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ABSTRACT

Although multidisciplinary teams (MT) are often available to all students in a school district, questions concerning the effectiveness and cost-efficiency of MTs remain largely unanswered. To examine MT functioning in New York, a survey was conducted with 108 separate MTs representing 43 public school districts. Respondents completed the Multidisciplinary Team Questionnaire (MTQ), a 19-item survey covering background information about the school district, its use and organization of MTs, and the respondent's assessment of the MT's success and other characteristics. The results revealed that 20 percent of the responding districts' MTs did not serve all grades and students, with service most lacking to junior high or middle school and high school students. Many of the MTs were responsible for large numbers of students making full service to all students a difficult task. Individual student assessments, individual student prescription, and teacher consultation were the most frequently cited functions of the team, although MT functioning at the elementary grade level differed from MT functioning at the high school level. Results are presented in two forms: a delineation of the cumulative responses to the 19 MTQ questions, and a discussion of multiple statistical contrasts which address primary ratings, effects, and correlates of MT success. The 19 MTQ questions are included in the text. (NRB)

Multidisciplinary Team Functioning in New York State: Surveying Team Characteristics and Elements of Success[1,2]

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Abstract

A survey investigating multidisciplinary team (MT) functioning in New York is presented along with the results from 103 [illegible] MTs representing 43 public school districts. Descriptive data summarizing the various characteristics of the MTs are revealed along with multiple statistical contrasts which address primary ratings, effects, and correlates of MT success. A discussion of relevant research and future research directions is also presented.

Multidisciplinary Team Functioning in New York State: Surveying Team Characteristics and Elements of Success

Tailored to setting-specific needs and objectives, multidisciplinary teams facilitate organizational planning and the delivery of effective services. They have long been evident in business, health and mental health care, community planning, and education. While Public Law (PL) 94-142, the Education for All Handicapped Children's Act of 1975, mandates the use of multidisciplinary teams (MT) when special education placement and programming decisions are being made, more "generic" MTs are often available to all students in a particular school building or district. These MTs, small groups with representatives from the professions most relevant to children's "wholistic" educational and social development, function proactively to recommend or develop sound educational practices in individual schools and/or reactively to address individual students with problems which interfere with their educational progress and the school building or classroom's educational process.

Much of our basic understanding about MTs can be generalized from theoretical considerations and empirical research investigating group process, group dynamics, organizational development, and organizational behavior. However, a substantial body of literature has emerged recently specifically addressing MTs in educational settings. These studies have focused on MT effectiveness (Abelson & Woodman, 1983), the influence of MT members on team decisions (Crowell, 1977; DeLeo, 1976; Knoff, 1983a, Vautour, 1976; Yoshida, Fenton, Maxwell, & Kaufman, 1978), the influence of specific assessment tools and procedures on MT decisions (Backman, 1975; Hannaford, Simon, & Ellis,

1975; Hyman, Carroll, Duffey, Manni, & Winikur, 1973; Knoff, 1983b; Matuszek & Oakland, 1979) and the social psychological effects of the MT as a small group within a larger organization (Fleming & Fleming, 1983; Kabler & Genshaft, 1983; Kane, 1975; Maher & Hawryluk, 1983; Yoshida, et al., 1978).

Despite this research, the question of whether MTs are effective and cost-efficient is still unanswered (Yoshida, 1983). Indeed, some results seem to indicate that MT decisions are partially in the hands of non-participating, passive team members whose lack of knowledge or power prevents them from providing meaningful information to the decision-making process (Kakalik, Furry, Thomas, & Carney, 1981; Yoshida, 1983). Regardless, school districts are often compelled, under the law, to pay for these "services" when delivered under the auspices of PL 94-142. A primary goal, therefore, should be to identify how MTs are functioning, whether they are successful or not (across different variables and perspectives), why they are successful or not, and then how they can help themselves to become more successful. Only in this way can effective and efficient MT process become more prevalent.

To date, one national survey assessing the impact of PL 94-142 on school psychology has investigated MT functioning (Goldwasser, Meyers, Christenson, & Graden, 1983). Assessing evaluation, pupil placement, and Individual Educational Plan (IEP) teams, the results analyzed the use of different evaluation procedures, the professionals represented and participating on the teams, levels of team participation and satisfaction, school psychologists' individual roles and functions, and the effects of legislation--particulary PL 94-142. This study, however, was related specifically to special education-oriented MTs. Further, its national perspective makes recommendations at a state or individual district level difficult.

The present study was completed to investigate "generic" MTs at the state (New York) level. It limited itself primarily to identifying the current characteristics of MTs in New York with an initial assessment of respondents' perceptions of MT success. The results, while important, are presented as a first step in a comprehensive research program evaluating MTs and their current, future, and necessary effectiveness.

