The Definitive Series:

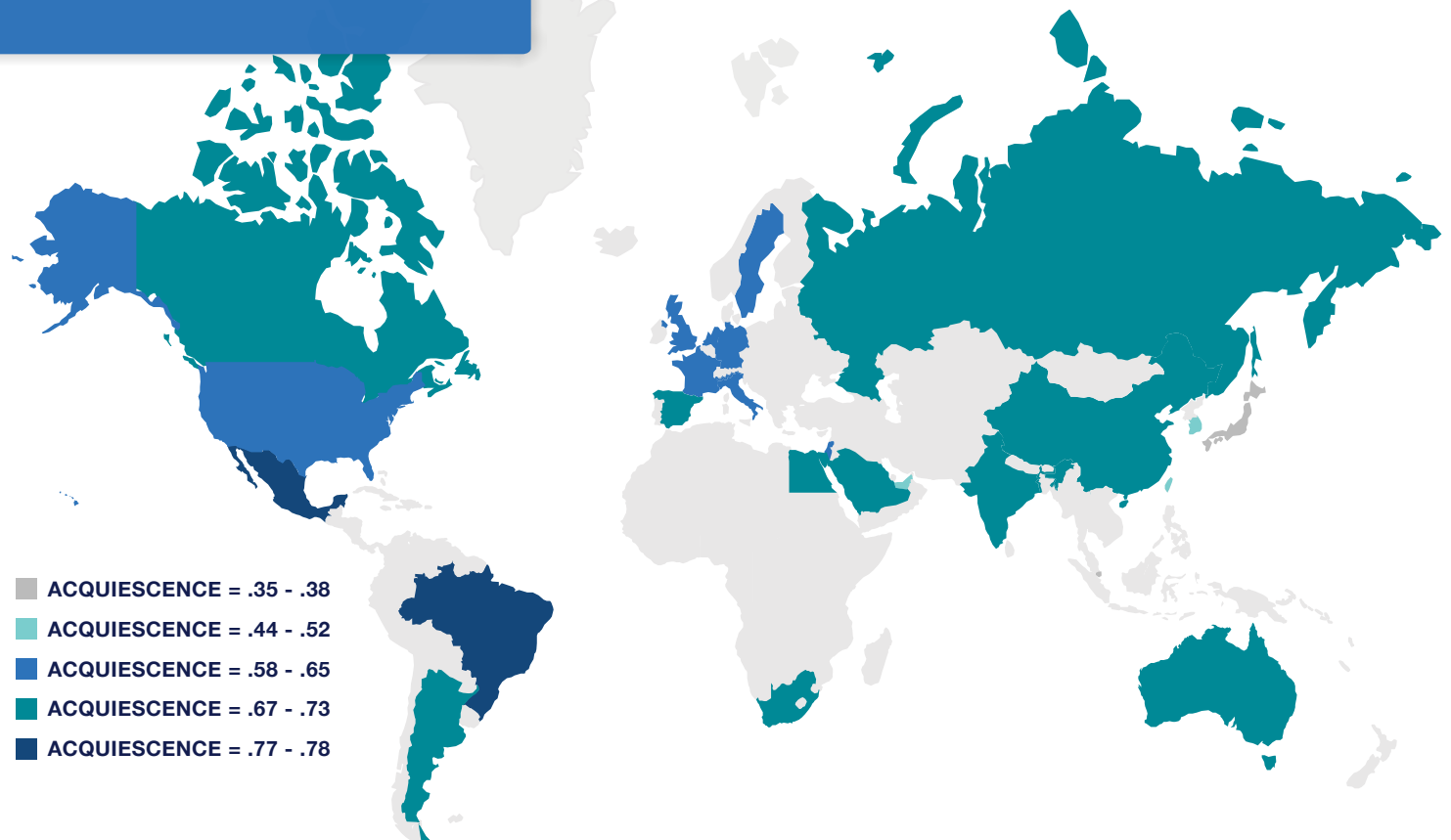# Response Scales Across Countries

Executive Summary

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Executive Summary

The ADP Research Institute developed an approach for **standardizing responses** collected from diverse populations to reduce systematic bias inherent to multi-country research.

