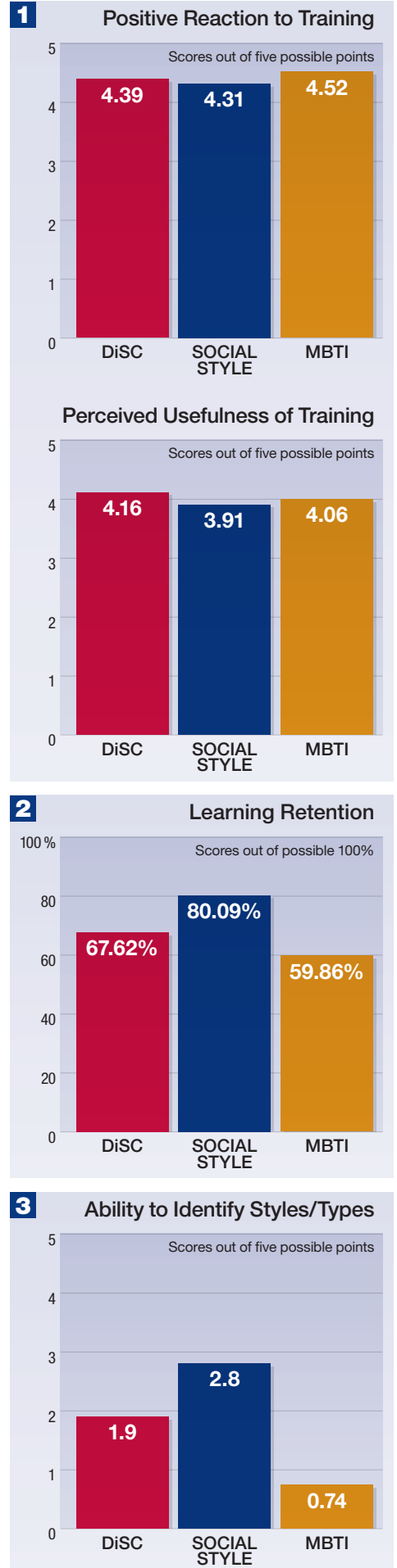


# Study Shows TRACOM's SOCIAL STYLE<sup>SM</sup> is Most Effective Interpersonal Skills Training Program

**SOCIAL STYLE learners were better able to identify and appropriately interact with different styles or types than DiSC or MBTI learners**

Colorado State University conducted a research study in conjunction with Regis Learning Solutions that compares the effectiveness of interpersonal skills training programs from three popular providers: the **Myers-Briggs Type Indicator**<sup>®</sup> model from CPP, Inc., the **DiSC**<sup>®</sup> model from Inscape Publishing, and the **SOCIAL STYLE MODEL**<sup>™</sup> from the TRACOM<sup>™</sup> Group. This 2007 study evaluated the training programs on three measures: **Reactions**, **Learning**, and **Behavior**.



## Outcome of the Study

### 1 Reactions

Participants of all three programs perceived their training positively.

### 2 Learning

**SOCIAL STYLE** program participants retained 34% more information than MBTI participants and 18% more than DiSC participants.

The results demonstrate that the **SOCIAL STYLE** Model and program materials are easier to grasp and make more intuitive sense to the learners than MBTI or DiSC.

### 3 Behavior

**SOCIAL STYLE** program participants were able to correctly identify style or type of others almost 4 times better than MBTI participants and almost 1.5 times better than DiSC participants.

**SOCIAL STYLE** participants scored considerably higher in their ability to appropriately work with other types or styles.

The results indicate that employees who participated in **SOCIAL STYLE** training were far better able to put what they learned into practice than those who took either DiSC or MBTI training.