Method

Subjects and Procedure. After a statewide call to all public school districts, 43 districts identified themselves for participation in the present study. These districts represented student populations ranging from 361 to 920,911 students (the largest population obviously being from New York City) with an average student size of 3,924 students (Standard Deviation = 2759.26; this statistic was calculated without New York City's significant positive skew). In all, four (93%) of the districts had student populations between 1 and 1000 students, nine (20.9%) between 1001 and 2000 students, 18 (41.9%) between 2001 and 5000, eight (18.6%) between 5001 and 10,000, three (7.0%) between 10,001 and 25,000, and one (2.3%; New York City) over 25,001 students.

Because these responding districts volunteered or self-selected themselves for this research, these districts cannot be considered a random sampling of school districts across New York State. These results, therefore, may not be representative of the State. Given the large number of responses reflecting different MTs (N = 108), however, it is likely that these results do approximate statistical normality and the methodological violations committed by using this sampling procedure can be tolerated.

As per the survey directions, participating school districts were asked to complete separate surveys for each existing MT functioning within the district. The Multidisciplinary Team Questionnaire (MTQ) consisted of 19 questions covering background information about the district, its use and organization of MTs, and the MTQ respondent's assessment of the MT's success and other characteristics. The number of MTs represented per district ranged from one (shared by many districts) to 17 (New York City) with, as noted above, a total of 108 MTs available for analysis. Each participating district completed an average of 2.16 MTQs (Standard Deviation = 1.93) with most districts completing one MTQ (the mode); the median district completed four MTQs (again New York City's positive skew was eliminated for this statistic).

Of the 108 MTQs available for analysis, 93 (86.1%) were completed by a school psychologist, eight (7.4%) by a building principal, two (1.9%) by a Dean of Students, and one each (0.9%) by a learning disability specialist, school nurse/teacher, special education teacher, remedial reading teacher, and elementary assistant. No demographic characteristics about these respondents were requested.

Results and Discussion

The data collected from the MTQ will be discussed in two ways: first, a delineation of the cumulative responses to the 19 MTQ questions, and second, the results from a number of analyses which compared and contrasted some specific MTQ questions.

Cumulative Responses/Descriptive Statistics from the MTQ

Question 1. How many MTs function in your district? (based on the districts, not MTs, responding)

N = 50 (This includes 8 smaller "districts" within NYC.)
Total number of teams: 355
Average number of teams/district: 7.10 (S.D. = 6.21)
Range: 1-30 teams
Percentage of teams/district within specific ranges:

Teams/District	Percentage of Respondents (raw score)	
1- 5 teams	48%	(24)
6-10 teams	30%	(15)
11-15 teams	10%	(5)
16-20 teams	10%	(5)
21-25 teams	0%	(0)
26-30 teams	2%	(1)

Question 2. Does the total school district population have access to services of a building level team? (Based on the district, not MTs, responding.)

N = 50
Yes: 40, 80.0%
NO: 10, 20.0%

Question 3. Grade levels of the school district population that are not served. (Multiple responses were permitted in this question based on districts' responses.)

Kindergarten: 6% (n = 3) of the MTs do not serve this grade level
Grade 1: 6% (n = 3) not served
Grade 2: 6% (n = 3) not served
Grade 3: 6% (n = 3) not served
Grade 4: 6% (n = 3) not served
Grade 5: 6% (n = 3) not served
Grade 6: 10% (n = 5) not served
Grade 7: 16% (n = 8) not served
Grade 8: 16% (n = 8) not served
Grade 9: 12% (n = 6) not served
Grade 10: 16% (n = 8) not served
Grade 11: 16% (n = 8) not served
Grade 12: 16% (n = 8) not served
Special Ed: 8% (n = 4) not served

(Percentages based on the fifty school districts responding.)

Question 4. How many teams do you (the respondent) participate on? (Note that some individuals responded for more than one MT, such individuals were counted only once for this question.)

N = 83
Total number of teams: 151
Average number of teams: 1.82 (S.D. = 1.06)
Range: 1-7 teams
Percentage of teams within specific ranges:

Teams Participated On	Percentage of Respondents (raw score)	
1 team	48.2%	(40)
2 teams	32.5%	(27)
3 teams	12.1%	(10)
4-6 teams	6.0%	(5)
7+ teams	1.2%	(1)

Question 5. How long has the team approach been used in this building? (This and all questions below are answered specifically given the MT for which the MTQ was completed.)

N = 108
Less than 1 year: 2.8% (n = 3)
1-2 years: 5.6% (n = 6)
3-4 years: 36.1% (n = 39)
5-6 years: 18.5% (n = 20)
More than 6 years: 37.0% (n = 40)

Question 6. What grade levels are served by this team? (Multiple responses permitted on this question.)

Kindergarten: 67.6% (n = 73)
Grade 1: 70.4% (n = 76)
Grade 2: 70.4% (n = 76)
Grade 3: 70.4% (n = 76)
Grade 4: 70.4% (n = 76)
Grade 5: 63.9% (n = 69)
Grade 6: 50.0% (n = 54)
Grade 7: 17.6% (n = 19)
Grade 8: 15.7% (n = 17)
Grade 9: 24.1% (n = 26)
Grade 10: 21.3% (n = 23)
Grade 11: 21.3% (n = 23)
Grade 12: 21.3% (n = 23)
Special Ed.: 45.4% (n = 49)

Question 7. How many students are in the total population served by this team?

