ABSTRACT

Title of Thesis: TEACHERS' CHANGING PERSPECTIVE ON STUDENT

                       CONCERNS DURING INSTRUCTIONAL CONSULTATION

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The purpose of this study is to investigate the relationship and degree of

specificity between teachers' reported concerns at three points in the Problem

Identification process of Instructional Consultation. Although previous research has

documented the types of teacher referral concerns commonly seen in special education

and other consultation models, the research regarding this issue in Instructional

Consultation Teams is limited. This research is drawn from a sample of 67 case

manager/teacher dyads during the 2001-2002 school year. Descriptive statistics on the

types of referral concerns at all three points are provided. The relationships between

referral concerns and demographic characteristics of the student (gender, grade level, and

ethnicity) are discussed. Finally, patterns in the specificity of concern descriptions are

analyzed. Implications for future research and training in Instructional Consultation are

considered.

TEACHERS' CHANGING PERSPECTIVE ON STUDENT CONCERNS DURING
INSTRUCTIONAL CONSULTATION

by

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Chapter 1

Introduction

Within the field of school psychology, there is a push towards implementing problem-solving teams and consultation-based support teams in the general and special education arenas. According to Reschly and Ysseldyke (2002), "problem-solving is an essential component of implementing advances in assessment and intervention" (p. 12). The purpose of these school-based problem-solving teams, broadly defined, is to support students who are having academic and/or behavioral concerns through the provision of interventions and other teacher support. A variety of problem-solving approaches have been discussed in the literature (Chalfant & Pysh, 1989; Fuchs, Fuchs, & Barr, 1990; Graden, 1989; Graden, Casey, & Bonstrom, 1985; Kovaleski, Tucker, & Duffy, 1995; Rosenfield & Gravois, 1996).

Models vary in terms of how these key components are used, such as which phases of the process are emphasized, whether consultation is involved as a service-delivery approach, and the types of concerns addressed. However, certain key characteristics exist within all models. Most models include stages, typically problem definition, which includes direct measurement of target behaviors, designing interventions, continued monitoring of behaviors during the implementation of the intervention, modifications of the intervention as required, and evaluation of the outcome of the intervention (Reschly & Ysseldyke, 2002; Tilly, 2002).

A large body of research has focused on the importance of the first stage of problem-solving, known as problem identification. Several researchers have argued that

developing a definition of the problem may indeed be the most difficult and most important stage of the problem-solving process (Gutkin & Curtis, 1982; Lazarus, 1973). Goals of the problem identification stage typically include prioritizing the referral concerns to select one behavior to address, developing a specific, measurable, and observable definition of the target behavior, selecting a measurement procedure and gathering baseline data on the target behavior, and setting a goal for the desired level of performance (Rosenfield, 1987).

The referral concern is the starting point for all school psychological services. Best practice in school psychology services is based on tailoring the work to the referral concern (Reschly & Grimes, 2003; Sattler, 2001). If the identified referral concern does not adequately represent the problem or is not the most important concern, the work done based on that concern may not be appropriate or useful. Jones (1999) demonstrated that the referral concern developed in a consultation simulation was the concern for which future assessment procedures were designed. This is also true in psycho-educational assessment (Sattler, 2001). High-quality assessments are tailored to the referrals, in order to provide more information about the concerns that were initially identified (Sattler, 2001). Similarly, in counseling, the goals of the therapy are typically based on the initial concerns that a client presents (Corey, 2001).

One body of research exists that documents the concerns most commonly indicated by teachers who refer students to special education (Anderson, Cronin, & Miller, 1986) and to school psychologists (Bramlett et. al., 2002). In a sample of children classified as Learning Disabled, Anderson, Cronin, and Miller (1986) found a reading problem was the most common specific academic concern reported by the referrer.

Around that same time, Ownby, Wallbrown, D'Atri, and Armstrong (1985) looked at referrals to a school psychologist over a four year period in a Midwestern town and found that academic concerns were more common than behavioral concerns. The most frequent concern listed overall was a request for evaluation of the student to assess whether there is a Learning Disability or other identifiable special education disability, and these requests made up over 42% of the referrals. The next most common area of specific concern was in reading, accounting for just over 14% of the referrals (Ownby et al, 1985).

A survey of school psychologists found that the most common specific concern expressed by the referrer, occurring 27% of the time, was that the student "lacked basic academic skills or prerequisite abilities," while the more general category of "poor academic performance" was cited in 52% of all concerns (Harris, Gray, Rees-McGee, Carroll, & Zaremba, 1987). A more recent survey of school psychologists also found that academic problems were the most common referral concern, with reading being the most common (57% of referrals) (Bramlett et al., 2002).

Research has also shown that the special education referral, evaluation, and placement process is fraught with biases against male students and students of minority backgrounds. The recent move towards the use of problem-solving models in addressing school-based concerns has been partly in response to the gender and ethnicity biases which have been revealed in the special education process. Gregory (1977) showed that elementary school teachers were more likely to recommend a male student for a psycho-educational evaluation than a female student, given the same description of the student's behaviors and skills. More recently, MacMillan and Reschly (1998) demonstrated that

African-American students are significantly over-represented in the population of American students served under the special education categories of "Mild Mental Retardation," "Specific Learning Disability," and "Serious Emotional Disturbance." Students of Hispanic heritage are also overrepresented in referrals and in special education (MacMillan & Reschly, 1998). Given the biases in referrals within the special education process, it seems important to evaluate whether other school processes, such as problem-solving teams, are subject to the same biases.

A variety of problem-solving models have been developed over the past twenty years. One early model that incorporated both problem-solving and teaming was developed by Graden, Casey, and Christenson (1985). The model that they proposed includes six stages: request for consultation, consultation, observation, conference, formal referral (for a psycho-educational evaluation of the student), and a formal program meeting. The teacher works with a consultant through a systematic problem-solving process to develop interventions to help the student be successful. The Mainstream Assistance Team, or MAT, model makes use of behavioral consultation as a service delivery approach for the interactions between the consultant and the teacher, and the consultant and teacher would work together through the problem solving process (Fuchs et al, 1990). More recently, Kovaleski, Tucker, and Duffy (1995) introduced research on Instructional Support Teams, which focused on addressing both academic and behavioral concerns.

In Instructional Consultation Teams (IC Teams) (Rosenfield & Gravois, 1996), the model that is the focus of the present study, teachers initiate the consultation process by submitting a "request for assistance" to the IC Team. The request for assistance form

includes the student's name, the teacher's name, and a brief description of the teacher's concern. In addition, the teacher has space to list his/her available times for meeting with the consultant. The form is intended to be a quick and easy way for the teacher to access the team and access the support that they desire (Rosenfield & Gravois, 1996). In many schools, the facilitator of the IC Team (commonly the school psychologist or a special educator) is the person who receives teachers' requests and brings all the requests to the team. The teacher who requested assistance is then assigned a trained member of the IC Team, based on compatibility in meeting times for the teacher and the members of the team. That team member then becomes the teacher's case manager. The teacher and his or her case manager work collaboratively through the problem-solving process of Instructional Consultation, beginning with the problem identification stage.

During the problem identification stage, the teacher and case manager follow a problem-solving process, talking about the behaviors that the teacher sees in the classroom that have led to his or her concern. As part of this systematic process, the pair will conduct some assessment of the student's current functioning in the academic areas to help clarify and prioritize the concerns. In addition, the pair will work to determine whether the current academic work that the student is doing is at his or her "instructional level" (Rosenfield, 1987; Rosenfield & Gravois, 1996). Working at "instructional level" means that the student has the prerequisite knowledge and skills to enter into the learning task and benefit maximally from instruction (Gravois & Gickling, 2002). Based on the initial information, they then develop a specific, observable, and measurable statement of the behavioral or academic area(s) of concern. After establishing a measurable and specific statement of the concern, the pair can move on to collect baseline data on the

concern, set goals for expected student progress, and begin designing an intervention to address the concern.