# An Empirical Evaluation of Three Popular Training Programs to Improve Interpersonal Skills

Kurt Kraiger, Ph.D., *Colorado State University*; Stephen Kirkpatrick, Ph.D., *University of the Rockies*

As part of their talent development efforts, organizations implement training and development programs that often include some form of interpersonal or behavioral assessment. The study examined in this article compares three popular interpersonal skills training programs for measuring and understanding one's interpersonal style: Inscape's DiSC model, TRACOM Group's Social Style Model, and Consulting Psychologist Press's Myers-Briggs Type Indicator. The facilitators found that participants in each program held positive reactions to training; participants in the Social Style training scored significantly higher than did participants in the DiSC and MBTI programs on a learning measure; and participants in the Social Style training scored significantly higher than did participants in the DiSC and MBTI programs on two measures of participants' skill at analyzing and responding to the interpersonal behaviors of others.

Understanding and responding to the unique social or interpersonal styles of others is an important skill for working professionals. Extensive lines of workplace research establish that in addition to cognitive ability and technical knowledge, interpersonal skills strongly predict business and professional success (Goleman, 1998; Goleman, Boyatzis, & McKee, 2006). An analysis of job competencies at 286 organizations worldwide found that 18 of the 21 competencies for distinguishing superior from average performers were interpersonal in nature (Spencer & Spencer, 1993). A recent survey of 726 human resource (HR) and performance professionals indicated that the top three most valued competencies in organizations were management leadership, technical knowledge, and people skills (BPM Forum and Success Factors, 2007). Intelligence rated near the bottom of the value scale.

As part of their talent development efforts, organizations implement training and development programs that often include some form of interpersonal or

behavioral assessment. Along with the assessment itself, this type of training typically includes education about the accompanying theoretical model and information on how to use this information to work more effectively with others. The American Society for Training and Development estimates that U.S. organizations spend almost \$110 billion on employee learning and development annually, with an average expenditure of more than \$1,400 per employee (Rivera & Paradise, 2006). Combining the publishers' estimates of annual sales volume from their respective Web sites for the three interpersonal skills training programs investigated here—TRACOM Group's Social Style, Inscape's DiSC, and Consulting Psychologist Press's Myers-Briggs Type Indicator (MBTI)—indicates that a minimum of 8 million and perhaps as many as 12 million individuals receive feedback and training using just these three models annually. According to a 2006 forecast and analysis, soft skills training will post the largest change in market share over the next few years, overtaking the information technology market for the first time in terms of both size and share (Simba Information, 2006). This same analysis also reported that soft skills training grew 32.6% from 2005 to 2006, and the compound annual growth rate from 2004 to 2006 was 26.1%. With so much emphasis on social and interpersonal skills and so many organizations investing so much money in training and development programs, it is important to understand what these programs are teaching and how well they work.

Analyzing and responding to the interpersonal styles of others challenges the skills of many professionals and other adults in the workplace. Accordingly, understanding one's personal behavioral styles and training in assessing and

interpreting others' interpersonal styles improves one's chances of success. Supported by this knowledge, adults in the workplace can then better adapt to others' styles, improving relationship management, teamwork, and productivity.

In the marketplace, multiple measurement tools are available to working professionals to assist them in understanding their own styles and those of others. Maximum benefit from understanding any of these assessments and their underlying interpersonal interaction models requires providing individuals not only with an interpretation of the assessment results but also with support in using that information to make workplace behavior more effective. Thus, in choosing a behavioral model or assessment program to use personally or for a company's workforce, it is important to select one that has scientific evidence of the validity (or accuracy) of the specific measurement instrument used in the program and scientific evidence of the effectiveness of the training based on application of the model.

The study reported here compares three popular interpersonal skills training programs for measuring, understanding, and applying one's social or interpersonal style. These programs present either the DiSC model from Inscape Publishing, the Social Style Model from the TRACOM Group, or the MBTI from Consulting Psychologist Press. All three of these programs claim to develop interpersonal skills related to greater workplace effectiveness, such as communication, team building, and leadership development. A recent survey of HR executives found that 86% of the organizations studied use one of these three programs, and at least 60% of their companies' additional training programs incorporate an interpersonal skills component (Leflein Associates, 2005). In addition, 73%

of these professionals believe that interpersonal skills training is effective despite the lack of empirical evidence for such a claim. When asked how they decided on a program, these professionals stated that they rely on personal experience (71%) and general research (53%). Anecdotally but significantly, many HR and organizational development (OD) professionals develop a preference, even a strong loyalty, for one program based on little more evidence than that program has helped that individual professional personally.