N = 106

0-100 students:	0%	(n = 0)
101-200 students:	4.7%	(n = 5)
201-300 students:	10.4%	(n = 11)
301-500 students:	34.9%	(n = 37)
501-700 students:	20.8%	(n = 22)
over 700 students:	30.0%	(n = 31)

Question 8. What are the functions of this team? (Multiple responses permitted on this question.)

N = 108

Individual student assessment:	93.5%	(n = 101)
Individual student prescription:	87.0%	(n = 94)
Teacher consultation:	85.2%	(n = 92)
Committee or subcommittee on the handicapped:	60.2%	(n = 65)
Advisory capacity to administration or school board:	41.7%	(n = 45)
Group assessment or screening:	39.8%	(n = 43)
Parent education:	36.1%	(n = 39)
In-service education:	24.1%	(n = 26)
Other		
Supportive counseling or crisis intervention:	8.3%	(n = 9)
Discussion of retentions:	3.7%	(n = 4)
Psychotherapy:	1.9%	(n = 2)
Community resource:	1.9%	(n = 2)
Staff consultation:	0.9%	(n = 1)
Related services:	0.9%	(n = 1)
Consultation with students:	0.9%	(n = 1)

Question 9. Describe the characteristics of the following possible team members.

N = 108 (See Table on page 11.)

Others designated as team members:

Social worker:	26.9%	(n = 29)
Resource room teacher:	8.3%	(n = 9)
Secretary:	7.4%	(n = 8)
Educational evaluator:	7.4%	(n = 8)
COH chairperson:	2.8%	(n = 3)
Bilingual coordinator:	1.9%	(n = 2)
Special project director:	1.9%	(n = 2)
Senior project aide:	1.9%	(n = 2)

Learning disability specialist:	0.9% (n = 1)
Assistant principal:	0.9% (n = 1)
Additional counselors:	0.9% (n = 1)
Department heads:	0.9% (n = 1)
Central office personnel:	0.9% (n = 1)
Social services personnel/probation:	0.9% (n = 1)

Question 10. How often does the team meet?

N = 107

Ad hoc basis:	15.9% (n = 17)
Once per week:	46.7% (n = 50)
Twice per week:	5.6% (n = 6)
Every other week:	8.4% (n = 9)
Once per month:	5.6% (n = 6)
Other:	17.8% (n = 19)

(those who checked two alternatives were placed as "other")

Question 11. At what time does the team meet?

N = 86

Before school hours:	18.6% (n = 16)
During school hours in the morning:	40.7% (n = 35)
During school hours in the afternoon:	36.0% (n = 31)
After School hours:	4.8% (n = 4)

	Is a Member		Always Attends		Attends As Needed		Itinerant In Building		Permanent In Building		Leads Meetings		Organizes Schedule		Records Information	
	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n
Psychologist	99.1	107	91.7	99	2.8	3	65.7	71	81.5	20	23.2	25	20.3	22	29.6	32
Principal/ Administrator	86.1	93	63.0	68	21.3	23	7.4	8	72.2	78	51.8	56	38.0	41	25.0	27
Special Ed. Teacher	75.4	82	64.8	70	25.9	28	5.6	6	71.3	77	3.7	4	5.6	6	24.1	26
Nurse	70.4	76	54.6	59	19.4	21	23.2	25	46.3	50	6.5	7	9.3	10	25.0	27
Reading Specialist	63.9	69	52.8	57	22.2	24	5.6	6	63.9	69	3.7	4	1.8	2	16.7	18
Speech/Lang. Specialist	60.2	65	33.3	36	47.2	51	46.3	50	22.2	24	0.9	1	1.8	2	12.0	13
Classroom Teacher	38.9	42	25.9	28	57.4	62	0	0	43.5	47	0	0	0	0	5.6	6
Guidance Counselor	31.5	34	19.4	21	19.4	21	13.0	14	21.3	23	2.8	3	6.5	7	7.4	8
Math Specialist	27.8	30	18.5	20	18.5	20	6.5	7	26.8	29	1.8	2	2.8	3	6.5	7
Parent of Child Being Seen	9.3	10	11.1	12	32.4	35	1.8	2	0	0	0	0	0	0	0.9	1

Question 12. Generally, how long are the meetings?

N = 104

One-half hour:	22.1% (n = 23)
One hour:	52.9% (n = 55)
Two hours:	18.3% (n = 19)
More than two hours:	6.7% (n = 7)

Question 13. How are students generally referred to the team?

N = 95

Direct referral by building personnel:	68.4% (n = 65)
Referral by Committee on the Handicapped:	1.1% (n = 1)
Referral to building administrator for consideration of team involvement:	25.3% (n = 24)
Referral from parent or outside agency:	0.0% (n = 0)
Other:	5.3% (n = 5)

Question 14. What is the time period generally taken for the discussion of a given child?