This approach to teacher referrals is different from other models of problem solving in that it gives the teacher an individual consultant with whom to problem-solve. The focus of problem-solving in IC is an ecological approach to problem definition and intervention, which is similar to the Graden et al (1985) approach. However, it is unlike the MAT approach which focuses solely on behavioral concerns, because academics are also a focus in IC. The "request for assistance" form which teachers complete to initiate the IC process is intended to be simple, quick, and straightforward, while in other models, this initial entry process is not as clearly defined. In addition, the IC Teams' approach to teacher referrals incorporates an explicit process for how consultants and teachers are matched up (i.e. based on availability for both individuals, although a particular team may use other criteria as well), which is not true of other models.

Some initial research has been done to document what types of referral concerns occur in Instructional Consultation Teams. Moniodis (1996) found that 64% of the concerns were behavioral in nature, with 31% being academic, and the remaining 4% being "uncodable." More recently, Weiner (2002) found that almost 38% of the concerns which were addressed by IC Teams were academic, with another 20% being solely behavioral. Almost 36% of concerns included both behavioral and academic components, and the remaining 7% of the concerns were identified as "other". These results suggest that academic concerns are present in 74% of all requests for assistance to the IC Team.

In addition, some research has examined patterns of requests for assistance to IC Teams in relation to student gender and ethnicity. Moniodis (1996) showed that the type of concern varies based on the student's grade in school, such that academic concerns were the most common type in first grade, but behavioral concerns were more common at all other primary (K-5) grades. She showed that males were more frequently referred for behavioral concerns than females (63% of all concerns for males, 42% of concerns for females).

Weiner (2002) also showed that males were statistically over-represented in the students for whom teachers requested assistance from the IC Team. She also found that African American students were over-represented in the referred students, and students of other minorities were under-represented (Weiner, 2002).

While previous studies reviewed the types of concerns brought to the IC Teams, none specifically addressed whether the concern that was initially presented by the teacher was the one which was eventually addressed through an intervention. This becomes an important question because in consultee-centered consultation models such as Instructional Consultation, the referral concern that gets addressed may not always be the one with which the teacher begins the process. Rather, "it is within the boundaries of the conversation that the reality of the problem is created" (Rosenfield, 2004, p. 340). Rosenfield (2004) argued that the verbal interchanges between the consultant and the consultee influence how a problem is defined. Jones (1999) found that the same initial teacher concerns led to different problem definitions depending on the language that the consultant used, lending support to Rosenfield's (2004) assertion about the power of the consultation work in defining the concern.

Higgins (1999) suggested that "saying is believing," which suggests that people do not know what they think about a problem until they start to talk about it. Through talking about the problem, they come to establish a definition of the concern, and they reinforce the belief that the problem really is the way that they are talking about it. This phenomenon is important for thinking about problem identification and referral concerns, because it highlights the influence that the problem identification discussion will have on how the teacher defines and views the problem. Potentially, teachers may describe their concerns differently before and after working through problem identification because they have talked about them with a consultant.

In addition, previous research has found that a large number of referrals consist of both academic and behavior components (Bramlett et al., 2002; Weiner, 2002). Many referrals that start as behavior issues may change to include academic concerns along with or instead of the behavior through the problem identification process. However, this has not been systematically evaluated in Instructional Consultation or in any other model. Moreover, in some models, there is little time devoted to problem identification, unlike the IC process (i.e., the focus in many models is on interventions with acceptance o f the teacher's perception of the concern).

Some initial research on changes in teachers' definitions of their concerns during consultation has been done. Tombari and Bergan (1978) examined the influence consultant verbal cues had on the referring teacher in a behavioral consultation model as compared with a medical model consultation. Specifically, the authors found that teachers who were participants in the behaviorally-based consultation (where consultant cues emphasized the behavior of the student and the conditions under which that behavior

occurred) tended to make more behaviorally-based verbalizations of their own than did teachers who worked with consultants using medical model cues. The researchers also found that behaviorally-based cues led teachers to develop different problem definitions and to have more positive expectations for whether the problem would be addressable in the classroom. Tombari and Bergan's (1978) work demonstrated how powerful work with a consultant is in terms of changing how a teacher views a struggling student. Specifically, this research showed that teachers will have more positive beliefs about the likelihood of addressing the students' needs in the classroom when the consultant uses behavioral cues.

In a related vein, Rosenfield (1987) discussed how consultants selectively respond to certain parts of the consultees' statements during their work together. Rosenfield (1987) distinguished between medical-model consultation and a behavioral model. In the latter, the consultant guides the discussion towards behaviors that are observable, measurable, and therefore perceived as changeable, as compared to more internal, trait-based characteristics of the student that are less likely to be addressed within the classroom. Rosenfield (1987) offered the following example of a teacher statement:

> T: Well, in phonics, for example, some days he could put all three sounds together, other days he knows the sounds and he can't put them together. He doesn't try. (p. 44)

The consultant now has the choice of whether to focus on the observable, measurable academic behavior (identifying the letter sounds) or the subjective construct of motivation, which the teacher alluded to by saying the student does not try. The choice

the consultant makes may have an impact on how the initial perception of the problem gets defined and determines the areas of focus for intervention.

The IC model directs consultants to support the consultee in developing a more observable and measurable statement of the concern through the problem identification process. Flugum and Reschly (1994) described six quality indicators for a prereferral intervention to be successful. One of those indicators is a behavioral definition of the concern. Most problem-solving and consultation models require the development of a behavioral definition of the behavior as an early step in the process (Bergan, 1977; Graden et al., 1985; Fuchs et al., 1990). However, previous research has not documented whether concerns actually do become more specific, observable, and measurable in consultation in general or in IC in particular. It is possible that while a behavioral definition of the concern might be developed during problem identification, teachers (who are less expert in the area of problem-solving) may not immediately change the way they think of the concern to reflect the new behavioral definition. However, research has not systematically considered whether this change in teacher perceptions occurs.

Statement of the Problem

The purpose of this research is to supplement the body of research on the impact of consultation during the problem identification stage of problem-solving. This research examines the relationship between initial teacher concerns and the eventual concerns that are focused on and addressed during the Instructional Consultation process. Specifically, initial concerns are categorized into specified academic and behavior areas. The present research addresses whether the concerns become more observable and measurable as a

result of the problem identification process. Additionally, these concerns are analyzed to see the relationship between the demographic characteristics of the student client and the type of concerns brought by the teacher.

<u>Research Questions</u>

Several questions will be addressed in this research. Specifically, the research questions to be addressed are:

1. What are the general and specific types of initial written concerns that teachers documented on the IC Team Request for Assistance form (point 1)?

2. What are the general and specific types of concerns that teachers report that they recall bringing to the problem solving process after the process has been completed, as documented in the IC Team Teacher Level of Implementation interview (point 2)?

3. What are the general and specific types of concerns that teachers report were focused on during the problem solving process, as documented in the Teacher LOI interview (point 3)?

4. What is the relationship between the initial concerns that teachers recall bringing to the IC process (Request for assistance form, point 1) and those they report at the end of the Instructional Consultation process during the teacher (point 2)?

5. Do the initial referral concerns (as written on the Request for Assistance form) vary according to the race, gender, and grade level of the student?

6. At different points in the IC problem solving process, what changes occur:

a) What proportion of initial concerns (point 1) that start out as behavioral become academic in nature (point 3)? If so, which types of academic concerns become more frequent?

b) What proportion of concerns become more specific as a result of the Problem Identification process (point 1 to point 3)?

Definitions of Terms

Referral Concern: A referral concern is the initial concern that a teacher has about a student that leads him or her to seek assistance from the IC Team. According to Rosenfield and Gravois, the IC Team views the referral as a "work-related concern of the teacher, brought to the team for professional consultation" (1996, p. 40). The concern may be general or specific, and it may be academic or behavioral, or both.

General: A general concern is one that is broad in terms of its scope. It may be academic or behavioral in nature, but it is not well-defined.

