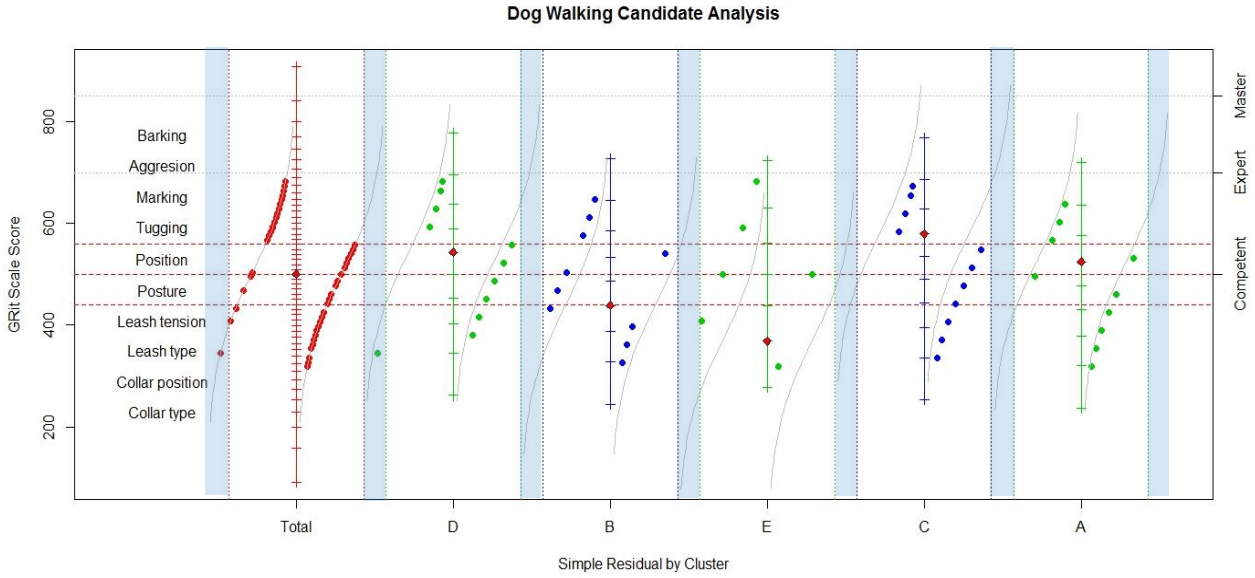
**Congratulations**, Ronald, your *500 GRits*[i] meets the criterion for *Competent*[ii] Dog Walker as established by our panel of authorities[iii].

| *Name:* | Ronald | *Exam:* | Dog Walking | Competent |
|---|---|---|---|---|
| *Location:* | Whitman | *Instructor:* | Conley | January 2015 |

| *Result* | | *Plausible Range*[iv] | |
|---|---|---|---|
| *GRit* | 500 | 425 | 575 |
| *Likelihood by Level*[v] | *Competent* | *Skilled* | *Master* |
| | 56% | 0% | 0% |




## Comments

Because your *GRit* is equal to the *500 GRit* criterion established for the *Competent* level, it would have been easy for the exam result to have fallen below that level. This is supported by the *Plausible Range*, which includes the criterion in its interval, and the *Likelihood by Level*, which is only slightly above 50% likelihood for being *Competent* or above. We encourage you to continuing working to improve your knowledge and skills, and perhaps achieve higher levels of certification in the future.

Looking first at the *Total*[vi] test, your performance shows a good mastery of the items dealing with basic equipment and its use. The items you missed on these topics could easily be due to misreading the question or over-thinking what was being asked. However, at the upper end of the scale, there is little indication of an understanding of problem behaviors or how to deal with them.

The topic clusters[vii] show some inconsistencies[viii]. Specifically, topic *E* is relatively low[ix] and *C* hints at being high[x]. The *E* items involved longer scenarios and more what-if types of questions. You may improve your performance by practicing this type of item and by visualizing similar scenarios in your daily routines.

[i] [Help] A *GRit* is the scale score unit, computed from the difficulty of the items you were given and the number for which you were successful. The *GRit* scale makes it possible to fairly compare your score with the performance level criteria and to describe your results in terms of the difficulties of the items.

[ii] [Help] To be considered *Competent* requires a *GRit* score of 500. This level implies the walker can control and keep a dog safe in common situations. The other performance levels, *Skilled,* and *Master,* require *GRits* of 700 and 850, respectively and imply greater capability to handle multiple dogs in more challenging circumstances.

[iii] [Help] The performance criteria were established by a panel of experienced dog trainers and instructors using the *MapMark* © method.

[iv] [Help] The *Plausible Range* is computed as the measure plus and minus two standard errors. This is often interpreted as the 95% confidence interval. To statisticians of the *Frequentist* faith, this means that 95% of the time an interval calculated in this manner will cover the true value. [This has more to do with the statistician's life work than with any individual examinee.] To *Bayesians*, it says there is a 95% probability that the true value is in the interval. This point of dogma relates to what is considered the random bit; the laity rarely concerns itself with the philosophical distinction.

[v] [Help] The *Likelihood by Level* is the probability that a person whose true location is equal to the measure will receive a number correct score that lands the person in the range for each performance level. The exact solution is somewhat laborious, requiring computing the probability for each possible response pattern and adding up the appropriate ones.

[vi] [Help] The red vertical line with tic marks shows performance on the total test with a mark for each number correct score beginning with one correct at the bottom. The red diamond on this line marks your location. You could determine your number correct by counting the tic marks up to the diamond. The *GRit* scale is shown on the left and representative item content is given in the text near the *GRit* line.

The gray lines curving away from the number correct line are covered with red dots showing which items were passed and which were missed; items passed are on the right; items missed on the left. The distance from the center line indicates our surprise at the response, i.e., the probability against the response. The vertical dotted lines are at a 75% chance.

[vii] [Help] The chart presents the same information for each cluster that we had for the *Total* but on fewer items. The blue bands indicate responses with less than 25% likelihood (or more than 75% likelihood against them.) Note each plotting symbol would represent multiple items if they have the same difficulty and same outcome.

[viii] [Help] *Among Cluster Mean Square = 1.6*.

[ix] [Help] *Cluster* E *Mean Square = 2.7; Change in p-value = -0.25; Change in logit difficulty = 1.3.* These values indicate Cluster *E* was surprisingly difficult for Ronald.

[x] [Help] *Cluster* C *Mean Square = 1.9; Change in p-value = 0.24; Change in logit difficulty = -1.0.* These values suggest Cluster *C* was easy for Ronald.