

REACH BRIEFING

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REACH Consulting Services (RCS) and the OrgDev Institute (ODI) collaborated to study evidence of scale reliability exhibited by the REACH Profile. When evaluating the reliability of psychometric surveys, researchers typically examine two forms of reliability evidence: internal consistency and stability. In this REACH Briefing, scales (styles and dimensions) reported by the REACH Profile were analyzed for evidence of internal consistency. In a separate REACH Briefing, these same scales were analyzed for stability using a test-retest approach.

- ODI gathered responses from 9,001 participants who completed the REACH Profile during training events from 2017-2019. The REACH Profile framework is derived from its predecessor, the Leading Dimensions Profile (LDP), the reliability evidence for which was reported in 2018 based on a sample of 33,308 participants.
- The REACH Profile is designed to convey a psychometric assessment of preferences and tendencies among four distinct profiles: Counselor, Coach, Driver and Advisor. These profiles emerge from the interaction of two aggregated styles (Relating style and Achieving style) and their respective dimensions: Intensity, Assertiveness, Risk Tolerance, Adaptability and Decision-making within the Achieving style; and, Affiliation, Openness, Consideration, Status Motivation and Self-protection within the Relating style.
- The most common method of demonstrating evidence of internal consistency is to report a statistic known as Cronbach Alpha. The following table reveals the Cronbach Alpha coefficients for REACH Profile scales (n=9,001).

Scale	Items	Cronbach Alpha	Mean Inter-Item Correlation
REACH Style			
Achieving Style	25	.86	.20
Relating Style	21	.82	.19
REACH Dimension			
<i>Achieving Dimensions</i>			
Intensity	8	.78	.31
Assertiveness	11	.82	.29
Risk Tolerance	8	.83	.38
Adaptability	8	.76	.29
Decision-making	8	.68	.21
<i>Relating Dimensions</i>			
Affiliation	10	.85	.37
Openness	9	.78	.28
Consideration	10	.77	.26
Status Motivation	14	.78	.20
Self-protection	9	.80	.31

- The Cronbach Alpha coefficient indicates the extent to which participants' item responses tend to be consistent within a given scale. Coefficients for the REACH Profile's primary factors are excellent at .86 and .82, for Achieving style and Relating style, respectively. Similarly, the dimensions exhibited strong evidence of internal consistency with average coefficients of .77 and .80 for the Achieving and Relating dimensions, respectively.
- While a higher coefficient indicates that a scale's items measure the same underlying construct, an exceptionally high coefficient (such as 1.00) may indicate that the scale's items are merely repetitive or redundant (such as presenting the same item 10 times for a 10-item scale). A lower coefficient may indicate inconsistency within a scale. This may be caused by more than one construct being reflected within a scale (thereby revealing no consistent response pattern) or by the lack of any underlying construct at all. Generally speaking, a coefficient of .70 - .90 is considered desirable for psychometric surveys.
- Since the REACH Profile represents a revision of the original LDP, the internal consistency reliability evidence was compared across the two surveys. The following table shows the Cronbach Alpha coefficients for both surveys (the number of items remained constant).

Scale	Cronbach Alpha	
	REACH Profile	LDP
REACH Style		
Achieving style	.86	.87
Relating style	.82	.81
REACH Dimension		
<i>Achieving Dimensions</i>		
Intensity	.78	.78
Assertiveness	.82	.81
Risk Tolerance	.83	.82
Adaptability	.76	.68
Decision-making	.68	.60
<i>Relating Dimensions</i>		
Affiliation	.85	.73
Openness	.78	.76
Consideration	.77	.77
Status Motivation	.78	.70
Self-protection	.80	.62
n=	9,001	33,308

- In addition to the styles and dimensions reported above, the REACH Profile also reports 16 ratings based on the REACH skills framework. These ratings are scored in clusters and categorized as Counseling, Coaching, Driving and Advising competencies. Cronbach Alpha coefficients for these ratings and clusters are shown in the following table:

Scale	Items	Cronbach Alpha	Mean Inter-Item Correlation
REACH Quotient (RQ)	16	.95	.53
Cluster			
Counseling skills (competencies)	4	.88	.64
Coaching skills (competencies)	4	.87	.62
Driving skills (competencies)	4	.87	.63
Advising skills (competencies)	4	.84	.58

- The findings reported herein demonstrate ample evidence of internal consistency reliability among the REACH Profile's psychometric scales. Specifically, Cronbach Alpha coefficients for the Achieving and Relating styles were quite strong, with an average of .84. The average coefficient for the ten dimensions was .79, with all but one (the Decision-making dimension) demonstrating a coefficient exceeding the desired level of .70.
- These findings suggest that significant evidence of reliability is demonstrated by the REACH Profile's skill-based ratings as well. Specifically, with a Cronbach Alpha coefficient of .95, the 16-item REACH Quotient demonstrated high internal consistency. Similarly, the four clusters (each comprised of four self-ratings) exhibited Cronbach Alpha coefficients of .84-.88, far exceeding the desired level of .70.
- In light of these findings (and the findings based on test-retest stability reported previously), users can be assured that the REACH Profile's scales and ratings are reliable – both internally and over time. In summary, there is strong evidence that specific, stable constructs are reported by the survey, providing reliable measures that are useful for professional and personal development.

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