Specific: A specific concern is one that has been more precisely defined and likely coincides with training materials from the IC Team regarding types of academic and/or behavioral concerns.

Accuracy in Recall: Teachers were asked to report what they were initially concerned about regarding the referred student (point 2), and this was compared with what the teacher wrote on his/her request for assistance form (point 1).

Focus Concern: The focus concern is that which the teacher and case manager decide to prioritize and address with an intervention as a result of the problem

identification process. In this research, teachers reported on the focus concern during the Teacher LOI interview at the end of their IC case (point 3).

Race: The student's race was identified as one of the following, as reported by the IC Team Facilitator: Caucasian, African-American, Hispanic, Asian, Native American, or Other.

Gender: The student's gender was either male or female, as reported by the IC Teams Facilitator from each school.

Grade level: The student's grade level was Kindergarten through eighth grade, as reported by the IC Teams Facilitator from each school.

Behavioral Concern: A concern was considered to be behavioral if it describes an action that the student performs in the classroom, such as: out of seat, disruptive behavior, inattention, calling out, etc. Concerns related to the subject areas will be coded as academic.

Academic Concern: A concern was considered to be academic if it describes a concern related to the student's performance in reading, writing, math, or another subject area, or if it describes the student as not meeting grade level expectations for academics.

Observable/Measurable: A concern was considered to be observable and measurable if it included what specific behavior will be recorded, whether it be academic or behavioral. Concern statements such as "reading comprehension" are not observable, but "the number of correct responses to aided comprehension questions" was considered observable.

Request for Assistance Form: The request for assistance form was completed by a teacher who had concerns about a student, group of students, or his/her entire class, and

wanted to seek collaborative support from the IC Team. The form typically included the

teacher's name, the name of the student(s) of concern, a brief statement of the teacher's

concern, and the times that the teacher was available to meet with a consultant.

Problem Identification: The problem identification stage is the second stage of the

IC process. During this stage, the teacher and consultant discussed all of the teachers

concerns, and then they worked to develop one or two prioritized target behaviors.

Typically, the pair used curriculum-based assessment or other classroom-based

assessments to better define the concern. A specific, observable, and measurable

statement of the behavior of concern (whether it is academic or behavioral in nature) was

developed next. The dyad also collected baseline data on the student's current level of

performance in the behavior. Next, the dyad set a short-term goal for the student's

progress on the behavior.

Chapter 2

Review of Literature

The purpose of this review is to provide a rationale for the present research. This

review will begin with a discussion of the literature around school-based problem-solving

teams. This review will include an examination of what specific components of these

team models have been shown to be related to the teams' effectiveness. In addition, the

review will consider consultation, since it is often a component of team-based problem-

solving models. Next, the review will focus on the theory and research that has been

done on the problem identification stage of problem-solving, which occurs in many

problem solving and consultation models, and serves as the primary focus in the proposed

research. The review will then consider referral concerns that have been studied, both in

terms of referrals to special education and referrals to early intervention teams. This

discussion will also feature an evaluation of the literature on the impact of student

demographic variables on the occurrence of and characteristics of referrals. Finally, the

review will conclude with a section on the Instructional Consultation Teams (Rosenfield,

1987; Rosenfield & Gravois, 1996) as an early intervention team model that includes

many of the characteristics of effective problem-solving teams. This model will be

considered as a framework for studying how referral concerns change over the course of

problem-solving.

Problem-Solving Teams in Schools

School psychology is a field whose members work to support the academic,

psychological, and emotional needs of children in schools. There have been a variety of

different methods in the field used to meet these goals. Traditionally, a major role of school psychologists has been to serve as the "gatekeepers of special education" (Reschly & Ysseldyke, 2002). This role has included doing assessments of children to determine eligibility for special education, and then working with the staff in the school to develop an individualized educational plan for children who are found eligible for and in need of support. According to Bradley-Johnson, Johnson, and Jacob-Timm (1995), the average cost of an initial assessment for special education eligibility was over $1200 per student in the early 1990's, but the results often provide little if any useful information regarding instruction for the student. Because of the expected changes in special education law, many school systems have turned to the use school-based problem-solving teams, or early intervention teams, in order to provide support to students before considering special education or for those students who do not quality for special education services.

Problem-solving teams have been defined in a variety of ways. Dettmer, Thurston, and Dyck (1993) defined teaming as "shared efforts in which each member of the group has a defined contribution while subordinating personal prominence to the team" (as cited in Welch, Brownell, & Sheridan, 1999, p.38). This general definition is appropriate for all different types of teams, but does not offer much clarity as to exactly what the purpose of the team or what its goals are. More recent research has defined school-based problem solving teams as "an indirect service delivery approach consisting of a group of three or more educational professionals who share the responsibility of working with a colleague or family member to develop and evaluate an action plan to address an academic or behavioral problem or to meet some other specific goal" (Welch et al, p. 38, 1999). In this definition, it becomes clear that school-based problem-solving

teams are designed to offer support to school professionals and/or family members of students who may be having trouble in school.

According to Bahr, Whitten, Dieker, Kocarek, and Manson, (1999), successful problem-solving teams in schools can lead to a variety of positive effects, including:

(a) the identification of parents and community agencies as potential resources, (b) the likelihood of students with disabilities remaining in the least restrictive environment, (c) more support provided by general education classroom teachers, (d), use of teams employing collaborative, problem-solving strategies, (e) an emphasis on intervention, and (f) an alternative to the traditional 'refer-test-place' practice that may result in fewer special education referrals (p. 67-8).

Given the potential for such varied positive impacts on student and staff performance, it makes sense to pursue team-based problem-solving models in schools.

Graden, Casey, and Christenson (1985) presented an early problem-solving teams model. Their multi-disciplinary prereferral intervention teams are "based on an ecological model of viewing the student problems in the context of the classroom, teacher, and instructional variables as well as student variables, and of attempting appropriate education interventions that are not focused solely on the child" (Graden et al, 1985, p. 379). The model that they proposed includes six stages: request for consultation, consultation, observation, conference, formal referral (for a psycho-educational evaluation of the student), and a formal program meeting.

Within the prereferral intervention teams model, teachers begin consultation with a team member through one of two channels: the referring teacher can informally

approach a trained consultant in the building and initiate consultation, or the initial referral can be made to the building team for group problem-solving first, and then the teacher would be assigned a consultant for follow-up. Regardless of which structure is in place, the teacher and consultant work together through a systematic problem-solving process in order to develop interventions to help the student be successful.

The Mainstream Assistance Team is another model that has been discussed (Fuchs et al, 1990). The MAT model makes use of behavioral consultation as a service delivery approach for the interactions between the consultant and the teacher, and the consultant and teacher would work together through the problem solving process. The model was implemented by trained graduate students (Fuchs et al., 1990). Although the use of graduate students and prescriptive interventions likely increases the treatment integrity, it leaves concerns about the generalizability of the model to other schools that may not have the same resources.

In addition behavioral consultation typically only addresses behavior concerns in the classroom, and Fuchs et al. indeed limited the concerns to only those which could be addressed through behavioral interventions. As such, it is possible that teachers may have had academic concerns for which they were not able to seek support. Thus, it may have been that some students who received behavioral interventions might also have been in need of academic support. However, these potential concerns were not addressed by the MAT.

Kovaleski, Tucker, and Duffy (1995) introduced some research on Instructional Support Teams, which focused on addressing both academic and behavioral concerns. The IST is made up of school professionals from various disciplines, including the

principal, the student's classroom teacher, a special educator, and other specialists depending on the makeup of the school. Both teachers and parents may request instructional support for a student, as compared to only the teacher in the MAT model (Fuchs et al, 1990). However, regardless of the referral source, the IST team members as a group work collaboratively with the classroom teacher to systematically modify instruction in order to support the student. Problem-solving occurs at the team level, as compared to the individual consultation involved in the MAT model (Fuchs et al, 1990) and the Graden et al model (1985).

