

# Personality & Lost Work Time: Connections and Interventions

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# Overview

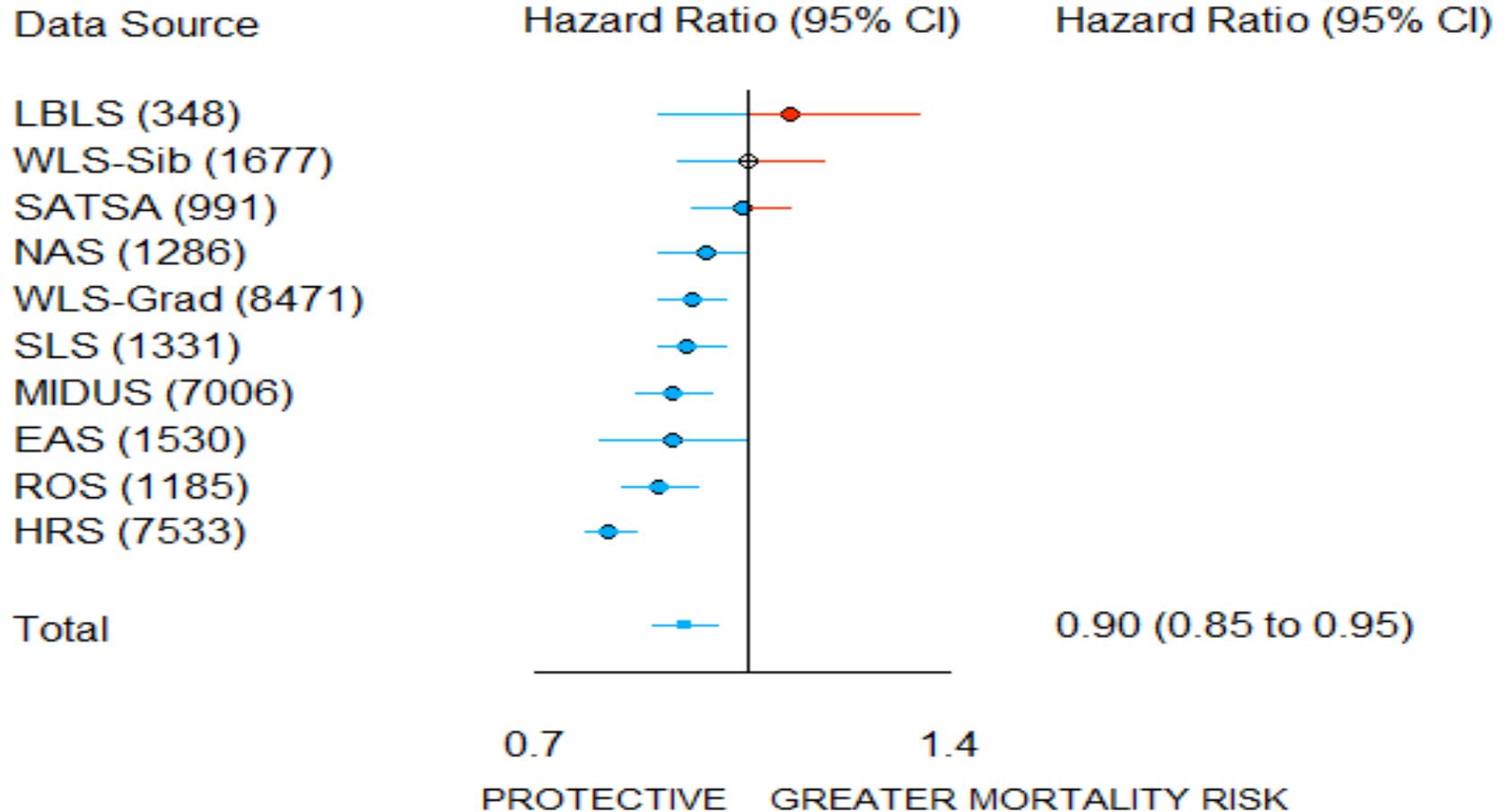
- Behavioral & psychological characteristics of individuals, especially personality traits (e.g. Big 5), strongly influence health and longevity.
- Traits also predict work cutbacks and lost income due to health reasons.
- *How do we leverage these data to improve employee wellness and health initiatives?*
- We'll conclude with practical solutions we've developed.

# Personality Traits Predict Health, Wellness, Longevity and Work Performance and Engagement

- Personality encapsulates individuality – what makes each person unique.
- People are not interchangeable.
- Personality traits impact: 1) how healthy we are, 2) how long we live, and 3) how well we perform on the job, including job turnover.

