



Are Honest People More Rational? Associations Between Personality and Decision-Making

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Introduction

- Our decisions directly impact our health, physical and psychosocial well-being.
- Consistently making choices that are rational from a normative standard (e.g. Expected Utility Theory) will typically lead to the most favorable long-term outcomes.
- *Who Makes Rational Decisions?*
 - Research suggests that individual differences in rational responding exist.
 - However, little is known about the relationship between personality and decision-making.
 - Understanding these associations has the potential to better understand *why* certain individuals make maladaptive choices.

Decision-Making Competence (DMC; Parker & Fischhoff, 2005)

- Individual differences in rational responding, measured by consistency and accuracy of responses on classic decision-making tasks.
- Lower DMC scores are associated with problematic life outcomes, such as risk-taking and delinquency (Parker & Fischhoff, 2005; Weller, Ceschi, Randolph, 2015).

HEXACO Personality Framework (Lee & Ashton, 2004)

- An alternate to the Big 5 models that includes a 6th broad dimension: *Honesty-Humility*, not included within the Big Five measure.
 - This factor has been linked to maladaptive risk taking and lack of empathy.

The Relationship between DMC and HEXACO

- The present study predicts that *greater* levels of three traits will be associated with better DMC performance:
 - *Conscientiousness*.
 - *Openness*
 - *Honesty/Humility*.
- These dimensions have been linked to cognitive dispositions that may support rational decision making (e.g., planning, perspective taking, impulsivity)