Characteristics of Effective PSTs

Some researchers have been considering what factors or characteristics are necessary for a school-based problem-solving team to be effective. Aksamit and Rankin (1993) reported that team members' knowledge and commitment were two key factors that contributed to the success of an intervention team (as cited in Bahr et al, 1999). However, it seems that there are probably also additional factors that influence whether and how problem-solving teams are effective.

Flugum and Reschly (1994) defined a set of quality indicators for prereferral interventions that are relevant to the discussion of what makes problem-solving teams effective. Based on the behavioral literature and previous research on high-quality interventions, the authors developed a list of six quality indices that they argue indicate an intervention that is highly likely to be effective. These indicators are:

> (a) behavioral definition of the target behavior, (b) direct measure of the
> student's behavior in the natural setting prior to intervention
> implementation (baseline data), (c) step-by-step, or systematic,

intervention plan, (d) implementation of the intervention as planned

(treatment integrity), (e) graphing of intervention results, and (f) direct

comparison of the student's post-intervention performance with baseline

data (Flugum & Reschly, p. 3, 1994).

Based on teacher and related service personnel reports, the interventions that included

more of these indices were rated as more highly effective than those that included fewer

indices. Overall, however, the researchers found that the majority of the interventions

studied included three or fewer of the six indicators (Flugum & Reschly, 1994). To the

degree that team-based problem-solving models are designed around these indicators, it

therefore seems likely that they would be more effective than those models that

incorporate fewer of the indicators.

Kovaleski (2002) suggests that in addition to team members having knowledge of

a problem-solving model, consultation skills, and principles of effective instruction, there

are additional systems-level factors that must be in place for a problem-solving team to

be effective. One factor is designated time for school staff members to devote to team

problem-solving within the regular professional day and administrative support and

principal participation in the team. Kovaleski (2002) suggests that designated time is

necessary so that workloads do not become unmanageable. In addition, Kovaleski (2002)

argues that there are several reasons why principals need to be active members of

problem-solving teams, including that they must show tangible support for the team

approach, fostering the collaborative atmosphere of the school, and coordinating staff and

physical resources in support of the team's success.

Finally, Iverson (2002) describes specific administrative activities and group process skills that are necessary for the success of a problem-solving team. Specifically, Iverson argues that effective teams will consider the following: (a) selecting a specific time of the week for meetings to occur, and not deviating from that schedule, (b) allotting appropriate periods of time for team meetings; (c) encouraging team members to attend meetings prepared for the discussion, and (d) making the purpose of the meeting explicit at the start of the meeting (2002). In addition, open communication, participation by all group members, group decision making, and trust amongst members are all characteristics of effective groups (Iverson, 2002). Indeed, issues such as sharing the decision-making process, defining specific roles for team members, and communication were included in a recently published team effectiveness scale (Bahr et al., 1999).

School-Based Consultation

School consultation has been defined as "a method of providing preventively oriented psychological and educational services in which consultants and consultees form cooperative partnerships and engage in a reciprocal, systematic problem-solving process… to enhance and empower" the consultee(s) (Zins & Erchul, 2002, p. 626). This definition highlights the key aspects of consultation, namely that the client is not directly served by the consultant, but is indirectly served through the consultant's work with the consultee. According to Gutkin and Curtis (1999), the key is not whether the consultant interacts directly with the client, but that the treatment services which are ultimately delivered to the client as a result of the consultation are implemented not by the consultant, but by one or more other people (the consultees) with whom he or she works. Consultees may be teachers, parents, other psychologists, counselors, or school

administrators, but the expectation is that the consultee is the primary person who implements the treatment with the client.

A second characteristic which is common across school-based consultation models is their purpose or goals. Two goals exist for most consultation interactions (Gutkin & Curtis, 1999). The first is to support the consultee in the development of effective interventions to support a child who is experiencing academic or behavioral difficulties. Usually, this type of consultation is initiated when a parent or teacher refers a student for academic or behavioral issues, and through the consultation, the consultee and consultant work together to remediate them. The other common goal of consultation is to prevent future problems by helping consultees develop their own skills. For example, a consultee who works with a consultant around managing the behavior of one of the students in her class is expected to be able to then take those same strategies and implement them with other students, either in her current or future classes. The hope is that over time, fewer students will have academic or behavioral difficulties because the consultees will be better able to support them.

Since the work of Carl Rogers revolutionized psychotherapy, mental health workers have recognized the importance of the relationships they have with their clients (Corey, 2001). Consultation models are similar in their emphasis on the importance of developing a quality relationship. Gutkin and Curtis (1999) suggest four factors which are considered most important in effective consultation. The first is that both participants in the relationship should have a shared and equal amount of power and control over the relationship. This has been called "coordinate power status" (Gutkin & Curtis, 1999, p. 604). The concept suggests that consultees and consultants should be equally

comfortable putting forth and critiquing ideas and in sharing their thoughts on the consultation relationship. Cooperation and collaboration must be present in all of the work done. However, this equal power status does not suggest that the two participants are equal in terms of expertise. On the contrary, the differing levels and types of knowledge of the two partners are believed to be one of the most important aspects of the relationship.

The second factor which should be present in consultation relationships is that both parties should be participating voluntarily. In part due to the collaborative nature of the relationship, if one member of the relationship is not participating by his or her own will, it is likely that the consultation will not be as successful. It has been suggested that the initiation of consultation should come from the consultee, because this is a good indicator that he or she is aware of a problem and that he or she is interested in accessing the support of a consultant to address that problem (Gutkin & Curtis, 1999).

Thirdly, Gutkin and Curtis (1999) argue that all communication between the consultee and the consultant should be confidential. The reasoning is that consultees must feel free to share in an honest way with the consultant, and that may be unlikely to occur if he or she does not feel like the statements he or she makes will be kept confidential. Often during consultation, consultees share their concerns about their own abilities or other personal issues, and consultants should respect their privacy. However, the consultant is also bound by his or her own personal moral code and by the ethical guidelines of his or her profession. Jacob and Hartshorne (2003) suggest the use of a verbal or written contract between the consultee and the consultant to ensure consultees provide informed consent. For psychologists, the American Psychological Association

lays out the ethical standards for practice and research, and consultants should always keep these principles in mind. Additionally, it is important that the consultant be clear with the consultee at the outset about whatever limitations there might be to confidentiality in the school setting. Jacob and Hartshorne (2003) suggest that a breach of confidentiality "would only be appropriate when the consultee's actions are harmful or potentially harmful to the student-client" (p. 221).

Finally, consultees should be encouraged to act as active participants in the consultation relationship. Examples of how consultees can be involved include developing an assessment framework and collecting assessment data, providing professional feedback and constructive criticism for the consultant, being open about his or her own skills and needs, and actively collaborating in the development of the intervention or treatment (Gutkin & Curtis, 1999). A skilled consultant will encourage and support consultees in becoming an active participant and collaborator in the relationship.

One final important characteristic to note is that consultants and consultees have some similar and some different responsibilities in the relationship. Both parties are expected to be actively involved in the problem-solving process, with each participant contributing from his or her own unique knowledge base. However, the consultant is expected to take the lead in making sure the problem-solving process is implemented appropriately, and that content of the sessions is relevant to the overall purpose of the consultation. Additionally, while consultees are expected to initiate the consultation, it is the consultant who is responsible for setting the tone of the relationship, including maintaining the collaborative emphasis of the work. Finally, although it is usually the

consultee's responsibility to implement the intervention, the consultant may act as a role model or supporter to the consultee during the implementation of the intervention (Gutkin & Curtis, 1999).