- **Response standardization** is the process by which survey responses are adjusted to reduce or eliminate cross-population differences due to response styles or method effects that are not related to the construct of interest.

- Failure to study and correct for response style differences across multiple populations is likely to yield **invalid comparisons and inferences**.

ACQUIESCENCE = .35 - .38
ACQUIESCENCE = .44 - .52
ACQUIESCENCE = .58 - .65
ACQUIESCENCE = .67 - .73
ACQUIESCENCE = .77 - .78

Context of Approach Application

Each possible standardization approach imposes a set of assumptions about the data, how it was collected, how it will be analyzed, and how the results will be used. **There is no one-size-fits-all approach to cross-population response standardization**.

- Measure primary construct of interest; use additional measurement instruments with the same / similar response formats to measure constructs that are theoretically related but conceptually distinct

- **Likert response scale (5-point)** anchored by *Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree*

- All items are positively worded statements; a response of *Strongly Agree* indicates a higher level of the construct being measured

Strongly Disagree · Disagree · Neither Agree Nor Disagree · Agree · Strongly Agree

Latent Constructs Versus Direct Measurement

No direct way to measure these constructs:

Engagement

Satisfaction

Burnout

Extraversion

Happiness

VS

Can be ascertained by using direct measurement:

Blood Pressure
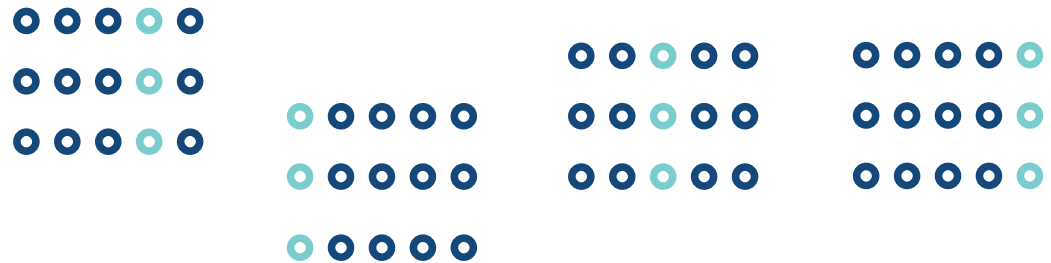
Height

Weight

Shoe Size

Gravity

1 Response Style Biases

Careless Responding

Careless responding is the act of providing the same response to all items.

As the number of items increases, it becomes less likely that a person's honest response to all items is exactly the same.

(Dis)Acquiescent Responding

Acquiescent Responding means selecting only the positive response options in response to all items, sometimes motivated by a desire to gain favor or present oneself in a positive light.

Disacquiescent Responding means selecting only the negative response options in response to all items, sometimes motivated by a concern of appearing too agreeable.

Careless Responding

QUESTION	RESPONSE
I am enthusiastic about the mission of the organization.	○ ○ ○ ○ ○
I know I will be recognized for excellent work.	○ ○ ○ ○ ○
I have the chance to use my strengths every day at work.	○ ○ ○ ○ ○

*I only use the **same** responses for all items.*

Careless Responder

Acquiescent Responding

QUESTION	RESPONSE
I am enthusiastic about the mission of the organization.	○ ○ ○ ○ ○
I know I will be recognized for excellent work.	○ ○ ○ ○ ○
I have the chance to use my strengths every day at work.	○ ○ ○ ○ ○

*My scale only consists of the **top two** choices.*

Positive Responder

Disacquiescent Responding

QUESTION	RESPONSE
I am enthusiastic about the mission of the organization.	○ ○ ○ ○ ○
I know I will be recognized for excellent work.	○ ○ ○ ○ ○
I have the chance to use my strengths every day at work.	○ ○ ○ ○ ○

*My scale only consists of the **bottom two** choices.*

Negative Responder

Response Styles Examples

My scale only consists of the **top two** choices.

