CHAPTER 5: Discussion and Conclusions

Review of the Issue

The overall exploratory objective of this study was to find out whether team members perceived the results of the MBTI® Team Report as accurate and useful for their team. Three sections of the Team Report were studied, with four to five questions asked per section. The sections are as follows: “Strengths and Weaknesses”, “Problem Solving Process”, and “Action Plan”. Four of the sixteen questions within these sections explored whether the participants would incorporate the information into their team by implementing the ideas suggested in the Team Report.

Because the MBTI® Team Report was a fairly new tool and there were no known studies regarding its validity, studies of this nature were important for the field and especially for the users of the report.

Discussion of the Findings

The results of the study appear to indicate that respondents found, in general, the information offered in the MBTI® Team Report was accurate and useful. However, the respondents scored the questions about implementation of the information lower. This discussion of the findings is an analysis of the results organized into sections studied from the MBTI® Team Report.

Strengths and Weaknesses

The research interest in this section of the Team Report was whether the strengths and weaknesses reported in the Team Report were congruent with the perception team members have of the strengths and weaknesses of their own team, and the extent to which they found the information useful. The accuracy and usefulness were measured by questions 1-4 on the questionnaire (Appendix B). The results were a median score of 3.0 ("Yes, Mostly") to all four questions (Table 1, p. 39). Therefore, the sample participants found the Team Report accurate and useful. The reason this was important was that if the team members found the strengths and weaknesses reported to be accurate and useful, they would be more likely to utilize the information to increase their team performance by capitalizing on their strengths and working to improve their weaknesses. If a team understands and agrees, as a group, what their strengths and weaknesses are, they can then work together to create an even stronger team in the areas they choose. Another importance of these results was that the validity of this report supported its use as a training tool consultants and counselors in their work.

Problem Solving Process

This portion of the study sought to establish whether team members found the Problem Solving Process section of the Team Report accurate and useful to improve team effectiveness. Questions 5-9 explored this research question (Appendix B). Four of the five questions resulted in a median score (Table 1, p. 39) of 3.0 ("Yes, Mostly") and one question scored 2.0 ("Some"). Question eight, that scored lower, asked if the team made any specific changes to the way they solve problems due to the recommendations from the Team Report. Perhaps a reason for the lower score was that not enough time had lapsed between when they read the Team Report and when they filled out the questionnaire. Although there are many reasons a team might not have taken any action yet, it was interesting to note that this was the only question regarding the implementation of the information. More on this is discussed in the next section (Action Plan).

The four questions that scored higher indicated that the team members were happy with the potential weaknesses and solutions for the teams' problem solving process offered in the report. This was a very important section to result in these findings because if the team did not find the problem solving ideas to be accurate and useful there would be no reason to take action (the next section) on any of the advice given. The entire training and efforts of the team leader in offering the team this training might have been a waste. There are many reasons a team leader may have chosen to introduce the MBTI® Team Report to their team. For any of those reasons, the team must agree with the information reported about their group before being able to make any advances toward greater team effectiveness.

Action Plan

This section researched whether the information from the "Personalized Action Plan" section of the Team Report was perceived as useful to improve team effectiveness as evidenced by the team taking action on some of the suggestions. Questions 10-14 (Appendix B) measured this research interest. The results (Table 1, p. 39) were that questions 10-12 scored a median response of 3.0 ("Yes, Mostly") and questions 13 and 14 scored 2.0 ("Some"). The first three questions asked, to what extent (1) did the team members know why the team leader chose to have the team receive this report, (2) how applicable was the action plan to their team, and (3) was the advice useful. Because the response was positive to these three questions, the intention of the Team Report (and probably the team leader) was that they would incorporate this information into action with their team.

Questions 13 and 14 asked whether the team took any steps provided from the "Action Plan", and if so, were there positive results? Because these questions scored lower, the interpretation is that even though they thought the advice was good, they did not act on it. But, was that really the case? Did they know how to implement the learned information? Depending upon the lapsed time between the Team Report session and when the participant filled out the questionnaire, these may not have been valid questions. Perhaps there was no time for "taking action" and seeing results. However, many of the questionnaires were completed several weeks after the initial session (31 of 51 respondents were at two weeks or more – see Tables 5-8, pp. 43- 45). This was certainly enough time to see some changes being attempted by the team or team leader and for results to have occurred.