Consultation can also be considered as either client-centered or consultee-centered. The client served in school-based consultation may be a single student, a group of students, or even an entire class, grade level, or school. Client-centered consultation is where the focus of the work done by the consultee and the consultant is on providing services to some third-party client. The work done in these consultation sessions is targeted toward improving the academic and/or psychological experience of the client or clients. Gutkin and Curtis (1999) emphasize that consultants should be aware that the work of consultation stays focused on supporting the client and his or her needs, instead of becoming solely a therapeutic or supportive relationship for the consultee. However, consultee-centered consultation focuses on addressing the skills and needs of the consultee, with the expectation that this work will have an indirect impact on both the current client and future clients (Horton & Brown, 1990).

Consultation models, like the team-based problem-solving models described above, typically work from a problem-solving framework, which includes a series of stages. These stages typically include: problem identification, problem analysis, intervention implementation, and intervention evaluation. Because the focus of this review is on referrals and teacher concerns, more clarification about the problem identification stage is needed.

Problem Identification Stage

A large body of research exists looking at Problem Identification, the first stage of many problem-solving models. Indeed, Gutkin and Curtis (1982) argued that although this process may seem simple, it is actually the most difficult stage of consultation. Lazarus (1973) suggested that poor problem definition could be the most important problem in developing an effective intervention. Witt and Elliott (1983) described nine components of the problem operationalization interview from Behavioral Consultation: (a) explanation of the problem definition purpose; (b) identification and selection of target behaviors; (c) identification of problem behavior frequency, duration, and intensity; (d) identification of the general conditions under which the behavior occurs; (e) identification of the desired level of performance; (f) identification of client strengths; (g) identification of a behavioral assessment procedure (including what will be recorded, in addition to when, where, how, and by whom the behavior will be recorded); (h) identification of the consultee's sense of effectiveness; and (i) a summary of the interview. They argue that each of these areas is necessary in developing an appropriate definition of the behavior in a consultation framework.

Osterweil (1987) presented a slightly different approach to problem definition, based on a combination of Behavioral Consultation and a mental health consultation perspective. She defines three stages within the problem definition process, labeled Problem Identification, Problem Clarification, and Problem-Focusing. Problem Identification incorporates elaboration of the details of the problem behavior and the situations in which it occurs. Problem clarification in the stage of gathering and analyzing information from one of four areas: client, consultee, interaction, and context.

During Problem-Focusing, the consultation focuses on generating several alternative definitions of problem causality and selecting from among them. Although slightly different than in the stages of Behavioral Consultation, the general themes and purposes of each stage in Osterweil's (1987) model are similar to those described in Behavioral Consultation.

Gable, Friend, Laycock, and Hendrickson (1990) suggested a set of interview skills which they see as valuable for consultants during problem identification interviews. These include problem-targeting statements, behavior-setting statements, ecological statements, empathy statements, and evaluation statements. When these skills are used together, the authors argue that consultants will be most effective in defining the behavior of concern. As described above, it is necessary that the consultant be effective in defining the behavior because all of the work that will be done after this point (i.e. the intervention) will be addressed to the identified concern.

One other interesting aspect of research on the problem identification stage concerns the changes in referral interviews when consultants and/or teachers have experience with training in Behavioral Consultation or another problem-solving process. McDougall, Reschly, and Corkery (1988) were interested in the impact of training in problem-solving on consultant behavior. Consultants taped themselves conducting a referral interview with a teacher. The consultants participated in a one-day in-service workshop in Behavioral Consultation, and then returned to their schools to tape another initial referral interview. The results indicated that the objectives of problem identification in Behavioral Consultation (developing a behavioral definition of the target behavior, estimating strength of the behavior, establishing an observational system, etc.)

were achieved significantly more often when the consultants had some training in the model.

Zins and Ponti (1996) were interested in what impact the consultee's skill level would have on the consultation process. Teachers from both the control and experimental were interviewed twice, wherein the teachers were advised to assume that the interviewer was there to provide assistance with an actual student who was having a behavioral problem. Teachers in the experimental group participated in a one-day workshop in problem-solving after the first round of interviews, followed by a "booster" session about nine weeks later. The results showed that teachers who had training in problem-solving skills and consultation skills engaged in more problem-clarification skills then the untrained control group in the second interview, and they also made fewer attributional statements (discussions of causation of the problem) than did controls. Together with McDougall, Reschly, and Corkery (1988), this research suggests that training and participation in consultation processes impacts the problem identification process, leading to more specific, observable, and measurable definitions of behavior. In addition, this research suggests that teachers who have more experience and/or knowledge of problem identification may think about and describe their concerns and the referred students differently than teachers who have less experience with problem identification.

Referral Concerns

Best practice in school psychology services is based on tailoring the work to the referral concern (Reschly & Grimes, 2003). Since the nature of the referral concern often directs what types of assessments and interventions will be considered for the student, it

is important to study what types of referrals occur and how accurate those referrals are (Reschly & Grimes, 2003; Sattler, 2001). If the identified referral concern does not adequately represent the problem or is not the most important concern, the work done may not be as appropriate or useful as it might otherwise have been. In consultation, Jones (1999) used a problem identification simulation to evaluate the impact of consultant behavior on the concern. Her research showed that the concern that was defined in the problem identification session influenced which future assessment procedures were designed, suggesting that the problem identification stage is important for influencing the future work. The value of focusing on the most important referral concern is also recognized in psycho-educational assessment and in counseling (Corey, 2001; Sattler, 2001)

Types of Concerns

Anderson, Cronin, and Miller (1986) looked at the referral information provided for a sample of children who were evaluated for and received special education services under the classification of Learning Disability. The sample included 260 students from four school systems in Louisiana, including 70 females and 199 males ages 5-10 to 12-5. Of the 260 students, there were 99 White students, 69 Black students, and 1 Hispanic student.

The researchers reviewed the evaluation records of the participants and recorded three pieces of information: grade level at the time of referral, evaluation referral statements, and subsequent special education classification. The referral statements were then classified as 'academic only', 'behavior only', or 'academic and behavior' (Anderson et al, 1986). The results indicated that 83% of the referrals included an

academic component (42% were coded as academic only and 41% as academic and behavior together) (Anderson et al, 1986). Overall, the most frequent type of concern reported was "general academic," a nonspecific academic concern, accounting for 56% of all referrals in the "academic only' category. The second-most frequent academic concern was in reading, accounting for 17% of all the academic referrals.

In terms of behavioral concerns, again the general concern 'general behavior' was the most common type of concern, representing 49% of all behavior concerns. The next most common type of behavioral concern was 'attention,' which was recorded in 15% of the behavior concerns (Anderson et al, 1986). In regards to the grade level results, it was noted that 137, or almost 51%, of the students were evaluated during the first or second grade.

Around the same time, Ownby, Wallbrown, D'Atri, and Armstrong (1985) looked at referral concerns from a four year period in a Midwestern town, and also found that academic concerns were more common than behavioral concerns. Most frequently, the referral was a request for evaluation of the student for the possibility of a Learning Disability or other identifiable special education disability, and these requests made up over forty-two percent of the referrals. As before, the next most common area of specific concern was in reading, accounting for just over 14 percent (Ownby et al, 1985).

Some other researchers took a slightly different approach to considering referral types. Harris, Gray, Rees-McGee, Carroll, and Zaremba (1987) conducted a survey of school psychologists to investigate the common reasons for referral to school psychology services. The authors sent surveys to 620 school psychologists from a random sample of elementary and secondary schools in the United States. Demographic information such

as level and type of training, professional memberships, nature of affiliation with the employing institution, and staffing ratios were included, along with a request that respondents provide information about their two most recent referrals. A 'referral' was defined as "any instance in which you were asked, either formally or informally, to 'see', assess, observe, or provide suggestions regarding an individual child – and in which the referral agent has communicated to you the nature of his/her concern regarding the pupil (Harris et al, 1987, p. 344).

