



# Trainer Moves: Analysis for RacingFM

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# **Trainer Moves: Analysis for RacingFM**

## **Part 1: Aggregate Analysis**

# Trainer Moves: Analysis for RacingFM

## Why Interesting ?

- **Betting**
  - Trainer Moves often cited as a reason for a horse to be fancied
  - Some trainers have a reputation for improving horses
- **Buying at the HIT sales**
  - Are there go to/stay away yards to target at the sales?
  - Should trainers appointment be influenced by their reputation for improving horses?

# Trainer Moves: Analysis for RacingFM

## Two Examples

- Anderiego: trained by David O'Meara, 18lb improvement
- Qaraaba: trained by Seamus Durack, 28lb improvement

| Horse     | Previous Trainer |      |            | New Trainer |      |            |
|-----------|------------------|------|------------|-------------|------|------------|
|           | Runs             | Wins | Max Rating | Runs        | Wins | Max Rating |
| Anderiego | 8                | 1    | 83         | 34          | 4    | 101        |
| Qaraaba   | 3                | 1    | 81         | 10          | 4    | 109        |

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## Data Analysis

- Plenty of examples – but in aggregate?
- Raceform (Racing Post) data
- 6,000 moves analysed using race data since 2010
  - Restrict to moves GB/IRE trainers to GB/IRE trainers
  - at least 3 runs for both old and new trainer
  - only 1<sup>st</sup> to 2<sup>nd</sup> trainer moves considered
  - Ratings based analysis (RPR)

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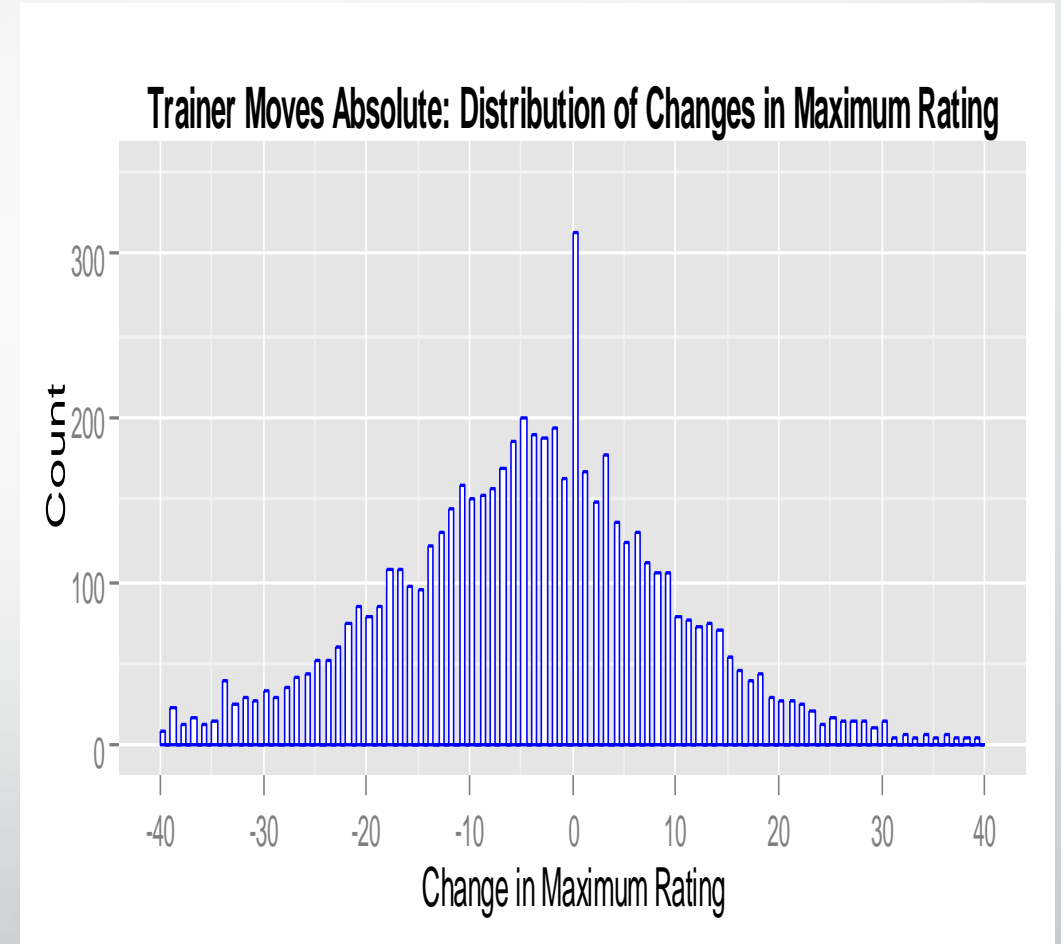
## Data Analysis - Defining Improvement