Based on a thorough review of the literature, no previously published study has compared the effectiveness of these three programs. The purpose of the study examined here is to compare and evaluate training programs conducted to support the analysis and application of each program. Colorado State University and Regis Learning Solutions, a Regis University affiliate that provides strategic learning solutions to corporations and organizations around the world, jointly conducted the independent study in order to provide an assessment of the benefits of training using each program.

Facilitators certified by the respective publishers to deliver training on their published assessments and programs trained 213 participants on one of the three interpersonal skills training programs. Colorado State University graduate students designed and analyzed all training evaluation measures. The results showed:

- There were no differences among the three training programs in terms of participants' satisfaction with training or their perceived usefulness of the training.
- Participants in the Social Style training scored significantly higher than did participants in the DiSC and MBTI programs on a measure of retention of key

knowledge based on the joint training objectives.

- Participants in the Social Style training scored significantly higher than did participants in the DiSC and MBTI programs on two measures of participants' skill at analyzing and responding to the interpersonal behaviors of others.

The following sections provide additional details of the three training programs, the study participants, the evaluation measures, and results. The discussion at the end of this article addresses the implications of these results for choosing a measure of interpersonal style.

## Method

### Materials and Procedures

Regis Learning Solutions (RLS) recruited and scheduled training participants. It also recruited, approved, and assigned training facilitators to training sessions.<sup>1</sup> All training participants were working adults, typically recruited through the training or HR director at their place of employment. When all participants were from a single organization, their training sessions occurred at their place of business (e.g., a seminar room); when participants were from multiple organizations, the training sessions occurred in a classroom at one of multiple locations of Regis University.

Facilitators assigned to any training session were always certified by the publisher to deliver the training program they facilitated, and all had had previous experience delivering the program. RLS informed the facilitators that they were taking part in a research study. For scheduling purposes, each training program used multiple facilitators.

Facilitators and participants in each session used training materials distributed by the publishers of each interpersonal styles program when conducting training. Participants in each session used one of these three specific interpersonal assessment profiles: DiSC Personal Profile System, Social Style Profiles Multi-Rater, and MBTI Form Q.

Because individual facilitators sometimes vary in the extent to which they follow the planned training material, RLS made concerted efforts to standardize the training as much as possible within training programs for a single instrument and across training programs for the three measurement tools. To do this, RLS reviewed the training materials for each program and derived a set of terminal training objectives that facilitators followed when conducting training. In other words, facilitators did not have latitude to train on the measurement tool as they saw fit, but to train on a specific set of training objectives using publishers' materials related to the interpretation and use of scores generated by the measurement instrument. Table 1 lists the terminal objectives.

Participants completed the profile instrument prior to attending the training program using the online systems from each publisher: EPIC online system (Inscape), LearningSurveys.com (TRACOM), and SkillsOne.com (CPP). Each training program was approximately four hours long; individual sessions ran a little shorter or longer depending on the number of questions, number of participants, or the pace of the facilitator.

Regardless of the measurement instrument, each program had similar elements:

- An introduction to the instrument and the personality or social-behavioral theory and model underlying it

- Coverage of the major dimensions or types the instrument measures
- Distribution of individual feedback reports (based on responses prior to training)
- Information relevant to interpreting participants' reports
- Information on using the instrument (and underlying theory) to interpret and respond to the behavior of others

Facilitators in all programs used a combination of lecture, facilitated discussion, small group exercises, and role plays to convey the required information.

Following completion of the training program, the facilitator introduced a researcher from Colorado State University who administered four evaluation forms to complete (measures are described below).<sup>2</sup> The assessment administrators told participants that the purpose of the evaluation was to evaluate the training program for purposes of formative evaluation (to recommend improvements in future training) and summative evaluation (to compare the effectiveness of different types of training programs).

All responses were anonymous; participants provided code names or numbers on the evaluation forms. The evaluation took approximately 45 minutes to complete. After completing all forms, the researchers thanked and dismissed the participants.