The respondent was asked to provide the student's grade, gender, and ethnicity, the professional role of the referral agent, the process and form through which the psychologist's involvement was initiated, whether interventions were attempted prior to the psychologist's involvement, and the nature of the information that he/she received from the referral agent. If this information included a description of what the student was or was not doing that was viewed as a concern, the psychologist was asked to assign the referral to one or more of the following categories:

> (1) pupil is lacking in basic academic skills or prerequisite abilities; (2) pupil was described as performing poorly in academics due to motivational problems; (3) pupil was described as performing poorly in academics – unclear whether the problem involves lack of motivation, prerequisite skills, or both; (4) pupil was described as performing poorly in academics – lack of motivation and prerequisite skills both considered as concerns; (5) pupil was described as evidencing deficits in social, emotional, or intrapersonal functioning; (6) pupil was described as evidencing excesses in social, emotional, or intrapersonal functioning; (7)

pupil demonstrates behavior of unusual quality; or (8) other (Harris et al.,

p. 345).

For the purposes of this review, the results concerning referral concern characteristics and the student grade, gender, and ethnicity will be highlighted.

The largest percentage of referred students were in the first grade (18%), followed by second grade (11%). Male students made up 70% of the sample. White students made up the majority of the sample (71%), while 13% were Black students, 10% Hispanic, 2% Asian or Pacific Islanders, and 5% Native American. There was a significant gender by grade interaction, such that boys were referred at a rate of between 3 and 4 boys to every one girl until sixth grade. In seventh and eighth grades, the ratio increased dramatically, such that only two girls were referred during this period, as compared with 36 boys. In high school, the ratio decreased such that males and females were referred with equal frequency (Harris et al, 1987).

The authors found a mean of 1.3 'reasons' per student, and the most common specific concern expressed by the referrer, occurring 27% percent of the time, was that the student "lacked basic academic skills or prerequisite abilities," while the more general category of "poor academic performance - unclear" included 52% percent of all concerns. For nonacademic concerns, those identified as "behavioral excesses" or "deficits" of a social, emotional, or interpersonal nature made up 31% of the referral concerns (Harris et al, 1987).

A more recent survey of school psychologists also considered the types of referral concerns that psychologists were serving. Bramlett, Murphy, Johnson, Wallingsford, and Hall (2002) surveyed 800 school psychologists who were members of a national

professional organization for the field, the National Association of School Psychologists. The survey included questions regarding demographics (gender, job status, educational attainment, years of experience, populations served, ratio of school psychologists to students, and primary job settings), professional activities (including services typically performed by school psychologists and time engaged in these roles), types of referrals (including common academic/behavioral concerns and low incidence problems), and other questions, such as questions about crisis team participation, confidence in consulting with others, and sources of information for interventions. A total of 391 surveys were received.

Consistent with previous research, Bramlett et al (2002) found that academic problems were the most common referral concern, with reading being the most common (57% of referrals). Reading was followed by written expression (43%), task completion (39%), mathematics (27%), and conduct (26%). Other concerns occurred less frequently, such as oral expression (11%) and suicidal thoughts (2%). In addition, referrals frequently included more than one type of concern. However, Bramlett et al. (2002) did not provide specific data on which concerns were reported in combination, but only the percentage of the concern from all reported concerns.

Across all four studies described above, some common themes are seen. Most referrals were for students in the primary grades (especially first and second grade). More male students than female students were referred. Academic concerns tended to be more common than behavioral concerns, although the two sometimes occurred together. Additionally, within academic concerns, reading was consistently the most frequently-identified concern reported.

In comparison to the previous studies, which focused on referrals to school psychologists, Eidle, Truscott, Meyers, and Boyd (1998) looked at teacher referrals to Child Study Teams in elementary, middle, and high schools. Interestingly, they found varying frequencies of referral concerns depending on what method of data collection was used (surveys, record reviews, observations, and interviews). When interviewed, respondents indicated that social-emotional behaviors were concerns in 30% of cases, while they were noted by 90% of the survey respondents. Records indicated that social-emotional concerns were present in about 40% of the referrals. Similarly, records indicated academic difficulty as the reason for referral in almost 50% of the cases, while academic difficulty was reported in 35% of interviews and 80% of the surveys.

This wide variability found by Eidle et al (1998) suggests that the description of the referral problem varies depending on the reporter and the tool used during the Child Study Team process. It is possible, then, that referrals to consultation teams might also show variations in the statement of the referral problem based on the reporter and tool for data collection. However, previous research has not considered this possibility.

While providing information about the type or makeup of referrals, none of the research described above considered how accurate the referrals were, in terms of whether the referred student ended up receiving services in the area of concern that was originally identified. Additionally, it is possible that teachers may access the support of consultation and/or problem-solving teams for different issues than would lead them to refer a child for special education evaluation, and none of the above studies looked at this possibility.

The recent move towards the use of problem-solving models in addressing

school-based concerns has been partly in response to the gender and ethnicity biases

which have been revealed in the special education process. Conceptually, an effective

early intervention or problem-solving team should be able to 'weed out' any referred

students who are in need of additional instruction but are not eligible for or in need of

special education. As such, the over-representation of certain minority groups should be

improved when a school implements an early intervention or problem-solving team

because students who are not really disabled will be successful with the interventions

provided by the team. Only those students who do not make the expected progress when

provided with targeted support by the early intervention or problem-solving team would

be considered for special education.

Instructional Consultation

Instructional Consultation is similar to other models of consultation in that it is a

stage-based model of problem-solving, which includes Entry and Contracting, Problem

Identification and Analysis, Intervention Implementation, Intervention Evaluation, and

Termination (Rosenfield, 1987). Instructional Consultation incorporates all of the

characteristics of effective consultation described by Gutkin and Curtis (1999), including

a focus on indirect service to clients who are in need of academic or behavioral support

through collaborative work with consultees and the recognition that consultee skill

development is one of the primary goals of consultation. In addition, consultants trained

in Instructional Consultation develop a set of collaboration skills, similar to those

described by Gable et al (1990), which help them to facilitate and guide the consultation

process and communication skills, including requesting clarification, paraphrasing, active and attentive listening (Rosenfield, 1987).

The problem identification stage in Instructional Consultation incorporates many of the principles described above. Only a limited amount of research has been done specifically on the problem identification stage in this model. Rosenfield (1987) and Rosenfield and Gravois (1996) do, however, endorse the idea that this is the most important phase of the consultation process, and new consultants learn that this is the stage that takes the most time and effort during the IC process. The training of consultants in the IC model emphasizes several steps during the problem identification stage: (1) clarifying the concern and developing an observable definition of the behavior; (2) instructional assessment of the concern; (3) prioritizing a target behavior; (4) gathering baseline data; and (5) setting short-term, intermediate, and long-term goals. The overall goal of the problem identification stage is to make the consultee's concerns observable and measurable, to collect baseline data on the frequency, intensity, and/or duration of the behavior, and to set a goal for the desired level of performance. Teachers and IC consultants may work together for several sessions, collecting additional data and clarifying the concern, before all of these goals are accomplished.

Instructional Consultation Teams

Almost any school-based professional can become trained in implementing the Instructional Consultation model. The IC Teams model (Rosenfield & Gravois, 1996) describes how Instructional Consultation can be "scaled up" from one consultant working alone to a group of trained professionals, who are then able to support more teachers. In the IC Teams model, team members may be school psychologists, social workers,

guidance counselors, regular education teachers, special education teachers, administrators, school nurses, reading specialists, and/or many other school staff members. Typically, teams consist of between eight and twelve members, and representation is expected from general and special education, as well as from administrators and specialists. Commonly, the school psychologist will serve as the IC Team Facilitator, leading team meetings and keeping up with the progress of the consultation cases of team members.

IC Team members receive training in four major areas: collaborative communication skills, curriculum-based assessment, problem-solving skills, and intervention strategies. This training may be provided by more experienced team members (in schools or districts where the model has been in place for some time) or by university trainers. New team members have the opportunity to observe others performing the skills (modeling), engage in practice using the skills (rehearsal), and receive feedback from more experienced team members. In addition, new team members often are "coached" by a more experienced team member during his or her first case, in order to continue to allow him or her to improve as a consultant. Gravois, Knotek, and Babinski (2002) provide a description of the training model for developing IC Teams.