Another speculation was that some members did not agree with the action plans and, therefore, tried to resist or ignore the changes. Those that did not "believe" or were not interested in personality style differences might be less apt to support any actions by the other team members. It would have been interesting to also research how these team members were prepared for receiving their Team Report. For instance: what expectations were communicated to the team prior to the session?

Overall, it was a very interesting similarity that the three questions (of the total 16) that received the lower median scores in the measure of central tendency analysis were all related to taking action on the information in the Team Report (Table 1, p. 39). All of the other questions dealt with the issue "do you agree with the information?" which scored more favorably. Thus, it is important to conduct further studies on whether or not the teams implement the information later. If not, the question still remains, was the Team useful and worth the investment of time and money for the organizations?

Overall Satisfaction

In addition to the above three sections, the study aimed to discover the overall satisfaction for the Team Report and whether or not participants would recommend this Team Report for other teams. Questions 15 and 16 measured this and both scored a median response of 3.0 ("Yes, Mostly") which reflected a favorable reaction to the experience with the Team Report (Table 1, p. 39). To the author of the MBTI® Team Report, as well as all the consultants and counselors who order the team report for their clients, these results of overall satisfaction were important. What the study did was reinforce that this tool for improving teams, was accepted, useful and liked by the people they are trying to service.

Leader versus Non-leader

A final, exploratory variable of interest was whether or not leaders answered the questions differently than non-leaders. The hypothesis was that because leaders decided to offer the Team Report to their teams, they were more likely to score the questions higher than the team members scored them.

Five of the 16 questions had a significant relationship ($p < .05$) with whether the respondent was a leader or not: questions 5, 7, 8, 10 and 13 (Ch. 4, pp. 45, 46). Question 10 was whether the respondent knew why the team leader selected to receive the Team Report for their team. It seems fairly obvious that all of the leaders would score this question high, but the team members could have scored it just as high if communications were clear to them as to why. Two of the questions (8 and 13) pertained to whether the team took action on the information. Leaders scored these questions high, whereas, as discussed in above sections, these were two of the lowest scoring questions overall in the study. This displays that leaders did have a different perspective on not only whether the information was accurate and useful (Q 5 and 7), but, also leaders had a different view on what the team did as a result of learning the new information.

Perhaps one reason why the leaders scored these five questions higher was because their intention was to not only have the members learn about the team, but to have them act on the information to improve the team performance. Or, maybe another option was because the leaders themselves began to act on the information.

Additional Analysis

Number of Weeks

The question regarding the "Number of Weeks" between the Team Report session and completion of the questionnaire was originally intended to simply indicate whether people filled it out within the time urged to do so by the Participant Letter (Appendix E). However, this information became very helpful in understanding why questionnaires were not returned sooner in the data gathering stage and when it was used as an independent variable, some interesting relationships were found.

Four of the 16 questions were found to have a significant relationship ($p < .05$) to the "Number of Weeks" lapsed before completing the questionnaire (Tables 5-8, pp. 43-45). The findings suggested that the earlier a respondent completed the questionnaire: (1) the more likely they were to agree that the strengths and weaknesses were accurate and useful, (2) the higher they ranked the report meeting their expectations, and (3) the more inclined they were to recommend it to others (Tables 5-8, pp. 43-45).

The passage of time made a difference in the response given for the above four questions. One speculation as to why, was that the people with less interest in (or more disagreement with) the Team Report simply procrastinated completing the questionnaire for a few weeks (another idea for future research). Another possibility is that participants were less positive over time because they were not seeing any changes (as discussed previously) in their team or work environment. However, any number of reasons could effect perceptions over time. For example, perhaps there was a lack of structure for follow-up from the organization or team leader.

These results flag a concern for practitioners and future studies are needed in order to diagnose this further. If people found the Team Report less important over time and did not utilize the information, then the use of the tool is in question even with the positive results from the above discussions.

Limitations to the Study

There were several limitations to this study and the following challenges arose in the process. The biggest problem was collecting the sample due to constraints in gaining contact with the participants. The questionnaires were passed through several hands because of the issue of anonymity for the customers of CPP, the customers' client organization, and the individuals in these organizations. Mistakes could occur at any of these four points of contact. The questionnaires could be lost, tossed or forgotten. This potential limitation became a reality. In a study where the survey travels directly from the researcher to the participant, all other things constant, there is probably a much higher rate of return.

