Criterion-Related Validation of the Choices® Assessment:

Findings from Two Recent Studies

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Using the assessment data from two international CHOICES® clients, we analyzed how learning agility scores are related to some criteria measures. This short report presents the results.

Case #1 – A Large, Global Pharmaceutical Company

Sample Sizes
Two different samples of Choices® data were analyzed. The first sample contained only boss rating data, herein referred to as *single rater* data (*N* = 8,071 learners). The second sample represents the traditional multi-rater approach, herein referred to as *multi-rater* data (*N* = 1,927 learners). All the data were collected in 2010.

Criteria Measures
Both ratings of *potential* and *performance* were correlated with the learners' Choices® scores. The potential rating was a dichotomous variable. The performance rating used a 3-point scale. For single rater data, the frequency distribution was as follows: (a) 40% received a "1," (b) 52% received a "2," and (c) 8% received a "3." Similarly, the distribution for multi-rater data was 46% "1s," 48% "2s," and 6% "3s." Thus, as expected, the performance ratings had significant restriction of range.

Correlations between Learning Agility and the Two Criteria Measures
The table below presents the correlation coefficients between learning agility scale scores and potential ratings and performance ratings. All the correlations were statistically significant (*p* < .001). It also is noteworthy to observe that for both rater groups learning agility had higher correlations with ratings of learner potential than performance ratings.

Scale	Single Rater (*N* = 6,730)		Multi-Rater (*N* = 1,713)	
	Potential	Performance	Potential	Performance
Mental Agility	0.40	0.31	0.38	0.32
People Agility	0.38	0.27	0.37	0.30
Change Agility	0.39	0.31	0.37	0.31
Results Agility	0.41	0.36	0.41	0.36
Overall Agility	0.42	0.33	0.40	0.34

Note. All correlation coefficients are statistically significant at the *p* < .001 level.

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Age Differences

The company also provided age information for the learners. Hence, we were able to investigate whether learning agility was related to age. Learner age ranged from 20 to 69 (M = 42.88) for the single rater sample and ranged from 23 to 69 (M = 44.57) for the multi-rater sample. The following table reports the correlation coefficients between learning agility scores and learner age. As can be seen, all correlations are close to zero. Consequently, the results strongly indicate there is no relationship between learning agility and age.

Scale	Single Rater (N = 6,730)	Multi-Rater (N = 1,713)
Mental Agility	- 0.00	- 0.00
People Agility	0.02	0.00
Change Agility	- 0.04	- 0.05
Results Agility	- 0.02	- 0.04
Overall Learning Agility	- 0.04	- 0.05

Note. None of the correlation coefficients are statistically significant ($p < .05$).

Case #2 – A Large, Global Consumer Products Corporation

Sample Size
Data were collected from a cross-section of the employees during late-2007 through early-2008. In other words, this organization was interested in simply measuring the general learning agility of the workforce, rather than identifying high potentials. The total sample size taking Choices® was 556, of which 451 had performance ratings.

The Distribution of Learning Agility
The mean learning agility score on Choices® was 268.85, with a standard deviation of 29.50. As can be seen in the figure below, the data were normally distributed.

Histogram

Mean =268.85
Std. Dev. =29.5
N =556
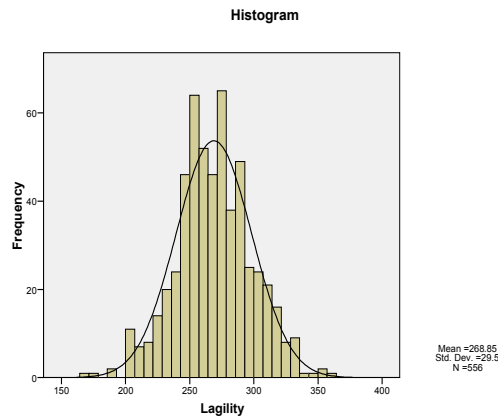
The Distribution of Performance Ratings
The company provided concurrent performance ratings. The mean performance rating was 4.20 (SD = 0.55). As can be observed in the histogram below, the performance ratings were severely skewed – 25% of the employees received a "5," 72% received a "4," and only 4% scored a "3" or "2." No employee received a "0," "1," or "6."

Histogram

Mean =4.2
Std. Dev. =0.547
N =451
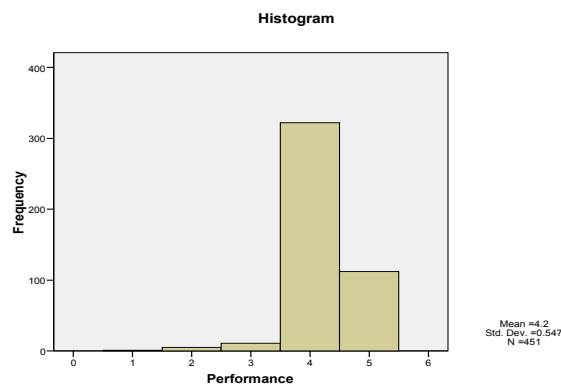
Correlations between Learning Agility and Performance
The following table presents the correlation coefficients between learning agility and performance ratings. All the observed correlations were statistically significant ($p < .001$). As can be seen, the relationship between learning agility and performance was increased when we corrected for the unreliability of performance ratings. The correlations would be even higher if we corrected for the restriction of range of the performance ratings.

Scale	Observed Correlation Coefficient	Corrected Correlation Coefficient
Mental Agility	0.33	0.46
People Agility	0.31	0.43
Change Agility	0.35	0.49
Results Agility	0.41	0.57
Overall Learning Agility	0.37	0.51

Note. The coefficients were corrected for the unreliability of
the performance rating. We assumed that the reliability of performance rating was 0.52,
which is a typical correction
made in the leadership literature.

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