IC Team meetings typically serve a number of functions, including training in all four areas of skill development and time to focus on team process issues. At each meeting, team members provide a brief update of the status of their cases, and some team members may provide a more extensive "case review" with their consultee for training purposes or to seek support from other members of the team. In addition, at one or more points during the school year, the team may do a "needs assessment" to determine in

which of the four areas of skills training is desired. Team meetings may also include opportunities to discuss how team members are relating to each other and to address any team conflict or systems-level issues that arise.

An IC Teams case begins when a teacher submits a request for assistance to the IC Team. The request for assistance form varies from school to school, but it typically includes the following: the teacher's name, the student's name, the date, a brief description of the teacher's concern that has led to the request, and the teacher's available times for meeting with a team member. Other information may also be included, such as whether the teacher has discussed the concern with the student's parent, whether the parent shares the teacher's concern, and/or previous strategies that the teacher has tried regarding the concern. However, the primary pieces of information are the teacher and student's names, a brief description of the concern, and his/her available times for meetings (Rosenfield & Gravois, 1996). Typically, an IC Team has an established process in the school building for teachers to submit these forms, either to the IC Team Facilitator or to a system manager.

When a concern is received by the team, a team member is assigned to work with the teacher based on availability of meeting times and interest, and he or she then becomes the teacher's 'case manager' (Rosenfield & Gravois, 1996). The teacher and case manager work together through the Instructional Consultation process described above. If at any time in the process, the pair decides that they would like to seek out additional problem-solving support from the whole IC Team, they come together to the team to present the issues that they are facing. In this way, the teacher and case manager

maintain their collaborative, equal-status relationship, and the teacher is an active part of all problem-solving around his/her concern.

Some initial research has been done to document what types of referral concerns occur in Instructional Consultation. Moniodis (1996) evaluated the use of a particular piece of documentation in the IC Teams process, called the Student Documentation Form (SDF). On this form, the consultant and consultee write down descriptions of the concerns as they work on them. While working through the problem-solving process, the pair is expected to develop a specific, observable, and measurable statement of the concern or concerns and to write these down on the Student Documentation Form. Moniodis (1996) evaluated how well the consultation dyads were making use of the form, and also considered what types of concerns were documented. The sample included SDFs from 59 case manager-teacher dyads. Consultants included school psychologists, administrators, guidance counselors, regular educators, special educators, reading specialists, and others school faculty and staff. Participants represented eight schools implementing the IC Teams model in one suburban school system.

Moniodis (1996) coded the indicated concern into one of seven broad categories: "general, attendance, assignments, academic skills, class behavior, verbal behavior, and miscellaneous" (p. 40). A total of sixty-seven concerns were coded across the fifty-nine scored SDFs. The research also recorded the grade level and gender of the student referred.

The results indicated that 64% of the concerns that were addressed through IC were behavioral in nature, with 31% being academic, and the remaining 4% being "uncodable." Of the behavioral concerns, "classroom behavior" was the most frequently

reported concern, representing 36% of all concerns. This was also the most frequently reported category overall. Reading was the most frequently reported academic concern, occurring 12% of the time. Math was the least frequently reported concern category, occurring only 3% of the time.

Moniodis (1996) provides an important initial description of the concern types that are addressed in IC Teams. However, since 1996 the training sequence for developing new team members has become significantly more complex. It currently places an even heavier focus on consideration of academic factors before any intervention is done around a behavioral concern. In fact, recently trained IC Team members are expected to complete a curriculum-based assessment of the student to ensure that his or her academic skills are not impacting on his or her behavior before addressing a behavior concern, even if the consultee does not mention academics as an area of concern. An additional weakness of this research is that the Student Documentation Form, on which this study is based, has been revised and updated since the research was completed in order to mirror the changes in the IC training. As such, the results may not be applicable to the IC process as it is currently done, and more current research is needed.

More recently, Weiner (2002) again considered the types of concerns that are addressed in IC Teams. In addition, she considered the referral concerns addressed in IEP teams in the same school buildings. Participants in this study were school psychologists at eight schools in a suburban school district. The participants completed a questionnaire on each student referred to a school-based team in the school. The questionnaire asked about the student's grade, race, and gender, the type of referral concern (academic, behavioral, or combination), whether the student had an existing

educational disability, which team the child was referred to (IC Team or IEP team), whether the child was referred to IEP after being referred to IC or SST), the date that the child was screened for special education, whether the child was referred for special education evaluation, whether the student was found eligible for services, and the results of the evaluation.

Weiner (2002) found that almost 38% of the concerns which were addressed by IC Teams were solely academic, with another 20% being solely behavioral. Almost 36% of concerns included both behavioral and academic components, and the remaining 7% of the concerns were identified as "other". The results suggest that academic concerns are a part of 74 percent of all referrals to the IC Team. These percentages are noticeably different from the data found by Moniodis (1996), and are consistent with the changes that have occurred in the IC Teams training process. More research is needed to clarify this pattern. It may be that when teachers report a larger number of concerns, both academic and behavioral concerns are reported, but when fewer numbers of concerns are identified, only one or the other is indicated. Again, more research is needed to clarify this issue.

In addition, some research has been done to look at patterns of referrals to IC Teams in relation to student gender and ethnicity. As mentioned above, Moniodis (1996) included the student's grade level and gender in her analysis of the concern types reported on the Student Documentation Form. She showed that the type of concern varies based on the student's grade in school, such that academic concerns were the most common type in first grade, but behavioral concerns were more common at all other primary (K-5) grades. In terms of gender, the referred children were overwhelmingly

male students (55 males to only 12 females). Additionally, the researcher showed that behavioral concerns were more frequently a focus for males than for females (63% of all concerns for males, 42% of concerns for females), while academic concerns were more common with females (50% of all concerns for females, 27% of all concerns for males) (Moniodis, 1996). Along the same lines, Weiner (2002) showed that males were significantly over-represented in the students who were referred to the IC Team, representing over 70% of the students.

Weiner also investigated the proportion of African American students and students of other minorities who were referred to the IC Team. She found that African American students were over-represented in the referred students (30% of the students served by IC Teams, but only 22% of the student body in the schools). In addition, students of other minorities were under-represented (14.2% of the student body in the school, but only 6.4% of students served by the IC Team) (Weiner, 2002). Interestingly, no interaction was found between gender and race. However, since this study was limited to one suburban school district and a small number of schools, additional research is needed to document whether the over-representation of males and African-American students are recurring patterns across years and settings.

While previous research has looked at the concerns teachers report when requesting assistance, none addressed whether the concern which was initially presented by the teacher was the one which was eventually addressed through an intervention. Since the current training for IC Teams consultants encourages them to consider academics even when teachers initially report only behavioral concerns, it may be hypothesized that at least a fraction of the concerns that are initially reported as

behavioral will become academic concerns or will include both academics and behavior. Additionally, when behavioral and academic concerns occur together, IC Teams consultants are trained to focus on addressing the academic concerns first, based on the belief that the academic struggles impact the behavior.

Finally, teacher-reported concerns may be automatically accepted by school-based problem-solving teams as 'the real problem,' the concern for which an intervention needs to be developed. Previous research has not considered whether the initially reported concern is the one for which interventions are implemented in the IC Teams model or in other problem-solving team models. However, it might be expected that the initially identified concern(s) might be different from those for which interventions are developed due to the specific approach that the IC Teams model takes to teacher concerns.

The purpose of the proposed research is to evaluate the types of referral concerns addressed in Instructional Consultation Teams. In addition, the research will look at whether and how the nature of the initial referral concern given by the teacher is related to the concerns that are eventually focused on during Instructional Consultation. Finally, the research will look at the relationship between demographics of the client and the identified concern at various stages of the problem-solving process.

