

PBC



# Measuring Resilience Using Hogan Assessments

2013

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# Introduction

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Although there are numerous definitions of resilience, psychological resilience is generally defined as having the flexibility to respond to changing situational demands while also having the capacity to bounce back from negative emotional experiences (Block & Block, 1980; Block & Kremen, 1996; Lazarus, 1993). Research has shown that there are numerous individual factors associated with one's capacity to be resilient (Masten, 2001; Ong, Bergman & Boker, 2009; Polk, 1997; Richardson, 2002; Tugade & Fredrickson, 2004), including:

- Personality
- Self-efficacy
- Emotional Intelligence
- Self-esteem
- Self-confidence
- Healthy relationships
- Flexibility and resourcefulness
- Adaptive coping strategies and problem solving ability
- Internal locus of control

The aim of the present research was to elucidate the personality scales that are most predictive of resilience. Personality was operationalised using Hogan assessments (as described below). With respect to resilience, the competencies, *Stress Tolerance* (i.e., handles pressure without getting upset, moody, or anxious), *Ambiguity Tolerance* (i.e., deals comfortably with unclear situations and problems), and *Perseverance* (i.e., pursues goals despite obstacles and/or challenges), from the Hogan Competency Model (Hogan Assessments Systems, 2009) were used to define resilience.

## Methodology

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The Hogan Research Division (HRD) statistically investigated the relationships between scales from the Hogan Personality Inventory (HPI), the Hogan Development Survey (HDS) and the three competencies identified as proxies to resilience (i.e., Stress Tolerance, Ambiguity Tolerance, and Perseverance).

### Measures

The HPI is the first business-related measure of normal personality based on the widely-accepted Five Factor Model (FFM) of personality and is designed to predict occupational performance and other real-world outcomes. As such, it is an original and well-known measure of the FFM and is used as a marker personality instrument worldwide.

The Hogan Development Survey (HDS) identifies personality-based performance risks and derailers of interpersonal behaviour. These derailers, which are deeply ingrained in personality,

affect an individual's leadership style and actions. Tables 1 and 2 (see Appendix) contain definitions for the HPI and HDS scales.

### Procedure

Using archival data, HRD conducted three meta-analyses (for each of the three resilience competencies) to determine the nature of the relationships between the personality and competency variables. The number of studies for each meta-analysis ranged from 12 to 74 studies with sample sizes of between 1,001 and 7,854 participants. Next, regression analyses were conducted to determine the HPI and HDS scales that were most predictive of the three aforementioned competencies related to resilience.

## Findings

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A number of scales from the HPI (Adjustment, Ambition, Prudence, and Inquisitive) and HDS (Excitable, Sceptical, Leisurely, and Diligent) best predicted Stress Tolerance, Ambiguity Tolerance, and Perseverance. Table 3 highlights the two HPI and two HDS scales that were most predictive of each competency along with the strength of the relationship of the scales to the specified competencies.

Table 3. Mapping Hogan Scales to Stress Tolerance, Ambiguity Tolerance and Perseverance.

Hogan Competencies	Relevant HPI Scales	Relevant HDS Scales	$R^2$
Stress Tolerance	Adjustment & Prudence	Excitable & Sceptical	$R^2 = .33$
Ambiguity Tolerance	Adjustment & Ambition	Excitable & Leisurely	$R^2 = .41$
Perseverance	Ambition & Prudence	Sceptical & Diligent	$R^2 = .35$

In terms of the directionality of relationships, Stress Tolerance was *positively* related to Adjustment and Prudence, and *negatively* related to Excitable and Sceptical; Ambiguity Tolerance was *positively* related to Adjustment and Ambition, and *negatively* related to Excitable and Leisurely; Perseverance was *positively* related to Ambition, Prudence and Diligent, and *negatively* related to Sceptical.

## Conclusion

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These findings indicate that scales from the HPI and HDS can be used to explain variance in the three competencies (Stress Tolerance, Ambiguity Tolerance & Perseverance) used as proximal measures of Resilience. This information indicates that organisations seeking to hire individuals who display behaviours associated with resilience can utilise the Hogan assessment tools to help identify resilient individuals.

# Appendix

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Table 1. HPI Scale Names and Description

Scale Name	Description
Adjustment	The degree to which a person appears calm and self-accepting, or conversely, self-critical and tense.
Ambition	The degree to which a person seems socially self-confident, leader-like, competitive and energetic.
Sociability	The degree to which a person seems to need and/or enjoy interacting with others.
Interpersonal Sensitivity	The degree to which a person is seen as perceptive, tactful and socially sensitive.
Prudence	The degree to which a person seems conscientious, conforming and dependable.
Inquisitive	The degree to which a person is perceived as bright, creative and interested in intellectual matters.
Learning Approach	The degree to which a person seems to enjoy academic activities and to value educational achievement for its own sake.

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Table 2. HDS Scale Names and Description

Scale Name	Description
Excitable	Moody, easily annoyed, hard to please and emotionally volatile.
Sceptical	Distrustful, cynical, sensitive to criticism and focused on the negative.
Cautious	Unassertive, resistant to change, risk-averse and slow to make decisions.
Reserved	Aloof, indifferent to the feelings of others, and uncommunicative.
Leisurely	Overtly cooperative, but privately irritable, stubborn and uncooperative.
Bold	Overly self-confident, arrogant, with inflated feelings of self-worth.
Mischievous	Charming, risk-taking, limit-testing and excitement-seeking.
Colourful	Dramatic, attention-seeking, interruptive and poor listening skills.
Imaginative	Creative, but thinking and acting in unusual or eccentric ways.
Diligent	Meticulous, precise, hard to please, and tends to micromanage.
Dutiful	Eager to please and reluctant to act independently or against popular opinion.

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# Authors

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Kim Pluess (Consulting Psychologist, PBC), Mark Do (Consulting Psychologist, PBC) and Steve Nichols (Consultant, Hogan Assessments)

PBC, Level 5, 221 Miller Street, North Sydney, NSW 2060

[www.peterberry.com.au](http://www.peterberry.com.au)

02 8918 0888

info@peterberry.com.au