- **Absolute**
  - Maximum RPR new trainer vs. old trainer
  - Use all runs for both new and old trainers
- **Revivers**
  - Maximum RPR in last 3 runs for old trainer vs. first 3 runs for new trainer

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## Observations

- Distribution of ratings old vs. new trainer
  - average change - 5lb
  - median change - 4lb
- Absolute RPR comparison
  - 34% of horses post improved ROR
- Revivers RPR comparison
  - 37% of horses post improved RPR
- Conclusion
  - The majority of horses that move yards do not improve for the move
  - Chances of an improvement about 45%



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## Further Questions

- What is relationship between absolute improvers & revivers?
- Is there a difference if the owner stays the same?
  - one owner vs two or more owners
- Is improvement related to the extent to which a horse is exposed?
  - use number of runs as a proxy
  - classify into Unexposed, Experienced & Exposed
- Does yard size new vs. old have an effect?
  - classify yards into Small, Medium & Large
- Does horse ability have an effect ?
  - use maximum rating achieved for first trainer
  - classify into Limited, Useful & Smart



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What is the relationship between absolute improvers & revivers ?

←-----Absolute----->

|          | Better/Worse | Worse % | Better % | Total % |
|----------|--------------|---------|----------|---------|
| Revivers | Worse %      | 55      | 11       | 66      |
| Revivers | Better %     | 8       | 26       | 34      |
| Revivers | Total %      | 63      | 37       | 100     |

- 55% of horse deteriorate regardless of measure
- 26% improve on both measures
- 19% improve on one measure

