

SHAPE Poster Presentation
Dr. Bethany Shifflett
San Jose State University

Reliability of Communication Style Measures

Background/Purpose:

One important factor influencing learning can be the quality of communication between an instructor and student. One of the tools available for identifying individual communication style is Gregorc's Transaction Ability Inventory (TAI). Given conflicting reports regarding the instrument's reliability, this study explored the reliability of transaction ability inventory scores from collegiate faculty. In addition, the challenge of working with ipsative measures and the impact on reliability were highlighted.

Method:

An online version of the TAI was developed and faculty (n=124) from one college within a large comprehensive university were invited to complete the inventory. Within a week the faculty were asked to complete the inventory a second time so the reliability of the data could be examined. The reliability of the scores from each of the four style categories represented in the TAI was examined using coefficient alpha. The reliability of a differential score, which provides an indication of the extent to which the individual has a dominant communication style, was also examined with coefficient alpha.

Analysis/Results:

Reliability (stability) was found to be good (coefficient alpha ranged from .78 to .96) for scores from each of the four style categories and the differential score. A key point, which potentially explains the conflicting reports in the literature, is that the ipsative (rank ordering) nature of the inventory can result in the collection of information with many errors. In this study, close examination of the data suggested that faculty often provided likert-scaled data rather than ranked data. Hence, recommendations focus on strategies to facilitate the collection of usable data.

Conclusions:

Verification of the reliability of TAI scores enables faculty to confidently employ the inventory to assess their communication style preferences as well as those of their students. The TAI takes little time to administer and if the information is then used for self reflection, the potential for both students and faculty to make productive use of the information is considerable. A greater understanding of personal communication style preferences itself is of value. With that information, both students and faculty can potentially apply that information in ways that strengthen teaching and learning.

Table 1

Group Characteristics

Variable	n	Percent	Mean	Median	Sx
Gender					
male	15	33%			
female	30	65%			
Degree					
doctoral	39	85%			
masters	6	13%			
Status					
tenured	27	59%			
tenure track	12	26%			
lecturer	6	13%			
Admin responsibilities					
yes	22	48%			
no	23	50%			
Inventory influence teaching					
yes	15	33%			
no	11	24%			
never taken	19	41%			
Age	42		54.4	55.5	8.4
Years collegiate teaching	44		16.8	15	10.6
Total years teaching	44		18.6	17.5	10.0

Table 2

Communication Styles by Group Characteristics

	CS	AR	AS	CR	Multiple	N
Overall (whole group)	20%	13%	4%	9%	35%	46
Male	13%	20%	13%	7%	40%	15
Female	23%	10%	0%	10%	30%	30
Tenured	30%	7%	7%	7%	30%	27
Tenure track	8%	17%	0%	8%	42%	12
Administrative experience						
Yes	32%	18%	5%	5%	23%	22
No	9%	9%	4%	13%	43%	23
Teaching influenced by style information						
Yes	7%	13%	7%	13%	33%	15
No	27%	18%	0%	18%	27%	11
Not Applicable	26%	11%	5%	0%	37%	19

Table 3

Central Tendency and Variability for Differential Scores

	Mean	Median	Sx	low	high	N
Overall	12.7	13.0	5.0	4	24	37
Male	11.4	11.0	3.4	6	18	14
Female	13.5	13.5	5.7	4	24	22
Tenured	13.3	14.0	4.6	5	24	22
Tenure track	11.8	11.0	6.1	4	21	9
Administrative experience						
Yes	14.1	14.0	4.9	6	24	18
No	11.3	11.0	4.9	4	21	18
Years collegiate teaching						
≤ 10	10.7	10.5	5.8	4	24	14
≥ 20	14.2	14.0	4.5	7	22	16

Table 4

Reliability for Style Inventory Scores

Scale	Stability	Estimation for one Administration	Internal Consistency
CS	.96	.93	.78
AR	.85	.75	.73
AS	.79	.65	.59
CR	.95	.91	.48
Differential Score	.90	.82	NA
