Accuracy of the FinaMetrica Risk Tolerance Tests

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The FinaMetrica 25-question test has a reliability score of 0.90 and a 95% confidence level of ± 6.

The FinaMetrica 10-question test was developed from the 25-question test using standard psychometric techniques. The 10-question test has a reliability score of 0.84 and a 95% confidence level of ± 8.

The chart below shows a comparison between 25-question and 10-question scores. Each point on the chart represents the average 10-question score for a specific 25-question score for a representative sample of 241,470 completed risk tolerance profiles.
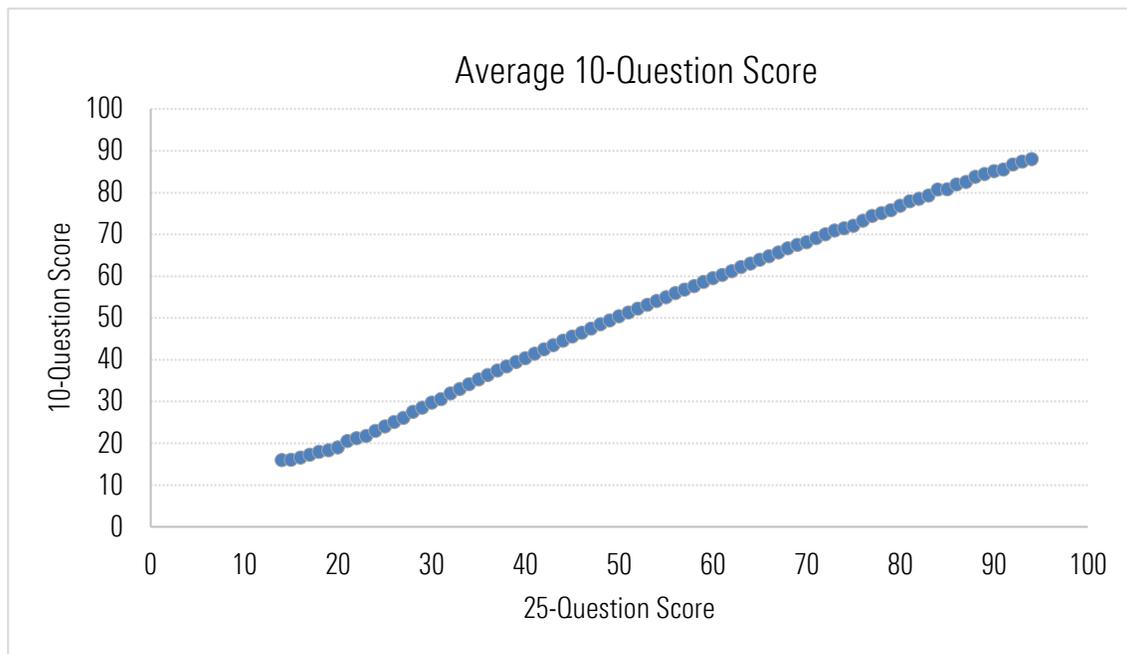
Points above the red diagonal represent cases where the 10-question score is higher than the 25-question score and points below cases where the 10-question score is lower than the 25-question score. As can be seen, while there is an overall decrease (-0.66) there is actually a slight increase for below average scores which does not quite balance out the decrease for above average scores. It should be noted that 99.6% of scores fall between 20 and 80 inclusive. The 'noise' evident at scores below 20 and above 80 will be due to much smaller sample sizes for those scores.

The statistics for the differences are as follows:

	Mean	Max	Min	SD
Diff (25Q-10Q)	0	18	-16	3.0
ABS Diff (25Q-10Q)	1.9	18	0	2.4

The large differences tend to occur at the extremes, i.e. for very low or very high scores. There are many possible answer combinations that can give rise to a middle score but only a very few that can give rise to an extreme score. At the extremes, a small difference in how a question is scored can have a large effect on the actual score. However,

because the two extreme risk groups are two and a half standard deviations wide, a significant change in score is unlikely to change either the risk group or give rise to a (material) change in the percentage higher or lower statistic quoted at the start of the Risk Tolerance report.

The 10 question-test's questions were selected from the 25-question test's questions with a focus on investment.

A difference between a 10-question score and a 25-question score arises when the answers to the other 12 questions are inconsistent with the answers to the 10 questions (note that three questions in the 25-question are not scored). If there was a significant difference in the scores because of this inconsistency, the inconsistent answers will have been highlighted in the 25-question report. If these were thought to be material in the discussion of the report they would be expected to give rise to an adjusted score.