In addition, the researcher had no access to "follow up" with the CPP customers to encourage participation. This part of the study was altered due to the lack of returning data. The organization still chose to maintain anonymity from the researcher to the customer, so a CPP employee contacted the customers from May and June to gain support for the project (details of this in the next section – data collection challenges).

Other limitations from Chapter 2 included the following three. The participants in May and June might not be representative of all users of the Team Report. Generalizability was addressed by gathering diverse organizations in various industries, with different Team Report trainers, and a variety of teams. The next three limitations were not addressed by the current study: the length of time a team was intact, the interpretation of language used in the Team Report, and reactions to a participants own type, all of which might effect responses to the questions (Ch. 1, limitations section).

Data Collection Challenges

Several challenges arose during the data collection period. Meetings were held with a supervisor at Consulting Psychologists Press (CPP) prior to the planned data gathering months of May and June. She wanted to be the sole contact at CPP for the project. As per the "procedures" section in Chapter 3, the created "MBTI® Team Report, TR Questionnaire" and related letters (Appendices C-E) were to be mailed out with every order at customer service for the MBTI® Team Report. Unfortunately, there were many errors made at the two participating offices, Palo Alto and Washington DC. The errors appear to stem back to the supervisor's communication (or lack thereof) and follow-up. Throughout the project, it was very hard getting the supervisor to return calls, report numbers at the end of the month, or to respond when the following problem surfaced: after six weeks zero questionnaires had been returned.

At the end of May and early in June four messages were left for the supervisor to report the counts of supplies and the Team Report numbers. The messages were not returned. She had previously committed to providing these counts and numbers (on April 13, 2000) at the end of each month for May and June. On June 19th her voice mail said she would be gone for three weeks until July 7th. CPP was contacted to find someone else to help with the project. Due to these challenges the supervisor's boss became involved as of June 21st**,** and some of the errors discovered were:

1. Supplies were not sent with every order, 12 of 33 consultants were missed from Palo Alto in May (Executive Summary, Appendix I).
2. One of the three scoring specialists in the department was sending out one questionnaire per order versus the number to match the Team Reports.
3. Repeat customers were not receiving supplies. (Consultants ordering for two or more teams only received supplies for one team the entire study period.)
4. "Upgrades" were not included. (The supervisor had never mentioned these, this error was found and corrected by her boss in late June.) Upgrades were simply a secondary avenue for receiving purchasing orders. Thus, the end user is the same and should have received the survey.
5. The number of remaining "Consultant Letters" should have matched the number of remaining "Team Leader Letters" at the end of each month, and they did not. (Specific numbers of copies and pre-addressed envelopes were

delivered to CPP in order to know the numbers sent out to compare with their reported number of Team Reports sent out.)

6. In summary, 447 Questionnaires should have gone out in May and June that did not. For these two months: 590 Team Reports were mailed out and only 143 Questionnaires were sent with them (Executive Summary – Appendix I).

The supervisors boss re-directed the two staffing groups of scoring specialists to properly send out the supplies, but this was not enough. Six weeks had passed and valuable sources (ordering consultants) had been lost. Additionally, since 143 questionnaires were sent out, there was still the baffling question of why **none** had been returned. It appeared that the team members were not receiving the questionnaire, that there was potentially another block in the system at one of the other three points of contact with the supplies.

The supervisor's boss and the researcher worked very closely over the next six weeks brainstorming daily and trying new solutions to the problems. He provided the company numbers needed, as well as, had the two offices conduct counts of remaining supplies. One solution was that he called several of their customers to find out (1) did they receive the supplies? (2) if so, what did they do with them? and (3) would they be willing to participate by sending questionnaires to the organizations they had worked with over the past two months if we sent duplicate supplies? By contacting the CPP customers, the intended anonymity from the original study plan was altered. But in hindsight, perhaps the personal contact should have been "the plan" (future researchers take note). Most (15 of 18) consultants contacted said they never received the supplies and the other three said that they did not know what they were so they threw them away.

He did not reach any consultants who received the supplies in the initial mailing and passed them along to the client organization. Fortunately, many consultants agreed to forward them to their recent (May and June) customers.

A second plan that was also successful was that any consultant who ordered via FedEx received a call from CPP asking for their support in the project. These customers were prioritized because a FedEx order indicated that perhaps the consultant was in a hurry to receive the materials in order to give a seminar very soon. That was usually the case. Many of them even offered to hand the questionnaire out and collect the envelopes at the end of the training – ensuring that the majority of the participants filled out the questionnaire.

