



The
Crucible

THE PRIVATE EQUITY
HORSEPOWER ASSESSMENT®

Crucible Insights



Research Report
2023

INTRODUCTION

The Crucible is a performance enhancement research tool exclusively for the private equity-backed middle market. The Crucible is comprised of an intellectual component, a work styles analysis, and a behavioral component. Based on the results, The Crucible offers insights into how candidates' profiles translate into a private equity environment - individually, as a team, and for a specific fund. The Crucible was built by private equity experts upon reams of private equity-specific performance data to ensure that the most critical cognitive and behavioral qualities are considered.

THE VALIDATION PROCESS:

The Crucible is a research tool used to measure abstract concepts like Urgency, Passion, and Authenticity. To test the accuracy of the tool, we explore the validity. The term validity is used to convey the idea that the test procedure measures what it purports to measure. Simply put, if The Crucible is indeed able to measure an individual's potential in the private equity environment, it should meet a variety of standards that have been established by the scientific community. Validation is the process researchers use to assess the quality of the research tool by testing it against these standards. In this paper, therefore, exploring the validation of The Crucible, we focus on one fundamental area: the accuracy of measurement.

While all psychometric tools are subject to sources of error and therefore no psychometric tool is perfectly valid, validity is measured on a continuous scale.

SAMPLE

The results presented in this report are from a sample of 300 leaders who completed the Crucible from December to March 2022-2023. The scores measured and compared in this report are those calculated by The Crucible to represent an individual's results. The following table outlines all scores.

Table 1. Scores within The Crucible Reports

Catalysts: Elements	Execution Engine: Urgency, Relentlessness, Impatience, Hands-on-Approach, Digs for Root Cause, Detail Orientation, Systems and Process Focused, Metrics Focused, Intellectual Curiosity	Emotional Leverage: Passion, Intensity, Hunger/Drive, Resiliency, Energy/Endurance, Disdain for Losing, Competitiveness,	Leadership: Sets High Standards, Optimism, Inspires Confidence and Belief, Clear Communicator, Strategic Perspective, Ensures Buy-in, Engages Deeply with Stakeholders, Drives Accountability	Cognitive Horsepower: Logic, Math, Word Association, Pattern Recognition	Interpersonal: Self Esteem, Belief in Others, Empathy, Confidence, Authenticity, EQ, Collegiality
Overall Score: PEQ (Private Equity Quotient)					

Contaminants: Hesitancy, Fear of Failure, Inability to Adapt, Lack of Awareness, Fragility, Arrogance

VALIDITY

The Crucible model predicts the potential of an individual in the private equity environment. In order to explore the accuracy of measurement, we can use information about the individuals in our sample to see how results differ for those who have achieved different benchmarks of success in the private equity environment. Additionally, we compared individuals with private equity experience to those without private equity experience, to see if The Crucible favors those with experience or if it can fairly assess any individual for their potential in private equity.

When a company goes through a sale process, this milestone, referred to as an exit, is considered a measurement of success in the private equity environment. The executives involved in the sale process, particularly those in the c-suite, are considered to have been influencers in the means by which a private equity firm realizes a return on its investment. On the other hand, if an executive is in a c-suite role with a company during the hold period but does not make it to the sale process, potentially due to being replaced or moving on to another opportunity for other reasons, this is considered an indication of failure in the private equity environment. In our sample, we calculated means for different groups of individuals: those with or without experience in private equity, those with private equity exits, those with failed exits while in c-suite positions, and those who are still in their first hold. To compare the means of these groups to analyze for statistically significant differences, we use t-tests. The t-test is one of the most fundamental tests for statisticians in comparing the mean of two given samples.

$$\text{T-Test } t = \frac{m-u}{s/\sqrt{n}}$$

A T-Test is a type of inferential statistic used to determine if there is a significant difference between the means of two groups. The tests were used to determine if the significance level was below 0.05. Two different types of T-tests were run to determine if bias existed. A one tail T-Test and a two tail T-Test. A one tail test determines if the sample mean would be higher or lower than the population mean, but not both. The two tailed tests both below and above the mean in 2.5% in both directions.