N = 103

Fifteen minutes:	30.1% (n = 31)
Thirty minutes:	54.4% (n = 56)
Forty-five minutes:	1.9% (n = 2)
One hour:	4.9% (n = 5)
One to two hours:	8.7% (n = 9)

Question 15. Are team services limited to handicapped pupils only, or available to all students?

N = 108

Yes, limited to the handicapped:	7.4% (n = 8)
No, available to all:	92.6% (n = 100)

Question 16. Estimate in round numbers how many students this team studies in depth each year.

N = 106

1- 5 students:	3.7% (n = 4)
16- 30 students:	27.1% (n = 29)
31- 60 students:	43.9% (n = 47)
61-100 students:	16.8% (n = 18)
100+ students:	7.5% (n = 8)

Question 17. Rank order the degree to which the following make use of information derived from team operation. (1 = greatest use, 7 = least use)

Average Rankings		S.D.	n	Range	Modal Ranking
Teachers:	2.20	1.27	105	1-6	1
Special Service Providers:	2.75	1.36	104	1-6	2
Committee on the Handicapped:	2.85	1.63	102	1-6	1
Parents:	3.69	1.27	103	1-6	5
Administrators:	3.78	1.35	103	1-7	3
Community Resources:	5.78	0.58	83	2-7	6

Question 18. Rate the degree to which you feel the team approach has been successful in your building. (1 = very little success, 9 = very highly successful)

N = 105

Rating

1.	Very little success:	1.9% (n = 2)
2.		0.0% (n = 0)
3.	Moderately little success:	5.7% (n = 6)
4.		4.8% (n = 5)
5.	Moderately successful:	16.2% (n = 17)
6.		13.3% (n = 14)
7.	Highly successful:	33.3% (n = 35)
8.		11.4% (n = 12)
9.	Very highly successful:	13.3% (n = 14)

Question 19. Rank order the outcome goals which you feel reflect your team's success. (1 = most frequent outcome, 7 = least frequent outcome)

Average Rankings		S.D.	n	Range	Modal Ranking
Arriving at a more accurate diagnosis of students' difficulties	2.48	1.53	101	1-7	1
Increasing the knowledge of staff about the student	3.51	1.79	103	1-7	2.5
Increasing the number of potential strategies to use with a student	3.52	1.50	101	1-7	3
Increasing the likelihood that a special needs student will come to the attention of appropriate service personnel	3.56	2.06	100	1-7	1

Average Rankings		S.D.	n	Range	Modal Ranking
Increasing the level of functioning of the student in his/her program	3.65	1.81	101	1-7	5
Arriving at a more efficient organization of a student's program (less duplication of services)	4.60	1.64	101	1-7	6
Reducing the number of children needing special education	6.29	1.37	96	1-7	7

Discussion

While many of the descriptive statistics presented above are self-explanatory, there are some results that need particular emphasis, explanation, or analysis.

1. Given the research noting that MTs can be useful and important in coordinately solving or analyzing students' educational difficulties while making decisions regarding their school programs (Bass 1981; Pfeiffer, 1981; Vautour, 1977), the result (Question 2) that 20% of the responding districts' MTs do not serve all grades and students may identify a cause for concern. While these MT-absent grade levels may be using their Committees on the Handicapped (COH; New York's official title for its PL 94-142/special education MT) to serve some students' needs, COHs are limited to special education referrals and thus would be unavailable to all students. Given the result that services are most lacking to junior high or middle school and high school students and the non-special education problems of adolescent adjustment (e.g., disciplinary problems, drug and alcohol problems, pressure to academically achieve for college), the absence of a formally organized and active MT at these grade levels may deny students and staff an efficient forum which addresses school-wide and multifaceted student difficulties.

2. School psychologists have expressed concern, especially over the past decade (Meacham & Peckham, 1978; Ramage, 1979; Wright & Gutkin, 1981), concerning the numbers of students they are responsible to serve (i.e., the student:psychologist ratio). Analogously, MTs are responsible for large numbers of children: 30% of the MTs are responsible for over 700 students (the exact number of students is unknown given the format of this question in the MTQ) and 85.3% of the MTs are responsible for 301 or more students (see Question 7). Given that most of the MTs meet only once per week (Question 10) for an hour (Question 12) during the school afternoon (Question 11) and that only 31 to 60 students are studied in-depth per year (Question 16; an average of one to two per week), it is possible that the MTs are under the same pressures and, perhaps, frustrations of not being able to fully serve the population they are responsible for. For example, this may be one explanation why 28.6% of the respondents rated their MTs as moderately successful or less (Question 18). This possibility needs further investigation, and if evident, some creative thought and action toward a solution. More positively, at least the MTs have more people, and potential manpower hours, available with which to work more efficiently while also supporting the school psychologists and others who, individually, may be responsible for inordinately large ratios of students.

3. Again contrasting the present data with that evident in the school psychology literature (Benson & Hughes, 1985; Meacham & Peckham, 1978), the district MTs seem able to utilize the consultation role with teachers more than most school psychologists--almost as much as their individual assessment role (Question 8). This is an extremely positive result as is the MT emphasis

on developing individual student prescription/ intervention programs. It is also promising to note how MTs are being used in advisory capacities and as prime movers in parent and in-service education.