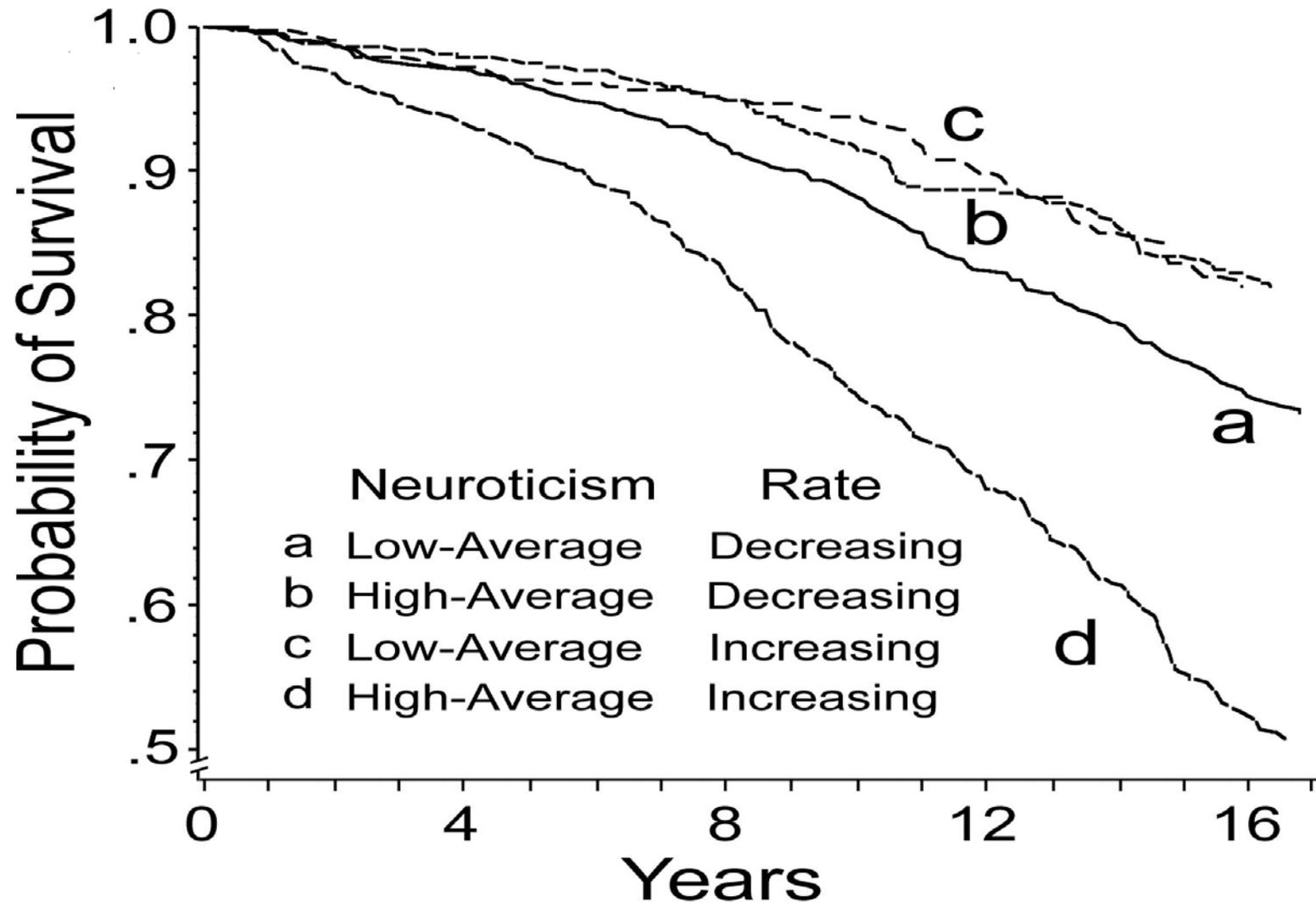
# Conscientiousness Effect on Mortality

N = 31,358 (Graham, Mroczek et al., 2016)



# Neuroticism Change and Longevity

N=1,643 (Mroczek & Spiro, 2007)



# Personality and Work Cutbacks (Turiano, Mroczek et al., 2012)

- Used a national sample, Midlife in the U.S. (MIDUS), data from 10 year longitudinal follow-up: N = 3,451.
- Work cutbacks (lost work time) assessed with items asking about work loss and limitations in past 30 days because of physical health reasons.
- Measures *impairment* due to physical health, but captures some absenteeism as well.

