

Test Scores, Norms, and Score
Interpretation

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Establishing Norms

1. Target population.
2. Standardization sample.
3. Norm Group.

- Size.
- Geographic representation.
- Socioeconomic level.
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- Ethnic composition. $\qquad$
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Table 6. Word, raw score: Undergraduate Students

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Valid | 6 | 3 | 8.1 | 8.1 | 8.1 |
|  | 7 | 14 | 37.8 | 37.8 | 45.9 |
|  | 8 | 11 | 29.7 | 29.7 | 75.7 |
|  | 7 | 18.9 | 18.9 | 94.6 |  |
|  | 11 | 1 | 2.7 | 2.7 | 97.3 |
|  | 12 | 2.7 | 2.7 | 100.0 |  |
|  | Total | 37 | 100.0 | 100.0 |  |

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## Major Issue

1. How do you compare performance of different people across different forms of a test?
2. How to compare performance of $\qquad$ people on the same test across different administration $\qquad$ techniques?
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Equating

Process of establishing $\qquad$ the relationship between scores on $\qquad$ alternate forms of a test or the same test across $\qquad$ time.

Equating: Same Sample Technique

1. Get a large representative sample of examinees.
2. Give half the sample form $A$ and the other half form B.
3. Compute the mean and standard deviation for each form.
4. Compute the z-scores for the raw scores for each test.
5. For ease of interpretation transform the z-scores to some common transformed score.
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Equating: Different Sample Technique

1. Identify a sample of key questions from the earlier test version. $\qquad$
2. Insert these items in the current version of the test. $\qquad$
3. Compare the performance on the key questions across the two groups.
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X_{\text {New }}=\left(Z_{\text {Old }} x S D_{\text {New }}\right)+\bar{X}_{N e w}
$$

Mean $=50$ SD $=10$
What is the T-score What is the T-score for a z-score of 1.5? for a z-score of -1?
$\mathrm{IQ}=(1.5 \times 10)+50 \quad \mathrm{IQ}=(-1 \times 10)+50$
$\mathrm{T}=15+50 \quad \mathrm{~T}=-10+50$
$\mathrm{T}=65$
$\mathrm{T}=40$
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- Issues.
- Establishing the $\qquad$
- How to establish a score to indicate mastery?
- Useful for basic skills and knowledge.

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