

NEW TTI INSTRUMENT RELIABILITY STUDIES

TTI continues the process of quality improvement in its assessments with this announcement of recently completed statistical studies. The following summary conclusions are excerpted from research completed on July 28, 2003, by Peter T. Klassen, Ph.D.

Style Insights™

(TTI's new DISC instrument referred to as Style Analysis 2 below)

Summary Conclusion

Based on a series of examinations of scale and item reliabilities across multiple populations of respondents, revisions were developed and tested for TTI's Style Analysis™ that culminated in development of a revised instrument. The results of assessment of this revised edition indicate improved reliability for the two dimensions (adaptive, nature) of four parallel scales (D,I,S,C) ranging from .72 to .84. Each of the ninety-six items used to construct the scales contributes at a significant level to one or both the scales dimensions. Correlations between adaptive and natural scales indicate that these two dimensions of parallel scales are highly related, as one would expect, but also that the scales are sufficiently independent measures to justify separate interpretations and comparisons. Scores on the scales are distributed across all scale points, which supports making comparison between individuals and the self-reported behaviors in a population. Revision of the instrument included utilization of new population distributions that anchored comparisons in a population representative of the 21st century. Overall, the Style Analysis 2 is a strong, reliable instrument applicable across a variety of populations.

Revised Scale Reliability

Scale reliabilities were calculated using Cronbach's Alpha. Cronbach's Alpha is considered the most appropriate statistical test for reliability, given the dichotomous responses used to construct the scales. For dichotomous data, this is equivalent to the Kuder-Richardson formula 20 (KR20) coefficient. These evaluations are a more rigorous approach than a traditional split-half statistic. Cronbach's Alpha ranges in value from 0 to 1. In general an Alpha equal to or greater than .6 is considered a minimum acceptable level, although some authorities argue for a stronger standard of at least .7. **These findings document the revised SA2 (Style Insights™) as an instrument with solid scale construction and reliability.**

New Style Insights™	Adaptive	Natural
Dominance-Challenge	.83	.84
Influence-Contact	.83	.81
Steadiness-Consistency	.78	.72
Compliance-Constraints	.73	.80

Motivation Insights™

(TTI's new Values instrument referred to as Personal Interests, Attitudes and Values 2 below)

Summary Conclusion

Based on a series of examinations of scale and item reliabilities, revisions were developed and tested for TTI's Personal Interests, Attitudes and Values™ that culminated in development of a revised instrument. The results of assessment of this revised edition indicate high or improved reliability for the six scales with Cronbach's ranging .7 to .82. Each of the seventy-six items used to construct the scales contributes at a significant level to its assigned scale. Correlations among the six scales indicate that they are substantially independent in measurements. Scores on the scales are distributed across the scales leading to meaningful comparisons and interpretation. Overall, the Personal Interests, Attitudes and Values 2 is a strong, reliable instrument applicable across a variety of populations.

Revised Scale Reliability

Scale reliabilities were calculated using Cronbach's Alpha. Cronbach's Alpha is considered the most appropriate statistical test for reliability, given the ranking of responses used to construct the scales. This statistic models internal consistency based on the average inter-item correlation. It is a more rigorous test than a traditional split-half statistic. Cronbach's Alpha ranges in value from 0 to 1. In general an Alpha equal to or greater than .6 is considered a minimum acceptable level, although some authorities argue for a stronger standard of at least .7. **These findings document the revised PIAV 2 (Motivation Insights™) as an instrument with solid scale construction and reliability.**

New Motivation Insights™ (PIAV 2)	
Theoretical	.77
Utilitarian	.80
Aesthetic	.82
Social	.82
Individualistic	.70
Traditional	.81

TTI is incorporating these new instruments into its product line to bring TTI Distributors and their Clients the most highly reliable assessments of their kind on the market today.