First, we compared the means of the group of individuals with PE experience to those with no PE experience. With p-values greater than 0.05, there was no statistically significant difference between PEQ scores of individuals from either group. This analysis indicates that The Crucible measures an individual's potential in PE, without favoring those with previous experiences in PE.

Table 2. T-Test of Samples with and without PE Experience

t-Test: Two-Sample Assuming Equal Variances		
	<i>PE Experience</i>	<i>NO PE Experience</i>
Mean	0.81062	0.801460784
Variance	0.01956646	0.024645716
Observations	200	102
Pooled Variance	0.02127647	
Hypothesized Mean Difference	0	
df	300	
t Stat	0.5160836	
P(T<=t) one-tail	0.30308809	
t Critical one-tail	1.64994867	
P(T<=t) two-tail	0.60617618	
t Critical two-tail	1.96790301	

Second, we explored the accuracy of The Crucible in measuring potential success in PE. In order to test the validity, we compared the means of the sample of individuals with PE exits to those without PE exits. We eliminated individuals who are in their first holds, as they have not had the opportunity yet to complete a PE exit.

With p-values less than 0.05, our analysis indicates that those with exits score statistically significantly higher on The Crucible than those without exits. The Crucible is accurate in measuring an individual's fit for PE.

Table 3. T-Test of Samples with and without PE Exits

t-Test: Two-Sample Assuming Equal Variances		
	<i>EXITED</i>	<i>NO EXIT</i>
Mean	0.831614	0.776651
Variance	0.019265	0.022857
Observations	127	175
Pooled Variance	0.021348	
Hypothesized Mean Difference	0	
df	300	
t Stat	3.227064	
P(T<=t) one-tail	0.000695	
t Critical one-tail	1.649949	
P(T<=t) two-tail	0.001389	
t Critical two-tail	1.967903	

To further confirm the accuracy of The Crucible, our final analysis explored the differences between the means of samples of individuals who had a PE exit compared to those with failed exit experience. For the latter group, we analyzed both the samples with failed exits and previous successful exits and those with failed exits and no previously successful exits.

For both t-tests, the p-values less than 0.05 indicate that the samples of those with PE exits score

statistically significantly higher than those with any failed exits. This further confirms The Crucible's alignment with success in PE.

Table 4. T-Test of Samples with Exits and those with Failed & Successful Exits

t-Test: Two-Sample Assuming Equal Variances		
	<i>EXITED</i>	<i>FAILED & SUCCESSFUL</i>
Mean	0.831614	0.755809524
Variance	0.019265	0.013791162
Observations	127	21
Pooled Variance	0.018515	
Hypothesized Mean Difference	0	
df	146	
t Stat	2.364918	
P(T<=t) one-tail	0.009675	
t Critical one-tail	1.655357	
P(T<=t) two-tail	0.019349	
t Critical two-tail	1.976346	

Table 5. T-Test of Samples with Exits and those with Failed Exits & No Successful Exits

t-Test: Two-Sample Assuming Equal Variances		
	<i>EXITED</i>	<i>FAILED</i>
Mean	0.831614	0.730615
Variance	0.019265	0.010493
Observations	127	13
Pooled Variance	0.018502	
Hypothesized Mean Difference	0	
df	138	
t Stat	2.549867	
P(T<=t) one-tail	0.005934	
t Critical one-tail	1.65597	
P(T<=t) two-tail	0.011868	
t Critical two-tail	1.977304	

SUMMARY OF FINDINGS:

The analysis supports the validity of The Crucible research tool.

In our Validity Testing, we found that the Crucible is accurate in measuring an individual's fit for private equity, regardless of the individual's previous experience. There is no statistically significant difference between scores for those with and without PE experience. However, there are statistically significant differences between scores of those who have proven success in PE compared to those with proven failures in PE.