### Participants

A total of 213 participants completed one of the three training programs (for Social Style, 74 participants; for DiSC, 73 participants; for MBTI,

**Table 1**  
**Terminal Training Objectives for Three Half-Day Training Programs**

Training Program	Terminal Objectives
DiSC	<p>Explain the behavior patterns characteristic of each of the four DiSC model primary behavior styles.</p> <p>Recall that DiSC profiles are not predictive of workplace success or the likelihood of success in any position, role, or task.</p> <p>Describe the strongest motivators, worst fears, favorite questions, and developmental challenges each primary style exhibits in workplace relationships.</p> <p>Read, interpret, and explain the learner’s personal DiSC Personal Profile System report.</p> <p>Describe and explain how persons with different DiSC profiles can best adapt their behavior styles to the styles of others in the workplace.</p> <p>Describe how different DiSC profiles prefer to contribute to a team in the workplace.</p> <p>Recognize the indicators of another person’s DiSC profile in the workplace based on observations of his or her behavior.</p>
Social Style	<p>Explain the behavior patterns characteristic of each of the four Social Style model behavior styles.</p> <p>Explain the concept of tension in workplace relationships and the impact of tension on performance.</p> <p>Describe the strongest motivators, worst fears, and developmental challenges each primary style exhibits in workplace relationships.</p> <p>Recall that Social Style profiles are not predictive of workplace success or likelihood of success in any role.</p> <p>Explain the meaning of versatility and how it affects individuals’ ability to earn social endorsements from others in the workplace.</p> <p>Read, interpret, and explain the learner’s personal multirater Social Style profile report.</p> <p>Read, interpret, and explain the learner’s own Social Style versatility report.</p> <p>Describe how different Social Styles prefer to contribute to a team in the workplace.</p> <p>Recognize the indicators of another person’s Social Style profile in the workplace based on observations of his or her behavior.</p>
MBTI	<p>Describe and explain the preferences represented by each of the four MBTI scales.</p> <p>Interpret the possible combinations of types in terms of their indicators of workplace behavioral tendencies.</p> <p>Recall that Myers-Briggs types are not predictive of workplace success or the likelihood of success in any position, role, or task.</p> <p>Read, interpret, and explain the learner’s personal Myers-Briggs type Indicator report.</p> <p>Describe and explain how persons with different Myers-Briggs types can best adapt their preferences and styles to the preferences and styles of others in the workplace.</p> <p>Describe how different Myers-Briggs types prefer to contribute to a team in the workplace.</p> <p>Recognize the indicators of another person’s Myers-Briggs type in the workplace based upon observations of his or her behavior.</p>

66 participants) and provided evaluation data on all of the assessments.<sup>3</sup> Training participants, all working adults, represented a diverse group in terms of gender, organizational level, work experience, and organizational setting, as indicated

in Table 2. On average, participants were 43.4 years old ( $SD = 10.8$ ). Participants reported working in 26 different industries, with the most frequently cited being education or adult education (55), government (37), and manufacturing (28). Participants

**Table 2**  
**Sample Demographic Characteristics**

Characteristic	Breakdown
Gender	73–Male 132–Female
Education	10–High school, GED, or less 17–Technical or two-year college 50–Some college/university 85–College/university degree 44–Postgraduate degree 1–Other
Current organizational level	7–Not working 66–Staff member, individual contributor 25–First-level supervisor 67–Manager 18–Department head 11–Executive 13–Other (usually self-employed)
Total work experience (across jobs)	1–Less than 1 year 4–1 to 3 years 10–3 to 6 years 26–6 to 10 years 25–10 to 15 years 141–More than 15 years
Total experience in current job	27–Less than 1 year 43–1 to 3 years 36–3 to 6 years 32–6 to 10 years 35–10 to 15 years 141–More than 15 years

also reported a wide range of occupations, with the most common being human resources (34), followed by administration or clerical (29), information services/technology (16), customer service (13), engineering (11), and general manager (10).