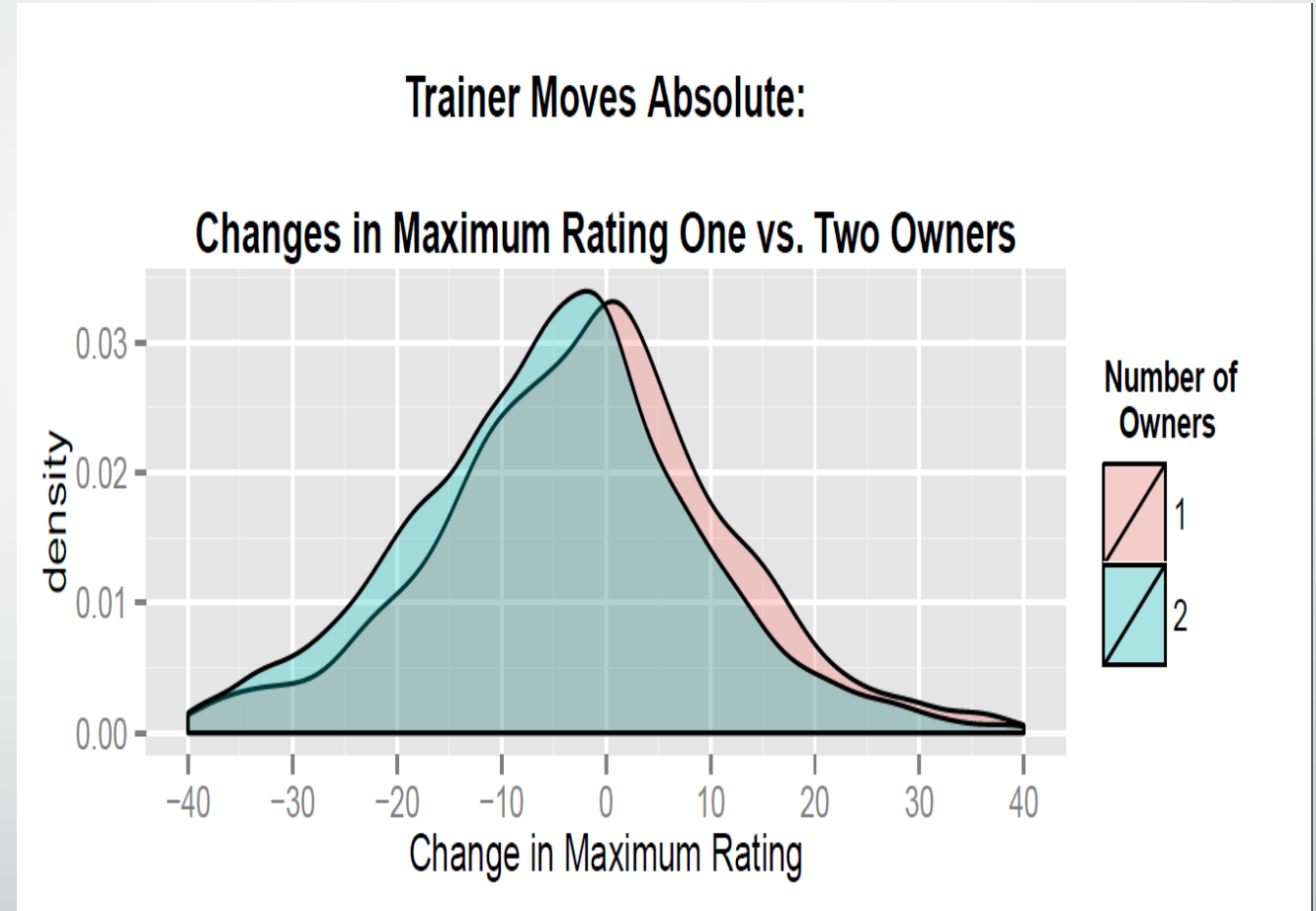
Conclusion: slightly odds-against that a horse will improve for a move

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Is there a difference if the owner stays the same?

- Owner+trainer moves perform significantly worse than trainer only moves
- Difference of 4lb in medians