4. The data generated in Question 9 are quite complex. It appears that the majority of the MTs have as members a psychologist, principal or administrator, special education teacher, nurse, reading specialist, and speech and language specialist. Given the research (Yoshida et al., 1978) noting how dissatisfied classroom teachers are with MTs and how this might affect their commitments to programs they are often asked to implement or assist with, why are they members of MTs only 39% of the time, attending always only 26% of the time, and attending as needed only 57% of the time? While issues of release time, classroom priorities, and MT efficiency may be evident, it appears that the importance of teacher participation and true "multi-disciplinary" representation is not yet a reality in our sample.

Another notable result in Question 9 was the written-in inclusion by 27% of the sample of a social worker in the MT. Perhaps, having this professional actually written on the survey would have produced a higher percentage of representation. Certainly, this professional is critical not only to address students' interpersonal and intrapersonal problems but also to implement the important role of home-school liaison.

5. As noted above, this entire sample is a self-selected, potentially non-random sample. While the large number of respondents may allow the data to approximate normality, the limitations of the data must be recognized. For example, it may be that the high overall ratings of MT success (Question 9) occurred due to the sampling process (if one had a successful team, one might

be more likely to complete a survey publicly attesting to it). Further, due to the large concentration of school psychologists completing the survey, it may be that these results reflect a profession-specific bias. These limitations should not decrease the possible heuristic impact of the present results, but it should put them into an important interpretive context.

Comparative Question Analyses and Results

The second part of the statistical analysis consisted of correlating or contrasting two or more MTQ questions resulting in a more specific or refined interpretation of the data. These contrasts and their results are described below.

1. Contrasts with the functions of the MT. The MTQ in Question 8 outlined eight specific functions that a MT might perform:

1. Individual student assessment,
2. Group assessment or screening,
3. Individual student prescription,
4. Teacher consultation,
5. In-service education,
6. Parent education,
7. Advisory capacity to administration or school board,
8. Committee or subcommittee of the handicapped.

When contrasted with the grade levels served by the responding MTs (Question 6), the following table results with data expressed as a percentage of those MTs (n) serving at a specific grade level. For example, 91% of the 73 MTs which serve the kindergarten level complete individual student assessments as part of their MT function.

Grade Levels Served	MT Function 1	2	3	4	5	6	7	8
K (n = 73)	91%	42%	86%	90%	29%	40%	42%	62%
1 (n = 75)	92	40	87	89	27	40	43	60
2 (n = 75)	92	40	87	89	27	40	43	60
3 (n = 75)	92	40	87	89	27	40	43	60
4 (n = 75)	92	37	87	89	25	39	43	61
5 (n = 68)	96	37	91	93	26	41	41	60
6 (n = 53)	96	32	91	91	28	43	45	60
7 (n = 19)	89	42	84	68	32	47	47	63
8 (n = 17)	88	47	82	65	35	47	47	65
9 (n = 26)	92	27	85	73	23	38	46	65
10 (n = 23)	97	30	78	83	26	39	39	65
11 (n = 23)	97	30	78	83	26	39	39	65
12 (n = 23)	97	30	78	83	26	39	39	65
Special Ed. (n = 49)	98	39	86	86	35	51	41	71

Visual inspection of this table indicates that:

1. Individual student assessments (#1), individual student prescription (#3), and teacher consultation (#4) are the most typical functions of the team (as noted above), but that individual assessments are most used at the high school grade levels and for special education students;

2. Approximately 60% of the MTs consistently do "double duty"--also functioning as Committees or subcommittees on the Handicapped (#8); and

3. Most of the MT functions are fairly consistent across the various grade levels--especially the functions of in-service education (#5), parent education (#6), MT advisory capacities (#7), and COH responsibilities (#8).

When the MT functions (Question 8) are contrasted with the number of students served by each MT (Question 7), again as expressed in percentages, the following table results:

Students Served by MT	MT Functions 1	2	3	4	5	6	7	8
101-200 (n = 5)	60%	40%	60%	60%	20%	0%	20%	80%
201-300 (n = 11)	82	55	73	64	27	27	36	64
301-500 (n = 37)	97	32	92	92	22	41	38	57
501-700 (n = 22)	90	59	86	86	32	36	45	54
700+ (n = 31)	100	29	94	87	23	42	52	68

Visual insoection of this table indicates that:

1. 80% (four out of five) of the MTs serving 101-200 students have joint COH responsibilities (#8), while fewer (in percentage) MTs serving larger numbers of students maintain this function (i.e., they have more opportunity to emphasize the assessment, consultation, and the other MT functions);

2. MTs serving more than 300 students do substantially more individual student assessments (#1), individual student prescriptions (#3), and teacher consultations (#4); and

3. As a MT serves more students, it is more likely to serve an advisory capacity to administrators and/or school boards (#7).