# Traits Predict Work Cutbacks Due to Health Reasons Over 10 Years (Turiano, Mroczek et al., 2012; N =3,451)

<u>Predictor</u>	<u>b (se)</u>	<u>Standardized coefficient</u>
<u>Demographics</u>		
Age	.92 (.14)***	.11
Gender	.21 (.15)	.03
Education	-.28 (.08)***	-.07
<u>Personality (1995)</u>		
Agreeableness	.04 (.09)	.01
Conscientiousness	-.21 (.08)**	-.05
Extraversion	-.29 (.09)***	-.07
Neuroticism	.14 (.07)*	.03
Openness	.19 (.09)*	.04
<u>Personality Change</u>		
Conscientiousness Chg.	-.19 (.07)**	-.04

# Attaching income data to work cutbacks (Graham, Mroczek, 2015; N=4,516)

- Lost monetary amounts ranged from \$3,451 to \$8,144 annually (per standard deviation of a trait), depending on the personality trait.
- Added work cutbacks due to mental health in this study.
- By attaching income data to the results of Turiano et al. we obtain a rough estimate of how much money is lost to self or employer, due to personality-related work cutbacks attributable to physical & mental health.
- Considerable, given that U.S. median household income is about \$52,000, and that profit margins for many small businesses is less than this.

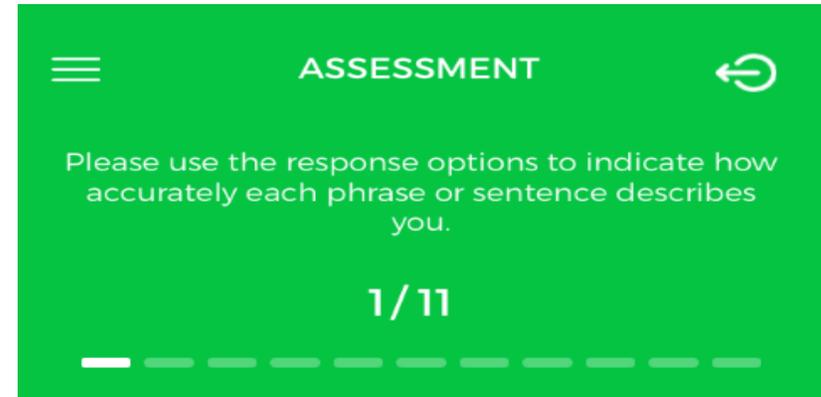
# Applying this work: Discovery with Delivery

- We can use personality trait measurements to more precisely identify who is most at risk for certain health outcomes.
- Organizations can *target and tailor* health and wellness resources toward the most high-risk people.
- Personality assessments may potentially be part of a *prevention toolkits* that organizations can use to improve health and lower health care costs.

# How are we applying this work?

- Personality assessment is an exciting and efficient solution because it can help organizations save money by reducing healthcare costs and work cutbacks.
- In line with the increasing emphasis on Personalized/Precision Medicine and Person/Patient Engagement.
- Personalized Medicine tailors treatments and preventions based on individual characteristics.

We're developing *health-care plan tailoring software*, based on assessment of individual differences in traits and other behavioral characteristics.