**Conclusion – more information in owner+trainer moves**

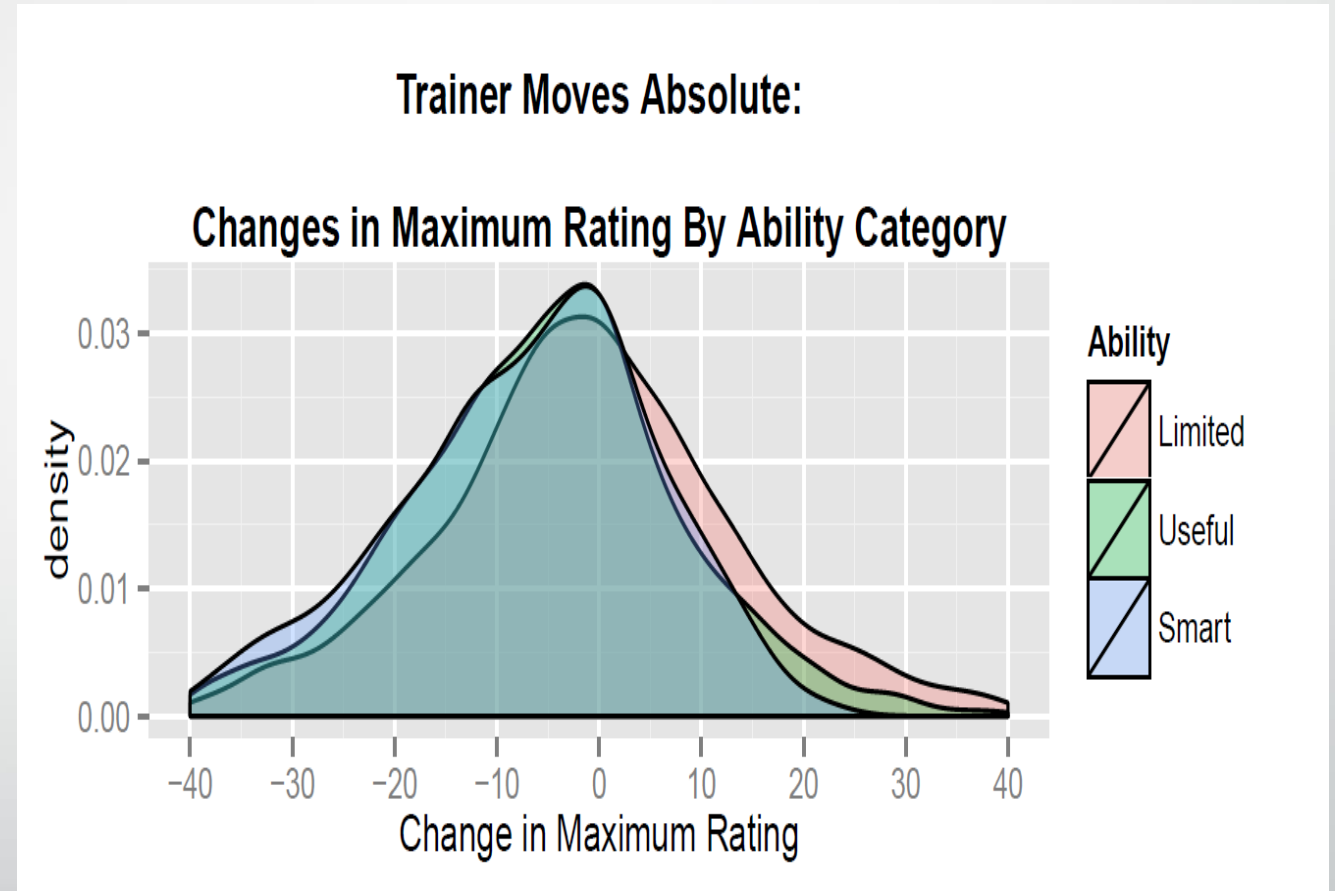


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## Does horse ability have an effect?

- Three categories, Limited (< 65) Useful (65-90) and Smart (90+)
- No category improves for a move on average, limited horses deteriorate the least
- Median changes -1lb (Limited), -5lb (Useful) and -6lb (Smart)

**Conclusion – better horses tend not to recapture their old form for a move, horses with limited ability perform about the same**