When the MT functions (Question 8) are contrasted with the number of years that MT has been in existence (Question 5), again in percentages, the following table results:

Years of MT Existence in Building	MT Functions 1	2	3	4	5	6	7	8
1-2 yrs (n = 8)	88%	13%	63%	63%	0%	25%	50%	50%
3-4 yrs (n = 39)	96	36	88	91	15	22	34	68
5-6 yrs (n = 20)	95	50	90	80	10	10	35	55
6+ yrs (n = 37)	93	45	90	88	45	60	51	60

Visual inspection of the table indicates that:

1. The three most typical functions noted above (i.e., Functions 1, 3, and 4) are again apparent when contrasted with the years of MT existence;

2. The percentages for group assessments (#2), individual student prescriptions (#3), teacher consultations (#4), and in-service education (#5) appear to increase after a team has been in existence for one to two years; and

3. Both in-service education (#5) and parent education (#6) roles substantially increase when a MT has been in existence over six years.

2. Contrasts with the various grade levels served by the district MTs. Responses to Question 6 indicated that the grade levels served by the sample's MTs ranged from 15.7% of the MTs at grade eight to 70.4% for grades one through four. Using Question 6 to discriminate those who served or did not serve at each grade level, these respective groups' rankings of how much various consumer groups used MT information (Question 17) where then contrasted. Using individual two-tailed t-tests at each grade level and for each consumer group, the results indicated no significantly different rankings of teachers, administrators, special service providers, and community resources at all grade levels by the two groups of MTs. Significant differences did occur for the parent and COH rankings, and they are presented below:

Grade Level	Consumer: Teachers Mean Ranking (S.D.)	Teachers t (df=105)	Consumer: COH Mean Ranking (S.D.)	COH t (df=105)
Kindergarten				
Served by MT:	1.75 (1.02)	5.10***	2.71 (1.77)	-0.18
Not Served by MT:	3.03 (1.53)		2.65 (1.65)	
Grade 1				
Served by MT:	1.77 (1.01)	5.06***	2.76 (1.74)	-0.63
Not Served by MT:	3.06 (1.59)		2.53 (1.70)	
Grade 2				
Served by MT:	1.77 (1.01)	5.06***	2.76 (1.74)	-0.63
Not Served by MT:	3.06 (1.59)		2.53 (1.70)	
Grade 3				
Served by MT:	1.77 (1.01)	5.06***	2.76 (1.74)	-0.63
Not Served by MT:	3.06 (1.59)		2.53 (1.70)	
Grade 4				
Served by MT:	1.79 (1.01)	4.84***	2.75 (1.77)	-0.50
Not Served by MT:	3.03 (1.62)		2.56 (1.63)	
Grade 5				
Served by MT:	1.84 (0.97)	3.43***	2.78 (1.79)	-0.69
Not Served by MT:	2.72 (1.69)		2.54 (1.60)	
Grade 6				
Served by MT:	1.89 (0.97)	2.11*	3.04 (1.84)	-2.09*
Not Served by MT:	2.43 (1.59)		2.35 (1.54)	
Grade 7				
Served by MT:	2.26 (1.33)	-0.37	2.63 (1.64)	0.17
Not Served by MT:	2.14 (1.35)		2.70 (1.75)	
Grade 8				
Served by MT:	2.35 (1.37)	-0.65	2.59 (1.73)	0.27
Not Served by MT:	2.12 (1.34)		2.71 (1.73)	
Grade 9				
Served by MT:	3.35 (1.57)	-5.99***	2.23 (1.66)	1.58
Not Served by MT:	1.78 (1.00)		2.84 (1.73)	
Grade 10				
Served by MT:	3.39 (1.59)	-5.66***	2.04 (1.72)	2.07*
Not Served by MT:	1.82 (1.04)		2.87 (1.69)	
Grade 11				
Served by MT:	3.39 (1.59)	-5.66***	2.04 (1.72)	2.07*
Not Served by MT:	1.82 (1.04)		2.87 (1.69)	

Grade Level	Consumer: Teachers Mean Ranking (S.D.)	Teachers t (df=105)	COH Mean Ranking (S.D.)	COH t (df=105)
Grade 12				
Served by MT	3.39 (1.59)	-5.66***	2.04 (1.72)	2.07*
Not Served by MT:	1.82 (1.04)		2.87 (1.69)	
Special Education				
Served by MT	2.57 (1.51)	-3.04**	2.49 (1.85)	1.11
Not Served by MT	1.81 (1.07)		2.86 (1.61)	

*$p < .05$
**$p < .01$
***$p < .001$

These results indicate that when a MT serves kindergarten through grade six, MTQ respondents ranked teachers higher among the six consumer groups in their degree of using MT information than those whose MT did not serve those grades. While this is a logical result, the finding that teachers were ranked lower in their use of MT information when the MT served grades 9 through 12 and special education is important. This indicates that the respondents felt that these high school and special education teachers were not utilizing the results of the team investigations as much as at the elementary school level. When ranking the COH's use of MT information, there were no differences in the rankings by MTs who served or did not serve various grade levels except at grade six (where COH use was ranked higher when the MT served that grade) and grades 10 through 12 (where COH use was ranked lower when the MT served those grades). These results at the high school level were consistent with those for the teacher rankings noted immediately above.