### Evaluation Measures

A number of different criteria can be used for evaluating training programs, including participants' satisfaction with training, learning during training, and skills at applying material covered in training (Kirkpatrick, 1994; Kraiger, 2002). What is most important to the design of training evaluation measures is to link logically the content of the measures to the training content (Kraiger, 2002; Kraiger, Ford, & Salas, 1993). To create measures of learning during training and skills applying the training, the research team from Colorado State University reviewed course manuals and facilitator guides and developed content closely related to the material covered in training. Efforts focused on ensuring a correspondence between evaluation content and training materials (addressing content validity) and ensuring a correspondence between test items across training programs (addressing fairness in evaluation). For example, each training program related particular styles or profiles to a pattern of behavior. In addition, each learning measure (by training program) had the same number of questions, which gave participants a style or profile and asked them to identify the probable behaviors displayed by individuals with this style or profile.

Thus, the reaction form was identical across training programs, except for the first question. The first item in each case asked participants to indicate their style or profile provided to them during the training, so the first item varied only to the extent it fit the terminology of the particular training program. The assessments of learning and behavior forms were customized to individual training programs, but the number and types of items were identical across programs. Descriptions of the measures follow.

### Participant Reactions

A 17-item rating form, administered at the end of training, assessed participant reactions to training. Items assessed participants' satisfaction with or liking of the training program (six items; sample item: "The training program was enjoyable"), participants' evaluation of the trainer or training program (five items; sample items: "The trainer presented material clearly" and "I had the opportunity to ask questions during training"), and perceived usefulness of the training (six items; sample item: "The training provided specific methods that I can apply at work"). All items used a five-point Likert-style scale (1 = strongly disagree, 5 = strongly agree).

After all the data were collected, the 17 items underwent a principal axis factor analysis to determine potential subgroupings of the items.<sup>4</sup> Two factors emerged. The first reaction factor was labeled Positive Reactions (toward training), as it combined items written to elicit general satisfaction and evaluation of the trainer. This factor had seven items (coefficient  $\alpha = .87$ ). The second reaction factor was labeled Perceived Utility and consisted of four items assessing the perceived usefulness of the training (coefficient  $\alpha = .81$ ). For evaluation analyses, the analysts averaged item scores so that both scales had a potential maximum score of 5.0 (indicating high satisfaction or perceived utility).

### Learning

A 16-item exam based on training content, administered at the end of training, measured participants' retention of the key information covered in training. The items were written to be as parallel as possible across training programs (e.g., the form had questions that provided the name of an

interpersonal style or personality type and asked what behaviors would be expected from a person displaying that style or type). Items were either multiple choice (12 items) or checklists (4 items) so they could be objectively scored. Multiple facilitators delivering the training completed the exams, and their answers provided keys for scoring answers. Multiple-choice questions had a single correct answer, but checklist questions had multiple possible answers. Scores on multiple-choice items were either correct or incorrect (worth 1 point each). For each checklist item, there were four primary answers and two to four secondary or acceptable answers. Trainees earned 0.2 points for each primary answer checked and either 0.1 points (if there were two possible secondary answers) or 0.05 points (if there were four possible secondary answers) for other answers checked. Thus, each checklist item was worth up to 1 point, the same as the multiple-choice questions. To convert exam scores to a 100-point scale, analysts divided individual raw scores for the 16 questions by 16 and multiplied the quotient by 100.

### Behavior

A behavior measure administered immediately after the training assessed participants' capacity to apply their learning to understand and react to the social and interpersonal styles of others. After completing the learning measure, participants watched a 14-minute video segment from the movie *12 Angry Men*. Despite having a relatively small sample of behavior to observe, the video clip was useful in that it provided an opportunity for participants to demonstrate their ability to analyze and respond to the interpersonal behavior of others after a short time.



The video showed a panel of jurors debating the evidence used to prosecute a defendant accused of murder. Different jurors displayed different interpersonal styles during this discussion. Following the video, the assessment presented participants with pictures and labels (e.g., juror 8) of five jurors, and asked them to identify the individual's behavioral style, social style, or type (depending on the training program). The behavior assessment used the same jurors for each training program and forewarned participants regarding whom they would evaluate.