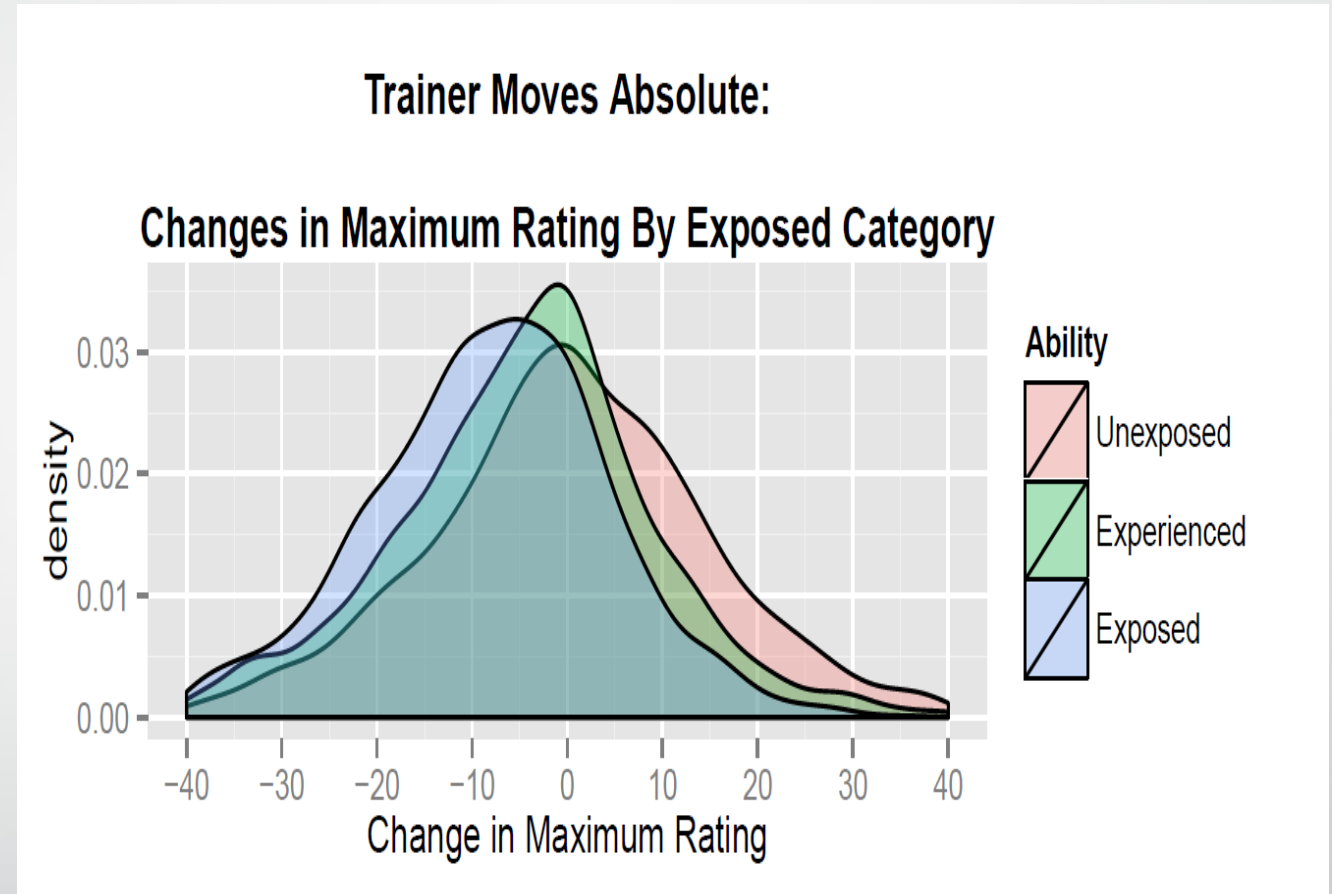


# Trainer Moves: Analysis for RacingFM

Is improvement related to the extent to which a horse is exposed?

- Three categories, Unexposed (< 5 runs) Experienced (5 to 10 runs) and Exposed (10+ runs)
- Median changes 0lb (Unexposed), -4lb (Experienced) and -8lb (Exposed)
- Unexposed horses perform about the same whereas horse with an increasing number of runs do not tend to recapture their old form

**Conclusion – exposed horses tend not to recapture their old form for a move, unexposed horses perform about the same**



# Trainer Moves: Analysis for RacingFM

Does changing yard size new vs. old have an effect?