Finally, the first questionnaire arrived on June 28, 2000. The data collection period was extended six more weeks in order to obtain enough for a sufficient and diverse sample.

Relation to Other Studies

This study related to the "perceived validity" studies previously covered in Chapter 2. Carskadon and Cook (1982) studied the "Perceived Accuracy of the 16 Type Descriptions" (see Ch. 2, p. 20). This study tested the perceived accuracy and usefulness of sections of the MBTI® Team Report. Both are basing results on the perceptions of the respondents. McCarley and Carskadon (1987) also conducted a study based on the perceptions of the participants for the perceived accuracy of individual descriptors of the 16 type descriptions. Ruhl and Rodgers (1988) replicated the McCarley and Carskadon (1987) study, with a few changes, and also looked for the overall perceived accuracy. All of these studies were focused on the individual respondent whereas Katzenbach and

Smith (1993) and Larson and LaFasto (1989) both studied teams of people. It would be very interesting to analyze the results for the type of study just conducted (Sedlock, 2000), by surveying entire teams. Therefore, if someone replicated this study with the addition of gathering data on entire teams, they could also analyze it broken down by each team. Some very interesting and significant results might be found.

Relation to Other Tools

As discussed in Chapter 2, the "Organizational Character Index" (OCI) by William Bridges (Ch. 2, p. 19) is a teambuilding tool for an entire organization. The MBTI® Team Report is for teams within an organization. The two reports are similar in various ways. They both utilize the MBTI as the basis of individual information. They combine the groups' individual types (organization or team) to summarize the group issues. Both of these reports are training "vehicles" to work with groups to improve some aspect of working together. A validity study of the OCI was another idea for future research.

Suggestions for changes in procedures and research design

- ♦ Spend the first week working alongside the scoring specialists at CPP while they send the materials in an effort to catch errors and to train immediately.
- ♦ Train the scoring specialists and create a chart (for reference) of exactly how to send out the materials.
- ♦ Contact each consultant when an order is placed. Ask them for their support and alert them that the supplies will be coming with their Team Reports.
- ♦ Insist on a contact person within the department rather than just the supervisor (because they are not the ones doing the actual work).

- ♦ Gain access to the actual team members and their organizations (rather than just the consultants who ordered for them) to send the questionnaire directly to them. (This was an option attempted, but CPP wanted to retain anonymity.)
- ♦ Send a more attractive cover sheet with photo or art work with the "benefits" clearer to the consultants (rather than buried in the letter).
- ♦ Offer an incentive. This was considered, but would have broken anonymity and therefore, was dropped as an initial idea.

Recommendations for future research

Throughout this chapter, ideas for future research were offered. Also encouraged is a replication of this study with some of the changes discussed. A longer time-frame for data collection is recommended, as well as, trying to find a way to have less points of contact with the supplies. If the consultants can pass out and collect the questionnaires in the training, then some of the Action Plan questions would need to be altered because of the shorter time frame. The most interesting results might come from analyzing entire teams within the sample of individuals. Of utmost importance is to design the study to have some personal contact with the consultants (if the flow of supplies is the same) to give them notice of what is coming and to gain support for the project. Once in the hands of the potential participants, the questionnaire format sold itself. Perhaps in the future there will be more efficient ways to directly send the questionnaires to the team members. Another idea for future research is to study the "team use" of the Team Report over a period of time. One final idea is to research other sections of the MBTI® Team Report.

What was Learned

Research does not proceed as planned, regardless of how good the plans might be. There were many different choices to make in defining and operationalizing variables. It was hard to stop at 10 variables. Many more questions arose throughout the process of writing, data collection and analysis than any one study could attempt. It is recommended that several of the procedures be changed (noted in above paragraphs) if this study is repeated in the future.

Conclusions

In summary, the participants were generally satisfied with the Team Report. More specifically, they were satisfied with three sections of the MBTI® Team Report that were studied. Many variables effected the experience of each team with this tool. The presentation of the Team Report varied by trainer. The use of the information gained varied by individuals and teams. The sub-sample of leaders reported even more satisfaction with the Team Report. In conclusion, consultants and counselors can utilize this tool with perhaps a little more support that it was, in the perception of this sample, accurate and useful.