**I am Worrying**



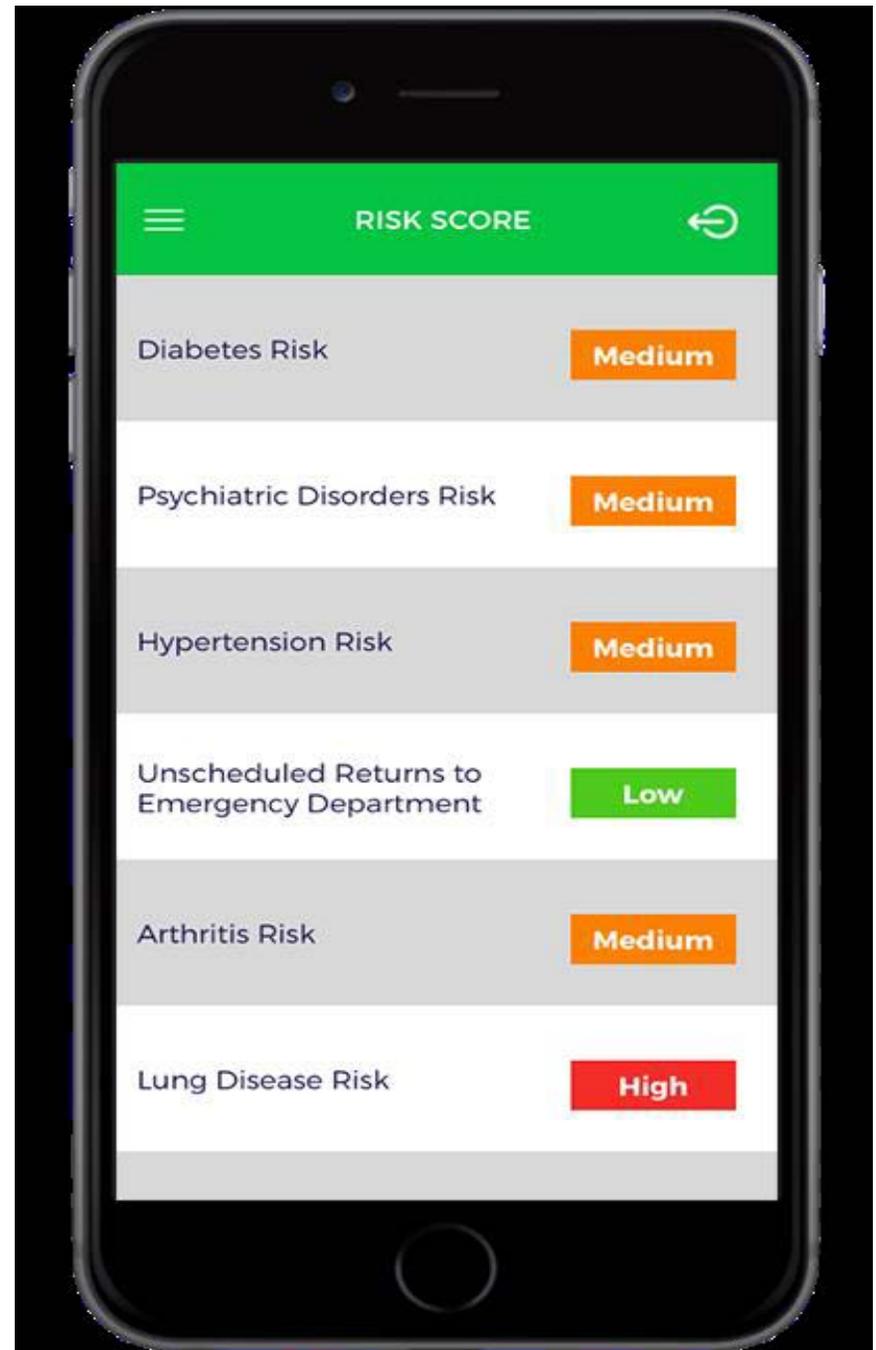
**I am Softhearted**



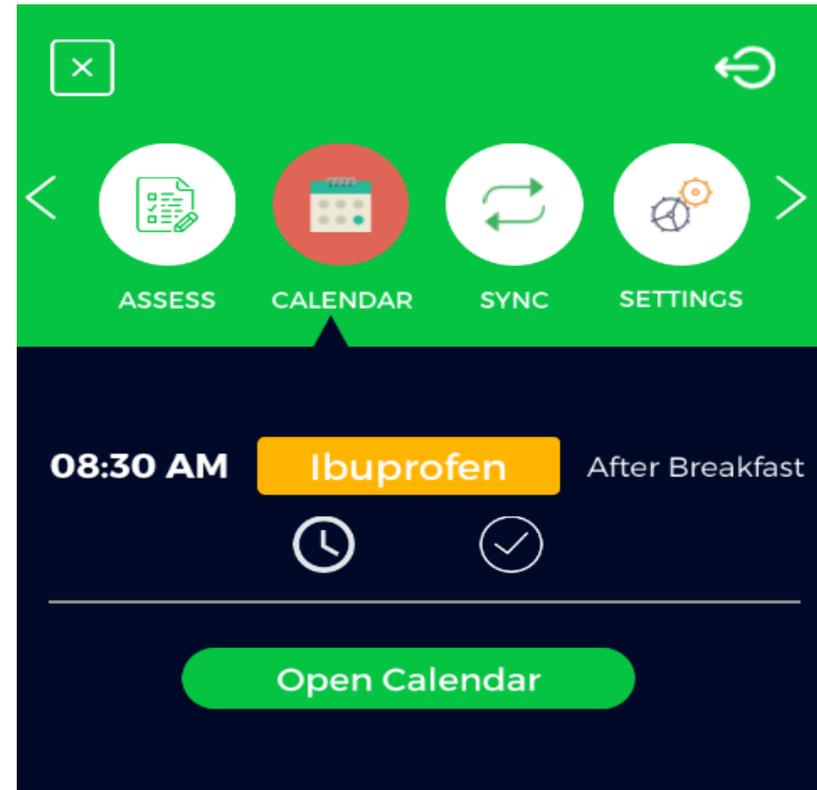
**I am Moody**



Personality assessments are used to assign health risk profiles.



Targeting and tailoring reminders and health-promotion tips, based on an individual's personality-based risk.



**TAP**  
TO RETURN BACK

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