

A Multi-Purpose Equivalence Estimator for Quantitative Career Matching

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Abstract

lalala dsds.

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Contents

List of Tables

List of Figures

1 Introduction

lalala (Lalala, 1919).

2 Methods

2.1 Conceptual Background

2.1.1 Defining Sufficient Similarity

dsds (Ds, 1919)

2.1.2 Identifying Core Attributes

2.2 A Multi-Purpose Equivalence Estimator

An initial insight for an equivalence estimator:

$$\text{eq}(x, M) = x^{\frac{1}{1-M}} \quad (1)$$

$$\ddot{a}_i^k := \text{æq} \left(\frac{a_i^k}{\max \mathbf{a}_{\mathbf{k}}} \right) \quad (2)$$

$$\text{æq} : [0, 1] \rightarrow [0, 1] \quad (3)$$

$$\text{eq}(\hat{a}_i^k, \gamma_k) = \hat{a}_i^k \frac{1-\gamma_k}{\gamma_k} = \hat{a}_i^k \frac{1}{\gamma_k} - 1 \quad (4)$$

The linear-logistic trigonometrically-scaled equivalence estimator:

$$\text{eq}(x, M) = x \{1 + M(1 - x) \exp[-b(x - M)]\}^{-\frac{M}{x}}, \quad (5)$$

$$b = \tan \left[\frac{\pi}{2} \cos^{M(1-M)} \left(\frac{\pi}{2} x(1 - M) \right) \right], \quad (6)$$

$$x, M \in [0, 1]. \quad (7)$$

2.3 Applications of the Equivalence Estimator

2.3.1 Skill Set Interchangeability

$$\beta_{kq} = \beta(s(\mathbf{a}_{\mathbf{k}}, \mathbf{a}_{\mathbf{q}}), M) = \text{eq}(s(\mathbf{a}_{\mathbf{k}}, \mathbf{a}_{\mathbf{q}}), M) \quad (8)$$

$$\mathbf{B} = \begin{bmatrix} \beta_{1,1} & \cdots & \beta_{n,1} \\ \vdots & \ddots & \vdots \\ \beta_{1,n} & \cdots & \beta_{n,n} \end{bmatrix} = \begin{bmatrix} 1 & \cdots & \beta_{k,1} & \cdots & \beta_{n,1} \\ \vdots & \ddots & \vdots & \vdots & \vdots \\ \beta_{1,k} & \cdots & 1 & \cdots & \beta_{n,k} \\ \vdots & \vdots & \vdots & \ddots & \vdots \\ \beta_{1,n} & \cdots & \beta_{k,n} & \cdots & 1 \end{bmatrix} \quad (9)$$

$$(10)$$

$$h_{kq} = h(\beta_{kq}) = \begin{cases} 1, & \text{if } \beta_{kq} \geq 0.5. \\ 0, & \text{otherwise.} \end{cases} \quad (11)$$

2.3.2 Attribute Equivalence

$$\ddot{a}_i^k = \ddot{a}(\mathbf{a}_k, M) = \text{eq} \left(\frac{a_i^k}{\max_j a_j^k}, M \right) \quad (12)$$

2.4 Data and Implementation

3 Results

3.1 Equivalence-Weighted Euclidean Matching

3.2 Similarity-Interchangeability Matrix

4 Discussion

dsdsds (dsdsds [ds], 1919)

5 Conclusion

References

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Appendix