A second contrast using Question 6 as a block variable investigated MT service at a specific grade level and the rankings of outcome goals reflecting MT success (Question 19). These results may help to suggest explanations for

some of the results in the consumer groups' contrasts above. The results for these contrasts included:

1. MTs who served the kindergarten [$t(105) = 3.02$, $p < .01$], first through third [$t(105) = 2.79$, $p < .01$], fourth [$t(105) = 2.91$, $p < .01$] and fifth [$t(105) = 2.70$, $p < .01$] grades ranked "increasing the knowledge of staff about the student" higher to explain their team's success than MTs not serving those grade levels; but ranked this outcome goal lower at grades nine [$t(105) = -2.24$, $p < .05$], ten through twelve [$t(105) = -2.62$, $p < .01$], and for special education students [$t(105) = -2.09$, $p < .05$]. This indicates that this outcome was considered a reflection of team success more at the elementary grade levels (note that teachers also were felt to use MT information more at this grade level) than at the high school and special education levels.

2. MTs who served grades one through three [$t(105) = -2.05$, $p < .05$] ranked "increasing the likelihood that a special education student will come to the attention of appropriate service personnel" lower as an outcome of team success than MTs not serving those grade levels; but ranked this outcome goal higher at grades nine [$t(105) = 2.67$, $p < .01$] and ten through twelve [$t(105) = 2.47$, $p < .05$]. This indicates that this outcome was considered a reflection of team success more at the high school grade levels than at the early elementary school grade levels.

3. MTs who served grades seven [$t(105) = 2.62$, $p < .01$], eight [$t(105) = 2.69$, $p < .01$], and nine [$t(105) = 2.65$, $p < .01$] ranked "reducing the number of children needing special education" higher to explain their team's successful outcomes than MTs not serving these grade levels.

3. Contrasts investigating ratings of MT success. Respondents' ratings of the degree of MT success was used as a dependent variable to investigate its correlation with a number of variables. Initially, a multiple correlation analysis revealed that ratings of MT success significantly correlated with:

1. The length of the team approach's use in a building (r = .374, $p < .002$);
2. MTs meeting after school hours (r = -.255, $p < .05$);
3. MTs meeting for more than two hours (r = .241, $p < .02$); and
4. MT's services being limited to handicapped students.

Not correlated with MT success were the number of students served by the team, how often the team meets, whether the team meets before school and during the day, whether the team meets for one-half, one, or two hours, and how long the referred student is discussed. A multiple correlation analysis to identify those independent variables which would best predict high MT success ratings included (in order from most to least predictive) studying fewer students in depth per year, not meeting after school, meeting before school, and discussing each child for 45 minutes.

Two-tailed t-tests then were performed to determine if MTs performing specific functions (Question 8) rated their MTs as more successful than MTs not performing those functions. Results indicated that MTs performing group assessments or screenings [$t(103) = 2.10$, $p < .05$] and in-service education [$t(103) = 2.82$, $p < .01$] rated their MTs as more successful than MTs not performing those functions. There were no differences in rated success for the other six functions listed in Question 8. Given that the average ranking of success for all of the MTs was 6.44 (S.D. = 1.78) out of a possible nine

(near the "highly successful" label of the rating scale) and that the success rankings across all eight functions were non-significant [One-way ANOVA: $F(7, 483) = 0.93$, $p \geq .05$], the significant results above appear to be more a statistical artifact than the identification of two variables that predict team success. Ratings for team success when in-service education was performed, however, were highest of all eight functions ($\bar{X} = 7.28$, S.D. = 1.51).

Finally, a number of one-way ANOVAs across Questions 5, 17, 18, and 19 indicated that:

1. Teams in existence for more than six years (Question 5) ranked the outcome goal "increasing the level of functioning of the student in his/her program" (Question 19) higher than teams in existence for 3 to 4 or 5 to 6 years [$F(3, 103) = 6.84$, $p < .001$];

2. Teams in existence for more than six years (Question 5) ranked "increasing the number of potential strategies to use with a student" higher in reflecting their team's success than teams of 5 to 6 years existence [$F(3, 103) = 4.16$, $p < .01$];

3. Teams ranking their success as very high ranked "increasing the level of functioning of the student in his/her program" higher in reflecting that success than teams ranking their success as moderate to moderately little [$F(6, 98) = 3.49$, $p < .005$]; and

4. Teams ranking their success as highly to very highly successful ranked teachers' use of MT information as higher than teams ranking their success as moderately little [$F(6, 98) = 6.31$, $p < .001$].