- compare median ratings by trainer size category

| Median Rating Change |        | <-----New Trainer Category-----> |        |       |
|----------------------|--------|----------------------------------|--------|-------|
|                      |        | Large                            | Medium | Small |
| Old                  | Large  | 0                                | -4     | -8    |
| Trainer              | Medium | +1                               | -4     | -7    |
| Category             | Small  | +2                               | -1     | -5    |

- In aggregate horses improve moving from Small to Large yards
- The reverse is also true – deterioration of 8lb

**Conclusion – strong evidence that Large yards perform better than Medium and Small yards**



# **Trainer Moves: Analysis for RacingFM**

## **Part 2: Trainer Analysis/Discussion**

# Trainer Moves: Analysis for RacingFM

## Which trainers typically improve/revive horses?

### TOP IMPROVERS

| Rank | Trainer         | Absolute<br>Horses Improvers | Absolute<br>Improvement %<br>(median lb) |
|------|-----------------|------------------------------|--|
| 1    | K R Burke       | 24                           | 75                                       |
| 2    | Mark Johnston   | 22                           | 68                                       |
| 3    | Roger Varian    | 17                           | 82                                       |
| 4    | John Quinn      | 21                           | 62                                       |
| 5    | Michael Appleby | 38                           | 61                                       |
| 6    | David O'Meara   | 70                           | 69                                       |

### TOP REVIVERS

| Rank | Trainer         | Horses Revivers | Relative<br>Improvement %<br>(median lb) |
|------|-----------------|-----------------|--|
| 1    | Roger Varian    | 17              | 82                                       |
| 2    | John Quinn      | 21              | 71                                       |
| 3    | Michael Appleby | 38              | 68                                       |
| 4    | Mark Johnston   | 22              | 59                                       |
| 5    | K R Burke       | 24              | 71                                       |
| 6    | David Evans     | 42              | 69                                       |

# Trainer Moves: Analysis for RacingFM

## Which trainers horses typically deteriorate for leaving?

| LARGEST DETERIORATION |                |        |                      | LEAST REVIVED                    |      |                   |        |                      |                                  |
|-----------------------|----------------|--------|----------------------|----------------------------------|------|-------------------|--------|----------------------|----------------------------------|
| Rank                  | Trainer        | Horses | Absolute Improvers % | Absolute Improvement (median lb) | Rank | Trainer           | Horses | Absolute Improvers % | Absolute Improvement (median lb) |
| 1                     | William Jarvis | 17     | 29                   | -14                              | 1    | William Jarvis    | 17     | 35                   | -9                               |
| 2                     | A P O'Brien    | 20     | 20                   | -12                              | 2    | Tim Easterby      | 20     | 25                   | -9                               |
| 3                     | Alan Swinbank  | 18     | 22                   | -11                              | 3    | John Gosden       | 18     | 28                   | -9                               |
| 4                     | Tim Easterby   | 16     | 25                   | -11                              | 4    | A Oliver          | 16     | 30                   | -9                               |
| 5                     | A Oliver       | 20     | 15                   | -11                              | 5    | Luca Cumani       | 20     | 30                   | -8                               |
| 6                     | Mark Tompkins  | 15     | 13                   | -10                              | 6    | Alan Swinbank     | 15     | 33                   | -8                               |
| 7                     | Michael Dods   | 17     | 24                   | -9                               | 7    | Sylvester Kirk    | 17     | 32                   | -8                               |
| 8                     | David Evans    | 28     | 32                   | -8                               | 8    | A P O'Brien       | 28     | 15                   | -7                               |
| 9                     | David Barron   | 21     | 14                   | -8                               | 9    | Kevin Prendergast | 21     | 30                   | -7                               |
| 10                    | Mick Channon   | 72     | 26                   | -8                               | 10   | Peter Winkworth   | 72     | 25                   | -7                               |



# Trainer Moves: Analysis for RacingFM

## Discussion with trainers Seamus Durack, Mark Johnston & David O'Meara

- background
- past industry experience – as jockeys, at yards
- what happens when a new horse arrives?
- standard process, or tailored
- veterinary input/soundness
- regime (less/more, type of gallop, treadmills)
- house style/trainer for all types
- placement (trip/going/class)