My scale only consists of the **bottom two** choices.

I only use the **middle** of any scale.

I only use the **same** response for all items.

I only use **1s** and **5s**.

Positive (Acquiescent) Responder

Negative (Disacquiescent) Responder

Compressed Scale Responder

Careless Responder

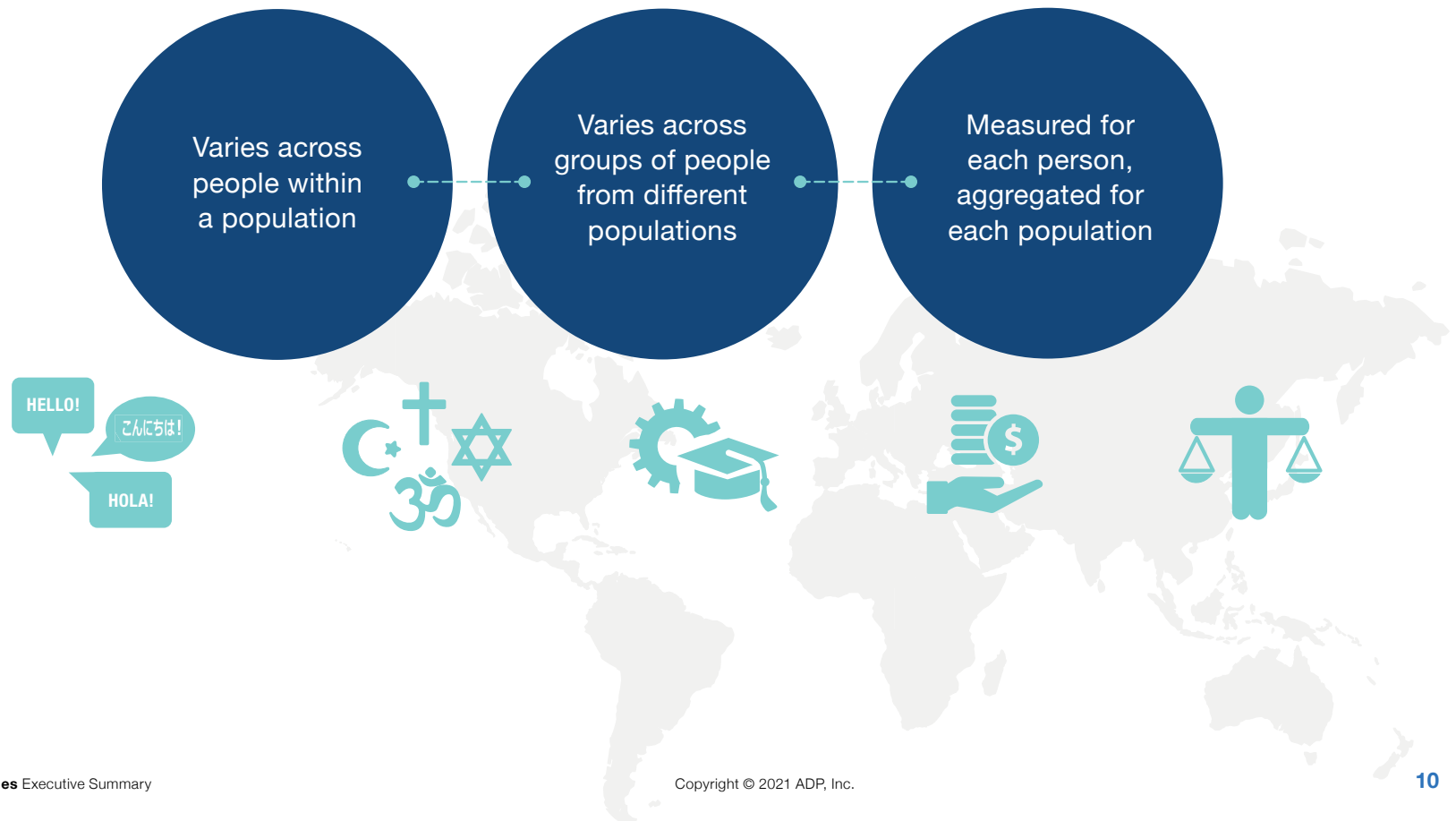**Extreme Responder**
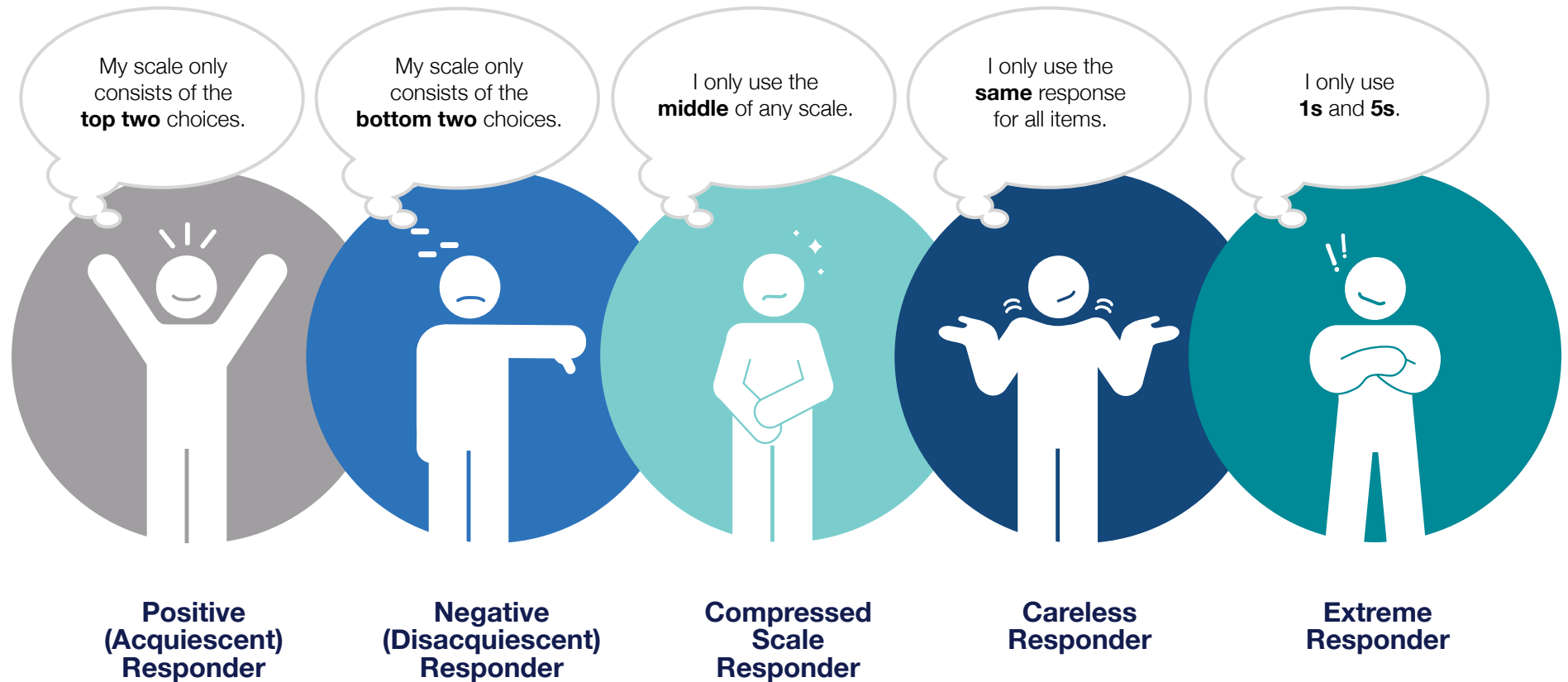
2 Response Styles by Country

