) which directly contribute to low productivity and exceptionally high turnover (est. 1 yr turnover = 44%) when compared to clinical laboratories (3 yr avg. turnover rate = 13.1%)^{1,2}.

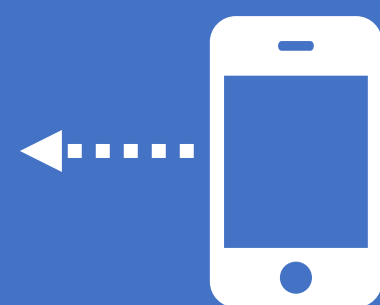
THE SOLUTION:

By using validated ESMs, predictive job success scores can increase to >90%³. To achieve these results, in addition to standard talent acquisition methods, the E4 Bioscience ESM system includes:

- Quantitative job eligibility testing
- Quantitative job suitability testing
- Quantitative paradoxical trait testing
- Quantitative technical knowledge testing



Adapted from Schmidt (1988)



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THE DATA:

n = 341 employees	Employee Turnover Rate (Under 6 Months)	Employee Turnover Rate (Projected Annually)
Best performers	2%	4%
Average to good performers	5%	10%
Poor performers	24%	48%

Figure 1 Turnover rates and actual job performance correlate closely with predictive job suitability testing. In a study with 341 employees, each employee completed a pre-hire assessment and overall performance was rated by supervisors scoring attendance, productivity, service quality, and safety at 6 months. Of the employees predicted to have probable success using pre-hire assessment testing, 91% were successful. Of the employees predicted to fail using pre-hire testing, 75% were identified as poor performers or did not complete 6 months in the job.

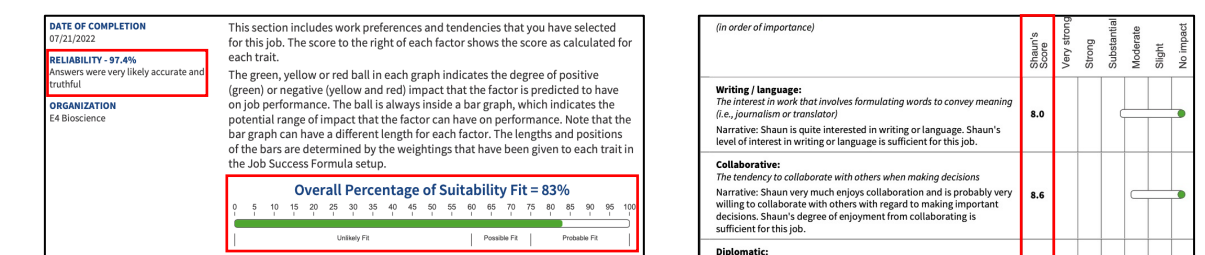


Figure 2 Quantitative job suitability analysis. When behavioral competencies including work preferences, emotional intelligence, and personality are measured, a high degree of accuracy is attained to predict individual performance in specific jobs⁴. Job suitability is specific to a position and cannot be determined from a resume or CV (i.e. lab technician and lab sales representative have different suitability needs). Typical unstructured interviews are generally ineffective at revealing these key factors or retention rates would be higher.

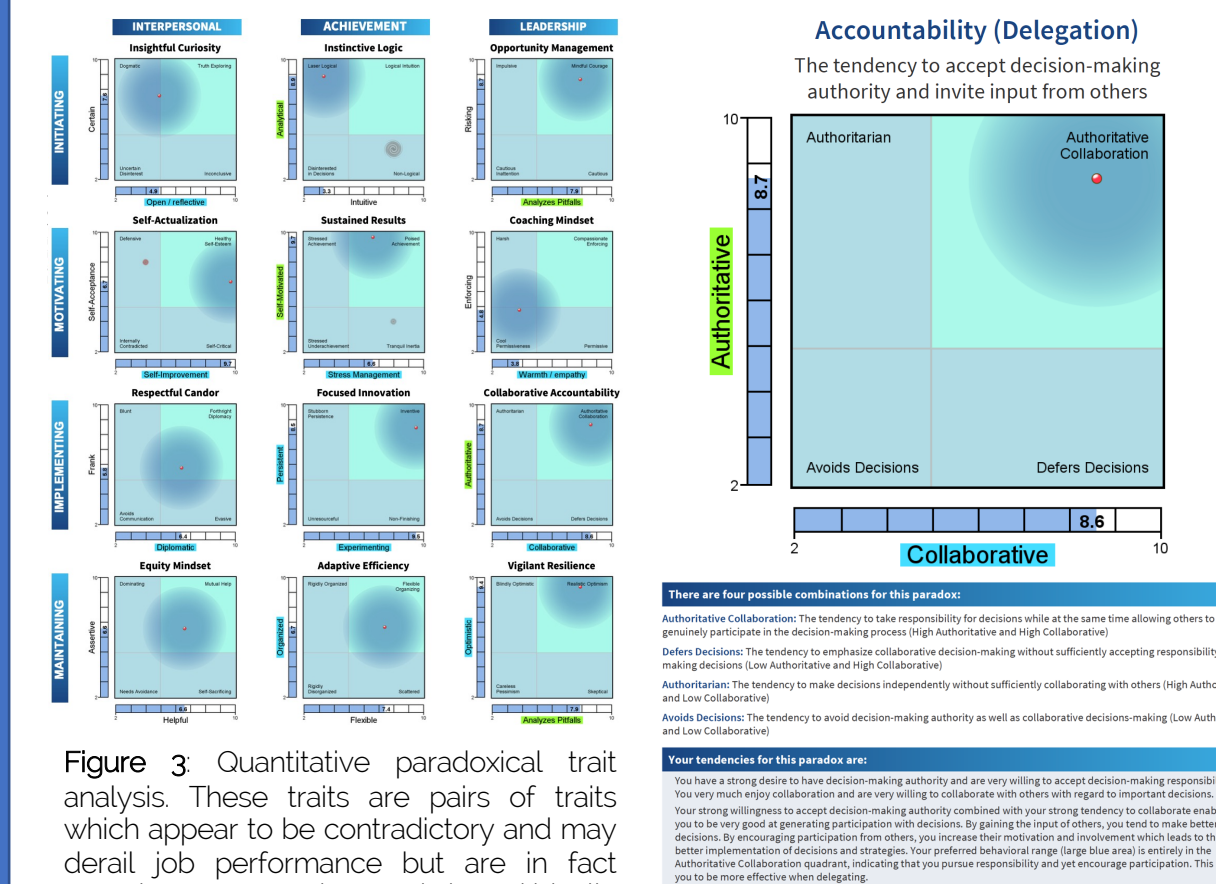


Figure 3 Quantitative paradoxical trait analysis. These traits are pairs of traits which appear to be contradictory and may derail job performance but are in fact complementary and synergistic and ideally balanced in the upper right quadrant.

THE REFERENCES:

- ¹Novis, D. et. Al, "Laboratory Staff Turnover: A College of American Pathologists Q-Probes Study of 23 Clinical Laboratories" Arch Pathol Lab Med (2020) 144 (3): 350-355.
- ²<https://greencultured.co/combats-cannabis-industry-turnover-rate/>. Last accessed 2/3/2023
- ³Schmidt, FL, & Hunter, JE., "The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. Psychological Bulletin, (1988) 124(2), 262-274.
- ⁴Harrison D, "Harrison Assessments Technical Manual Section I" 2015