Facilitators for each training program provided the correct pattern, style, or type for each of the five participants. Participants received 1 point for each juror correctly labeled, so final scores on the first behavioral measure ranged from 0.0 to 5.0.

After providing these answers, participants were shown the picture and juror number of three other jurors seen in the video. Then the assessment revealed each of the three individuals' behavioral pattern, social style, or type (depending on the training program) and then asked, "If this person is not contributing to a successful outcome, what are some ways of dealing with this juror to get him to participate in a more appropriate manner?" Participants responded to the question with short written answers. Training facilitators again provided the expert answers to each question. Since the last three questions were open-ended, COE researchers scored the answers subjectively. Each response was scored by two researchers, with scores (for items) ranging from 0 (no overlap with expert answers) to 3 (close approximation of expert answers). There was relatively high agreement among raters across questions and training programs; inter-rater correlations were .80, .80, and .72 for the Social Style, DiSC, and MBTI programs,

and interclass coefficients (ICCs) were .58, .61, and .61, respectively. When there were disagreements (rarely more than 1 point), ratings were averaged to produce a score for that item. Total scores represented the sum of the scores for the three items on the second behavioral measure and therefore could range from 0.0 to 9.0.

### Planned Analyses

An analysis of variance determined whether there were significant differences across training programs on any of the dimensions. "Significant differences" based on a statistical analysis such as analysis of variance means that differences in the mean scores between two programs are large enough that they are probably not due to random chance and would probably be found in similar future studies with large enough samples.

When significant differences were found among all three programs, Bonferroni post hoc comparisons isolated specific, significant differences between any two programs (e.g., DiSC versus MBTI or Social Style versus MBTI).

## Results

### Participant Reactions

Separate analyses (ANOVA) were conducted for the two reaction scales described previously.

For the Positive Reaction scale, there was a significant difference among the three training programs ( $F = 3.95, p < .05, \epsilon^2 = .04$ ), although this effect was relatively small. Post hoc comparisons revealed that participants in both the MBTI and the DiSC programs rated their training significantly more positively than did participants in the Social Style program. There were no significant differences between the MBTI and DiSC programs on this scale.

For the Perceived Utility scale, there was also a significant difference among the three training programs ( $F = 3.14, p < .05$ ), although this effect was again relatively small ( $\epsilon^2 = .03$ ). Post hoc comparisons revealed that participants in the DiSC program perceived their training program to be significantly more useful than did participants in the Social Style program. There were no other significant differences between any other combinations of groups.

*Conclusion:* There are some small differences in training reactions across programs but no clear trend favoring one particular program over another.

### Learning

There was a significant difference among the three training programs on the learning measure ( $F = 32.01, p < .001, \epsilon^2 = .23$ ). This was a large effect, indicating sizable differences in mean scores across programs. Post hoc analyses revealed that the mean score on the learning measure was significantly higher for the Social Style program than for either the DiSC or the MBTI programs (see Table 4). In

addition, the mean score for the DiSC program was significantly higher than the mean for the MBTI program.

*Conclusion:* On a learning test tailored to the content of each individual training program, participants in the Social Style program showed greater retention of key knowledge than did participants in the DiSC or MBTI training programs.

### Behavior

Separate analyses were conducted for both behavioral measures. Behavior 1 was the number (out of five) of jurors whom participants correctly labeled in terms of style or profile after watching the video. Behavior 2 was the rated score to three questions in which participants indicated what approach they would take to influence or accommodate a juror seen in the video given their knowledge of that individual's style or profile.

There was a significant difference among the three training programs on the Behavior 1 measure ( $F = 72.12, p < .001; \epsilon^2 = .41$ ). This was a large effect, indicating sizable differences in mean scores across programs. Differences of this magnitude are not only extremely strong in terms of statistical significance, but in practical terms, the likelihood of an impact on workplace behavior is potentially noteworthy.