Response styles are potential sources of bias that arise in survey data when responses are consistently influenced by beliefs, social training, language, or other population-specific experiences, expectations, and characteristics.
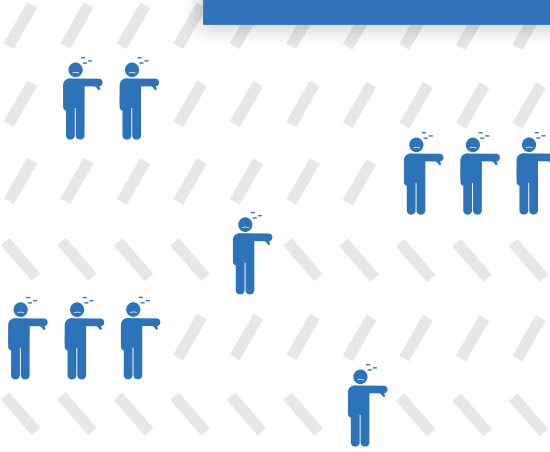
Varies across people within a population

Varies across groups of people from different populations

Measured for each person, aggregated for each population

Response Style Biases Vary by Country

Mexico has the highest rate of Acquiescent Responding.

UAE has the highest rate of Disacquiescent Responding.
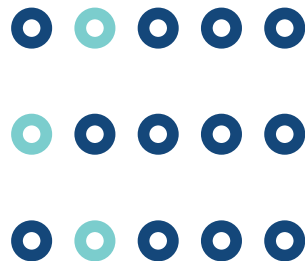
Response Style Biases Vary by Country

Mexico:

Highest rate of participants selecting only the top two scale points for all responses when measuring employee engagement (**Acquiescence** or **Positive Responders**).

With no correction for this pattern of response style bias, Mexico would always appear the **"happiest"**, **"most satisfied"**, and **"most engaged."**

Response Style Biases Vary by Country

UAE:

Highest rate of participants selecting only the bottom two scale points for all responses when measuring employee engagement (**Disacquiescence** or **Negative Responders**).

With no correction for this pattern of response style bias, UAE would always appear to be the **"least happy"**, **"least satisfied"**, and **"least engaged."**
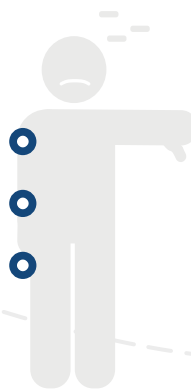
3 Steps in Approach

1 Identify and omit Careless Responders (these aren't lost response sets, they just aren't part of the sample used to calculate the correction values).
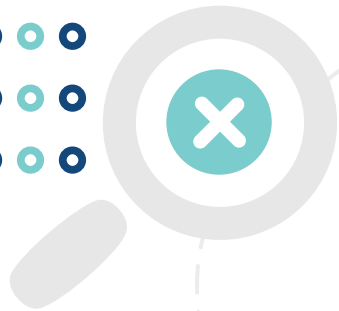
2 Evaluate Acquiescent Responding at the person-level; calculate population-level weights.

3 Evaluate Disacquiescent Responding at the person-level; calculate population-level weights.

4 Calculate means of items not measuring the primary construct of interest at the person, population, and total sample levels.

5 Compute the standardization adjustment value for each population.

6 Adjust responses to items measuring the primary construct of interest.

7 Compute scores for the measurement instrument.

4 Why It Matters

It is critical to **evaluate each cross-population data set individually** to determine whether Response Standardization is appropriate.

Response Standardization **enables more meaningful evaluation** of the psychometric properties of an instrument and more accurate application of advanced analytics (e.g., confirmatory factor analysis, testing for measurement invariance).

Failure to account for differences in response patterns attributable to population-based respondent characteristics can lead to **results that have little to no value**, rendering research findings that are lacking in validity and generalizability.
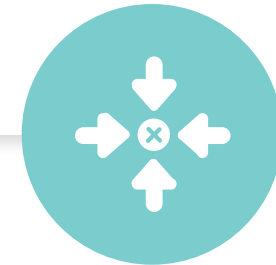
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