4. Other correlations and contrasts. Among the other analyses that reached statistical significance were the following:

1. A significant correlation (r = .226, $p < .05$) between length of team existence in a building and meeting in general for two hours;

2. A significant correlation between the number of students served by the MT and discussing each child for 30 minutes (r = .213, $p < .05$), limiting the students studied to only handicapped students (r = .226, $p < .05$), and the number of students studied in depth per year (r = .31, $p < .002$);

3. A correlation between meeting during the morning hours and 45 minute meetings (r = .242, $p < .02$), meeting during school hours in the afternoon and the number of students studied in depth per year (r = .265, $p < .01$), and meeting after school and discussing individual students for 15 minutes (r = .245, $p < .02$) not 30 minutes (r = -.199, $p < .05$);

4. A correlation between 30 minute meetings and studying fewer children in depth per year (r = -.203, $p < .05$), and one hour meetings and not spending one to two hours discussing individual students (r = -.213, $p < .05$);

5. A correlation between 30 minute discussions of students and studying fewer children in depth per year (r = -.203, $p < .05$), and one to two hour discussions of students and studying more children in depth per year (r = .231, $p < .02$); and

6. A result indicating that MTs serving over 700 students (Question 7) ranked teachers' use of MT information (Question 17) lower than MTs serving 301 to 500 and 501 to 700 students [$F(4, 101) = 3.37$, $p < .01$].

Discussion

Once again, many of the analyses above are self-explanatory; thus, those that need additional commentary have been selected for attention.

1. It appears that MT functioning at the elementary grade level is different from MT functioning at the high school level. Individual student assessments occur slightly more often at the high school level, yet individual student prescriptions and teacher consultations occur slightly less frequently. Survey respondents ranked elementary teachers higher than high school teachers among six consumer groups in the degree to which they use MT information, and similarly ranked "increasing the knowledge of staff about the student" higher as an outcome of MT team for elementary grades and lower for high school grades.

All of this suggests that MTs feel that they interact more with teachers or staff and that their information is more used or useful at the elementary versus high school grade levels. This may further suggest that MTs need to evaluate the different dynamics and organizational patterns in elementary and high school grade levels to identify how to best serve students and staff most effectively. For example, most elementary school teachers instruct their students in the same classroom in most academic areas for most of the school day while high school teachers generally see their students for one 45-minute period for one specific academic area each day. Thus, each teacher group may have different knowledge or need for knowledge about a particular student, different teaching roles and methods and, perhaps, different needs for and expectations from MTs. This may explain the presence of differences between the elementary and high school grade levels above without fully explaining why

the differences occur. For that, future research is necessary--research directed specifically at investigating the presence and reasons for the differences that were evident, perhaps in only a limited way, in the present results. Only through this future research can MTs see how and where to individualize, if needed, their services to staff and students. Such individualization may also help MTs to identify what service goals are most realistic at different grade levels such that they are not attempting to accomplish egocentric goals which are not desired or necessary to others.

2. The multiple correlations analyzing different variables' relationships to MT success revealed a positive correlation (r = .374) between the length of time that a team approach was in use and the success ratings. Thus, higher ratings of success are more likely the longer a team has been in existence. This important result suggests that MTs typically do not become immediately and completely successful upon their formation. MT success develops over time and, based on the research literature (Abelson & Woodman, 1983; Schein, 1980), is dependent on many group and organizational issues and functions (e.g., group cohesion, leadership, communication, organizational norms, atmosphere, flexibility). Future MT research needs to investigate the interaction between these group and organizational variables and MT characteristics, some of which were investigated in this questionnaire. Clearly, when only 14% of the variance for the MTs' success ratings is explained by the time of MT's existence, other variables are likely to be more predictive and important to MT success. These variables need to be identified and analyzed so that MTs can learn and develop routes to greater perceived success.

3. Similarly, the other significant correlations related to ratings of MT success are important yet not necessarily causal to MT success. While studying fewer students in-depth per year and meeting before but not after school may be important to the efficient and effective functioning of the MT, these are most likely supportive but not responsible for MT success. Again, future research should consider these results and incorporate them into more definitive, discriminating questions and methodologies so that causal statements may be made and effective MT practices and approaches may be identified.

Other Future Directions

As emphasized above, the results from the MTQ must be considered an initial step into investigating MT processes and functions in New York State. This is especially important given the two methodological characteristics discussed above: (a) that the MTQ was completed by self-selected volunteers and the districts' student populations do not reflect those across New York State, and (b) that 86% of the MTQ respondents were school psychologists. The first sampling bias could be eliminated in the future by randomly selecting questionnaire respondents. The second sampling bias, resulting in data that reflect an individual professional perspective, is not inherently inappropriate. However, other members of the MTs surveyed (e.g., administrators, special education teachers) might have completed the MTQ differently. Thus, future research should attempt to sample a consensus perspective of all MT members or professions.

To summarize, future research in this area is necessary (a) to validate these results as reflecting all MTs across New York State, (b) to validate

these results as reflecting all MT professions across New York State, (c) to identify the variables most predictive of MT success--in the eyes of both service providers and consumers, and (d) to apply all of these results pragmatically to facilitate the process and maximize the effectiveness of MTs as they serve teachers, staff, and referred students. The present results symbolize a first step in this process; continued research support and participation in the next steps are critical to ensuring that students receive effective services through the most efficient, useful means.

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Footnote

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