**Table 3**  
**Mean Training Reactions by Training Program**

Reaction Scale	Program	Mean	SD
Positive Reactions	DiSC	4.39	.43
	Social Style	4.31	.46
	MBTI	4.52	.44
Perceived Utility	DiSC	4.16	.64
	Social Style	3.91	.66
	MBTI	4.06	.52

**Table 4**  
**Mean Learning Scores by Training Program**

Dependent Variable	Program	Mean	SD
Learning test scores	DiSC	67.62	13.95
	Social Style	80.09	15.40
	MBTI	59.86	16.10

**Table 5**  
**Mean Behavior Scores by Training Program**

Behavior Scales	Program	Mean	SD
Behavior 1	DiSC	1.9	.9
	Social Style	2.8	1.2
	MBTI	0.74	0.9
Behavior 2	DiSC	2.12	1.2
	Social Style	2.63	1.3
	MBTI	1.66	1.1

Post hoc analyses revealed that the mean score on the Behavior 1 measure was significantly higher for the Social Style program than either the DiSC or the MBTI programs (see the means in Table 5). In addition, mean scores for the DiSC program were significantly higher than scores for the MBTI program.

There was also a significant difference among the three training programs on the Behavior 2 measure ( $F = 11.48, p < .001, \epsilon^2 = .10$ ). This was a relatively large effect, indicating relatively sizable differences in mean scores across programs.

Post hoc analyses revealed that the mean score on the Behavior 2 measure was significantly higher for the Social Style program than either the DiSC or the MBTI programs. There was no significant difference in mean scores between the DiSC and MBTI programs.

*Conclusion:* On two behavioral measures assessing trainees' skill at analyzing and responding to the interpersonal styles of others, participants in the Social Style program scored, on average, significantly higher than did participants in either of the other training programs. Participants in the DiSC program performed

**Table 6**  
**ANOVAs for Effects of Type of Training on Training Outcomes**

Outcome	Sum of Squares	df	F	$\epsilon^2$
Positive ratings	1.55	2, 210	3.95*	.036
Perceived utility	2.37	2,210	3.14*	.029
Learning	14,685.7	2,210	32.01**	.234
Behavior 1	146.06	2,207	72.12**	.411
Behavior 2	33.39	2,210	11.48**	.099

\* $p < .05$ . \*\* $p < .001$ .

on average better than did participants in the MBTI program, particularly on the analysis of behavior.

Table 6 provides summary statistics for ANOVAs on all of the dependent variables

### Limitations

Any study of this type involving both human subjects' responses to training and the variability of different facilitators delivering the training involves potential rival explanations to the results. These limitations include facilitator styles and degree of participant engagement; adherence to prescribed training design and materials; undetected difference among participants in the training program; and historic effects, such as undisclosed previous participant experience with one or more of the models.

Despite the remarkably high statistical significance of the analyses, the possibility exists that

underlying and undetected differences among participants contributed to some extent to the variances in outcome measurement results. For instance, differences in emotional intelligence among groups of participants could affect the results.

The age, and therefore life experience levels, of participants may affect the effectiveness of the training and the three interpersonal style or type models. The sample in this study represents midcareer adults in the workplace, with a mean age of 43 and an SD of 10 years. Younger or older professionals and employees may learn or apply the models differently from those in their 30s and 40s. Since these age cohorts represent Generation X, there may also be generational differences in social skills and expectations at work.

Furthermore, the sample for this study represented white-collar office workers rather than manufacturing, skilled trade, or other occupational workers. Inherent differences in these populations based on educational level, language skills, and experience with workplace interpersonal interactions also may play a role in the observed differences.

Using the data at hand, the researchers tested the possibility that participant characteristics moderated the study results. In other words, we examined whether the effects of training depended on participant age, gender, education, and work experience. To do this, we conducted a series of moderated hierarchical regressions on each training outcome variable, with training program, demographic variable, and the interaction of program type and demographic variable. There was no evidence that the demographic makeup of the sample moderated the effects of training. For Positive Reactions, Perceived Utility, Learning,

Behavior 1, and Behavior 2, there was no significant interaction between training program and any of the demographic variables.<sup>5</sup>

## Summary and Implications

Multiple measures are available to aid in the analysis, interpretation, and use of interpersonal style when interacting with others. To be maximally effective, interpersonal skills training should be logically linked to the assessment instruments, and training should provide not only information about the assessment instrument but also the knowledge and skills associated with using the instrument effectively to analyze and respond to the behavior of others.

