

Can Conscientiousness Compensate for Less Intelligence?

The Intelligence Compensation Theory

(Presented by Paul Wood)

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- **Background**
 - Rationale
 - Methodology
- **Intelligence Compensation Theory**
 - Findings
 - Implications (Multifaceted Interaction)
- **Practical Implications**
 - Different ways to skin a cat?
- **Questions and Comments**



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➤ **Rationale:**

- Predictive power of intelligence and conscientiousness
- Scarcity of research into their relationship
- Even less focus on primary personality factors
- Differentiate between fluid and crystallized intelligence
- Extend:

Moutafi, J., Furnham, A., & Paltiel, L. (2004). Why is conscientiousness negatively correlated with intelligence? *Personality and Individual Differences*, 37, 1013-1022.



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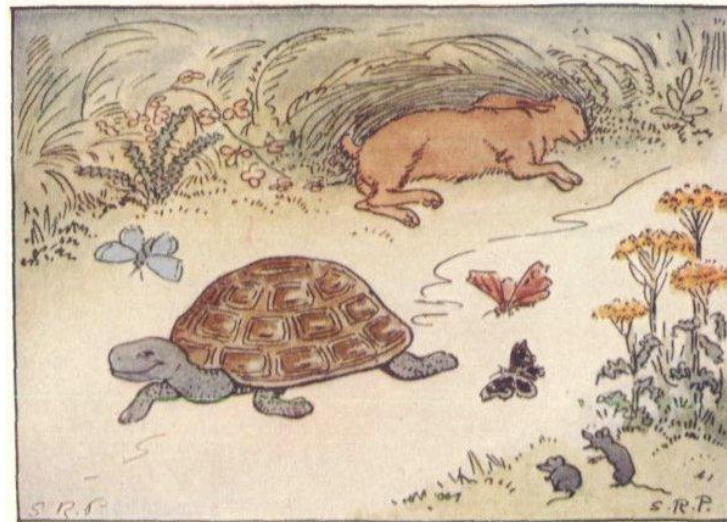
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➤ Methodology:

- Archival job-applicant data (GRT2 N=1629; 15FQ N=546; OPP N=1083)
- Correlations, multiple regressions, significance of difference
- Reference:

Wood, P., & Englert, P. (2009). Intelligence compensation theory: A critical examination of the negative relationship between conscientiousness and fluid and crystallised intelligence. *The Australian and New Zealand Journal of Organisational Psychology*, 2, 19–29.

- **Relatively less intelligent people can compensate by exhibiting relatively more conscientious behaviour.**
 - relatively less intelligent individuals may display behaviour that is more methodical, organised, thorough, and persistent (i.e., conscientious) to compensate for their relative lack of intelligence.
 - relatively more intelligent people may tend to get by on their cognitive efficiency rather than effort or procedure.



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➤ **Moutafi et al. (2004)**

- **Conscientiousness more highly correlated with fluid than crystallised intelligence.**
- **Conscientiousness explained approx 7% of fluid variance and 1% of crystallized variance.**
- **Stronger relationship due to fluid intelligence's biological basis and crystallised intelligence developing through cultural and educational experiences.**

➤ **Wood and Englert (2009)**

- **Conscientiousness more highly correlated with crystallized than fluid intelligence.**
- **Conscientiousness sub-factors explain 8-13% of crystallised variance and 2-6% of fluid variance.**
- **Conscientiousness and intelligence relationship is multifaceted.**

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➤ **Conscientiousness and intelligence will vary according to cohorts:**

Moutafi et al. (2004) an “educated and need-achieving” sample.

- **Lesser fluid ability have successfully compensated for this through more studious behaviour .**

Wood and Englert (2009) a sample largely without university qualifications applying for pre-management level jobs.

- **The ability requiring compensation is now lesser knowledge or understanding (i.e., crystallised intelligence). The way to compensate for knowing or understanding less within this context is through working harder.**

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- **Compensatory mechanism varies depending upon what it is one is trying to achieve, and which aspect of ability one is attempting to compensate for:**
 - **Does one need to compensate for not learning new information as quickly as others?**
 - **Or does one need to compensate for not knowing or understanding as much as others?**

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- **Previously reported incremental validity gains may be overstated and overly simplistic.**
 - Determine relationship between conscientiousness sub-factors and performance for specific roles, then place greater weight upon sub-factors loading most upon performance and least upon intelligence.

- **Compensation mechanism likely to vary across cohorts.**
 - Just as it is too simplistic to conceptualise conscientiousness as a single construct, so it is too simplistic to think of mental ability as a unitary structure in the prediction of behaviour.

- **Cut-score or hurdling implications.**
 - Include conscientiousness sub-factors to ensure potential assets in respect of high levels of diligence, good task completion, and more general contextual performance are not unnecessarily excluded from progressing further.

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- **The Challenges: Different ways to skin a cat...**
 - **What traits or abilities compensate for weaknesses in others?**
 - **Will such compensations lead to successful job performance, and how applicable is this across roles?**



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Questions and Comments



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