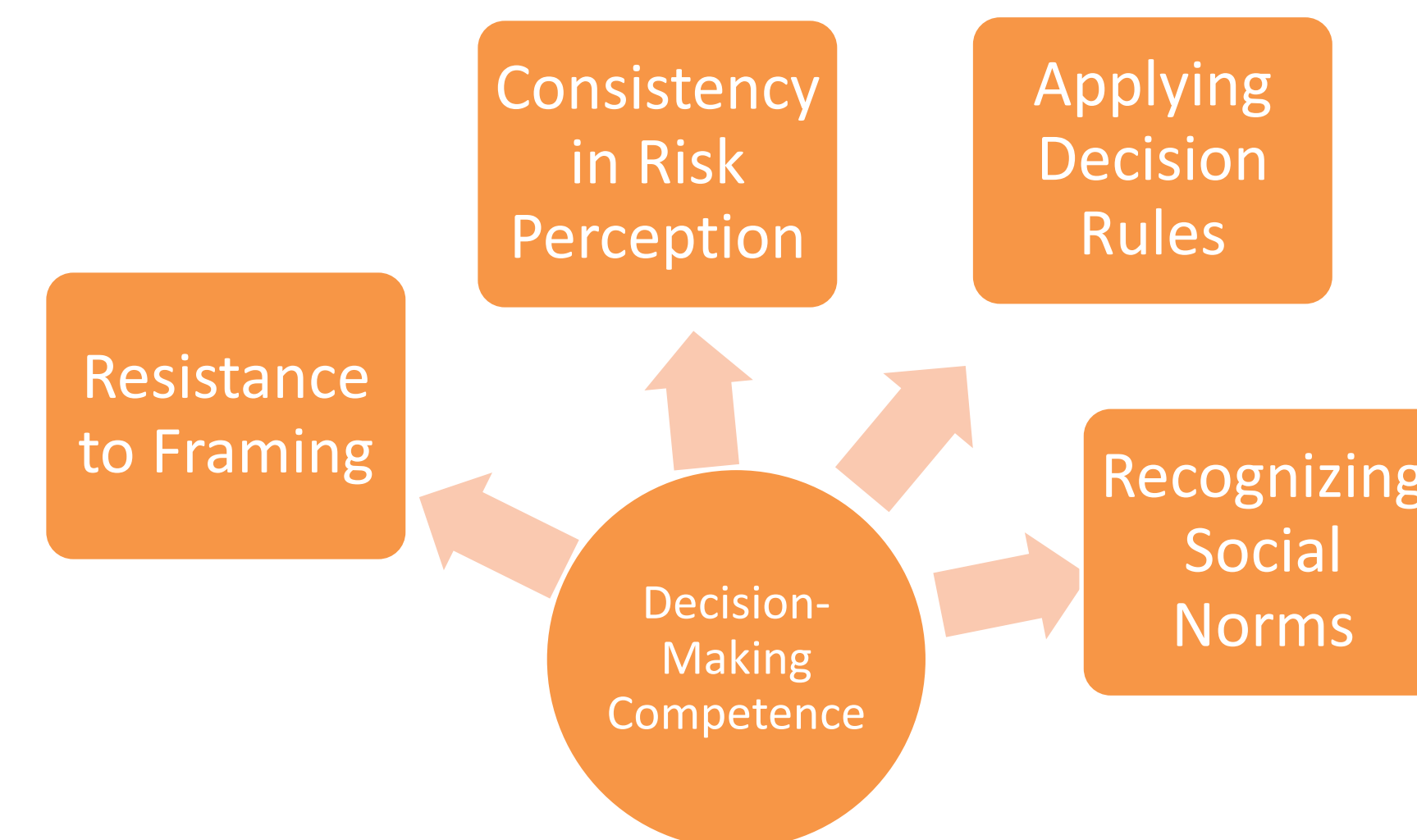
Method

Participants

- Participants were 804 Italian community residents who completed an online survey. (*Median age = 35 years; 58% female*).

Scales

- HEXACO-PI-R (Lee & Ashton, 2004)
- Adult Decision-Making Competence (Bruine de Bruin et al., 2007)
 - **Resistance to Framing:** Ability to avoid being swayed by a decision frame (gain/loss).
 - **Applying Decision Rules:** Apply decision rule(s) to choose option.
 - **Consistency in Risk Perception:** The degree to which a basic rule of probability judgment was followed.
 - **Recognizing Social Norms:** Accuracy in the assessment of peer social norms.



Results

Table 1: Correlations between subscale DMC dimensions and HEXACO personality dimensions

DMC	H	E	X	A	C	O
Recognizing Social Norms	.21**	.10**	.03	.01	.23**	.16**
Resistance to Framing	.00	-.08*	-.12**	.01	-.00	.02
Applying Decision Rules	.14**	.01	-.03	-.11**	.29**	.17**
Consistency in Risk Perception	.17**	.07*	.03	-.00	.21**	.12**

- We found that greater Conscientiousness, H/H and Openness were associated with better DMC performance

Results

- Next, based on past research, we calculated a composite DMC score and examined its associations with HEXACO facet-level traits.

Table 2: Pearson correlations between facet-level HEXACO measures and overall DMC scores

HEXACO Scale	DMC
Honesty-Humility	.21**
<i>Sincerity</i>	.21**
<i>Fairness</i>	.19**
<i>Greed Avoidance</i>	-.02
<i>Modesty</i>	.11**
Emotionality	.04
<i>Fearfulness</i>	-.03
<i>Anxiety</i>	.08*
<i>Dependence</i>	-.04
<i>Sentimentality</i>	.10**
Extraversion	-.03
<i>Social Self-Esteem</i>	.04
<i>Social Boldness</i>	.10**
<i>Sociability</i>	-.12**
<i>Liveliness</i>	.07
Agreeableness	-.03
<i>Forgiveness</i>	-.04
<i>Gentleness</i>	-.05
<i>Flexibility</i>	-.14**
<i>Patience</i>	.16**
Conscientiousness	.28**
<i>Organization</i>	.16**
<i>Diligence</i>	.26**
<i>Perfectionism</i>	.22**
<i>Prudence</i>	.18**
Openness	.17**
<i>Aesthetic Appreciation</i>	.01
<i>Inquisitiveness</i>	.20**
<i>Creativity</i>	.14**
<i>Unconventionality</i>	.10**

Results

- As predicted, we found that **Conscientiousness, Openness, and Honesty/Humility** were associated with overall DMC performance and its subscales.
- At the facet-level, we found that:
 - **Honesty/Humility.** We found a stronger correlation between Honesty (Sincerity and Fairness) facets and DMC scores than the Humility facets (Greed Avoidance and Modesty).
 - **Openness.** All facets, except Aesthetic Appreciation, were associated with the DMC composite.
 - **Conscientiousness.** All four facets were associated with DMC scores.
- *Extraversion, Emotionality, and Agreeableness* were not systematically associated with DMC.

Conclusion

- Supporting our predictions, broad personality dimensions were associated with rational decision-making.
- These dimensions, in part, have been associated with skills that support advantageous decision-making, including:
 - Cognitive Flexibility (Openness)
 - Cognitive control and planning (Conscientiousness)
 - (low) Impulsive antisociality (Honesty/Humility)
- More broadly, these results suggest pathways towards the development of interventions to improve decision-making
 - Promoting self-control (Weller et al., 2015)
 - Practicing open-minded thinking (Baron et al., 2016)
 - Directly teaching DMC skills (Jabsonsen, 2012)

Acknowledgements: This research was supported by a grant from the University Of Verona, IT, Cooperint program.