Effective training evaluation requires multiple measures conforming to the objectives of the training. The purpose of the study examined here was to conduct a thorough evaluation of three training programs based on three models that include measurement tools for understanding and working with the interpersonal behaviors or styles of others: Inscape's DiSC, TRACOM's Social Style, and CPP's MBTI. Evaluations focused on:

- Trainee reactions, that is, the extent to which participants enjoyed the training and perceived the training as useful for diagnosing the behaviors of others and communicating effectively with them
- Participants' knowledge of key concepts covered in training
- Participants' skills at applying what they learned by watching a brief video and correctly analyzing the interpersonal styles of

characters in the video and indicating how they would act toward other characters given knowledge of their styles or profiles

The results reveal apparently clear differences among the three programs. Participants in all three programs held positive reactions to the training. Nearly all were satisfied with the training, and nearly all perceived the training they received as useful and easy to apply.

On measures of learning, participants in the Social Style training scored significantly higher (80% on average) than did participants in the DiSC training (67%) or MBTI training (60%). Since different facilitators delivered each training type, it could be that some facilitators followed the training objectives more closely than did others or explained material in a way that is easier to understand. Alternatively, there could be differences among measurement instruments in the extent to which supporting material is easy to grasp intuitively and encode to memory. If so, there is a clear advantage to participants' receiving Social Style training. Participants receiving MBTI training typically accurately remembered their own profile but struggled remembering many other key concepts covered in training.

Regardless of what participants remember from the training, it is important that they be able to use the training to analyze and respond to the interpersonal behaviors of others. Recall that participants in all programs rated their respective programs highly in this regard. Ideally we would have waited for weeks or months after training and measured participants' posttraining skills in their everyday life. However, such an effort would be beyond the scope of this project. Instead,

evaluators showed the same video to participants in each training program and measured their skill at labeling the interpersonal style or profile of characters in the video, and their written answers as to how they would apply what they learned in training to work with other characters in the video given knowledge of their styles.

Again, there was an apparent advantage on both measures to participants' receiving the Social Style training. Participants in this program could identify more characters correctly (on average 2.8 of 5) than could either participants in the DiSC (1.9) or MBTI (.74) programs. Participants in the Social Style program also responded more accurately than participants in the other two programs when asked questions about their strategies for working with other characters in the video about knowing the characters' style.

Since application of the instrument and interpersonal styles is a primary objective of all three training programs, it would be difficult to argue that differences among programs were due to some facilitators' not emphasizing this skill. Rather, it appears that at least for a half-day training program, the Social Style program affects immediate skill development much more so than do the other two programs. One could alternatively argue that applying the skills learned in the DiSC or MBTI programs is more complex and requires greater processing time (posttraining) in order to employ them correctly. However, in general, research on skill acquisition shows that without regular everyday practice, skills acquired in training are more likely to atrophy than improve (Arthur, Bennett, Stanush, & McNelly, 1998) and that the gap in initial posttraining skill differences (e.g., between participants in the Social Style versus DiSC or MBTI programs) are more likely to

increase rather than decrease over time. Accordingly, the results of this study suggest that the training supporting the Social Style Model is the most effective for improving interpersonal skills related to analyzing and responding to the behaviors of others. ♦

## Notes

1. For each program, facilitators were independent contractors hired for this particular project based on previous experience delivering similar training programs to adults in the workplace.

2. Due to scheduling conflicts, a representative of RLS collected data from one training program.

3. Partial data were collected from an additional 19 DiSC participants, but an equipment failure prevented collection of the behavioral measures. Therefore, the analyses excluded all data for these participants.

4. Following recommended procedures, identifying the number of factors involved looking at multiple criteria, including a scree plot and percentage of variance accounted for by a set of factors. Both criteria led to the identification of a two-factor solution.

5. Statistical output is available from the first author on request.

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