Chapter 3

Methods

The purpose of this research was to look at the types and frequencies of concerns addressed during Instructional Consultation (Rosenfield, 1987), including how concerns varied according to certain demographic variables. In addition, the relationship between teacher's initial referral concerns and the concerns on which the consultant and teacher decide to focus were evaluated to look at whether they "match" and whether concerns became more observable and measurable as a result of the Problem Identification stage.

Participants

During the 2001-2002 school year, 166 consultants (called "case managers") and 177 teachers from 29 schools from 5 school districts in a Mid-Atlantic state, participated in Instructional Consultation Teams. The referring teachers sought out the IC Team to receive assistance in working with multiple student concerns, resulting in a total of 335 cases. The schools ranged in location from urban to rural school districts, spanning a wide range of socioeconomic-status student populations. As participants in schools implementing IC Teams, teachers and case managers were interviewed as part of program evaluation activities. At the end of each year, each case manager with a case that had gone through the "intervention implementation" stage of the consultation process was interviewed for one of the cases he or she had been assigned during that school year. The teacher for that particular case was then asked to be interviewed as well.

Of the 335 cases conducted in IC Teams schools during the 2001-2002 school year, 131 were evaluated (approximately 39 percent of the cases). Additionally, of those

131 interviewed cases, 118 gave their permission for their case data to be used in research; 48 of these 118 cases were excluded because the teacher's Request for Assistance form was not available, and an additional 3 cases were excluded because the Teacher LOI interview form was not complete. These 67 cases represented the sample included in this study, accounting for 20% percent of the total IC cases from the 2001-02 school year and just over 51% of the evaluated cases. However, the focus of this research was not specifically on the teacher/consultant dyads, but rather on the concerns reported by the teachers at each of three points during the IC Problem Identification process. Of the total, 253 concerns were reported at point 1, 191 concerns at point 2, and 113 concerns at point 3.

Instruments

Data for this study were archival, and were obtained from three sources. The three instruments of interest in this research were the IC Request for Assistance form, the teacher Level of Implementation Interview form, and the IC Case Summary Form.

IC Teams Request for Assistance Form. In a school implementing IC Teams, when a teacher feels that he or she would like assistance in working with a child or group of children, he or she completes the case request form and submits it to the Instructional Consultation Team. Request for assistance forms vary from school to school, but they typically include the teacher's name, the student or students' name(s), the date that the teacher is making the request, and a short description of the concern. The form itself is open-ended, allowing the teacher to write as little or as much as desired about the concern that led to the request. A sample IC Teams Request for Assistance form is in Appendix A. Some teachers indicate a specific concern (such as "poor reading fluency" or

"aggressive behavior toward classmates"), while others are more general, such as "below grade level" or "attention problems". Other information, such as times or days the teacher is available to meet, whether the teacher has informed the student's parent(s) of the concern, and/or interventions which the teacher has previously tried, may be indicated on the form as well, depending on how the IC Team at the school decides to arrange their form. All forms that were reviewed in this research included a space for the requesting teacher to describe his/her concern.

Teacher Level of Implementation Interview Form. During the IC Teams program evaluation process, the IC Team Level of Implementation (LOI) Interview served as a treatment integrity measure for the Instructional Consultation process. The LOI Interview was designed to evaluate the degree to which the case manager and teacher followed the Instructional Consultation model. The interviewer asked the case manager and teacher separately to describe the consultation work at the end of their case. The interview inquired about the entire consultation process: the initial contracting meeting, problem identification and analysis, the intervention design and implementation, the intervention evaluation stage and closure of the consultation relationship. Interviews were conducted by graduate assistants as part of the annual program evaluation data collection. Interviewers were trained to reach inter-rater reliability of 80% or higher before data collection began. Each interview typically lasted for 15-30 minutes.

The Teacher LOI interviews consisted of eighteen items, but for the purposes of this research, only two questions from the problem identification part of the interview were used: (1) Describe the initial referral concern, and (2) What concerns did you decide to focus on, both of which were included in item 3 of the Teacher LOI Interview form

(Rosenfield & Gravois, 1996). During the interview, the interviewer recorded the teacher's response to each of these questions on the Teacher LOI Interview form, and these responses were used in the present research.

IC Case Summary Form. The IC Case Summary form includes codes in place of the names of all students who have been referred to the IC Team, in addition to recording each child's grade and racial background, their teacher's name, and whether the child has been referred, evaluated, and/or found eligible for special education services. This form was completed by the IC Team Facilitator at each school throughout the school year. See Appendix C for a copy of the IC Case Summary form.

Procedures

All data in this research were collected as part of the annual program evaluation process by the Laboratory for Instructional Consultation Teams. These data are part of an archival dataset collected during and immediately following the 2001-2002 school year. Only the data for those participants who gave informed consent for their work to be used for research were included in this study. A copy of this consent letter is available as Appendix D. The IC Case Summary form and the Request for Assistance forms incorporated into this research were submitted by mail to the Laboratory for Instructional Consultation Teams or in person to a graduate student representative of the same by the IC Team Facilitator at each participating school at the close of the 2001-2002 school year. The Level of Implementation interviews were conducted by graduate assistants trained and employed by the Lab for IC Teams.

Every case was given a code number, and then the names of the case managers and teachers were removed. Case codes were determined in the following manner: (a) a

one-letter code to identify the school district; (b) a two-digit number code to identify the school; (c) a two-digit number code to identify the case manager; and (d) a final two-digit number code to indicate the teacher, such that a sample code would be A010101. Cases were identified for analyses only by their assigned code numbers. Student names were not included anywhere on the copies of the forms. Table 1 shows the school populations and the number of cases from each school represented in the 67 cases.

Table 1.

Descriptive Information on IC Schools

District code	School code	Number of IC cases	Enrollment 2001-2002
A	1	5	419
A	2	1	480
A	5	5	554
B	1	1	329
B	2	2	360
B	3	1	420
B	4	3	450
B	5	3	493
B	7	5	266
D	1	3	535
D	2	2	749
D	3	6	757
D	4	2	650
E	1	5	267
E	2	5	257
E	3	3	187
E	4	5	300
F	1	1	449
F	3	3	735
F	5	3	500

The teachers' initial referral concerns as recorded on the IC Request for Assistance form and on the Teacher LOI form, as well as the concern(s) on which the teacher and case manager decided to focus, were coded for type of concern and level of specificity. Category definitions were developed based on previous research on school referrals and on IC Teams training materials used by consultant/consultee pairs for defining academic and behavioral concerns (Gravois, Rosenfield, & Gickling, 2003). The same coding scheme was applied to the narrative written by the teacher on the request for assistance form, such that all three sources of concern descriptions were coded into general and specific categories.

Broad categories of concerns included reading, mathematics, writing, other academic concerns, work completion, behavior, and other concerns. These broad areas of concern were identified based on the categories commonly reported in previous research (Anderson, Cronin, & Miller, 1986; Moniodis, 1996; Weiner, 2002) and from IC training materials (Gravois, Rosenfield, & Gickling, 2003). Additionally, for academic concerns, all three statements of the concerns were also coded for more specific determinations within each category, based on training materials that are provided to all trained IC Team members (Gravois & Gickling, 2002; Gravois, Rosenfield, & Gickling, 2003). For example, within the category of reading, concerns were categorized as fluency, word study, comprehension, etc. Within the category of writing, concerns were categorized as penmanship, grammar, organization, etc. For behavior concerns, ten percent of the cases were selected and reviewed for commonly reported concerns, and the specific categories

for behavior were developed from this list. Table 2 lists the categories coded, with both

the broad and specific categories and their definitions.

Table 2.

Types of Specific Concerns to Be Coded

Reading

Language/Prior Knowledge – grammatical and range of experiences that gives meaning

       to the reader (includes issues of background knowledge and word meanings

Word Recognition – identifying, pronouncing, and knowing the meaning of words that

       are linked together in print (includes letter names, letter sounds, and sight words)

Word Study – use of organized approaches to unlocking words that are not in the sight

       vocabulary (includes sounding out words, using context clues, etc.)

Fluency – accuracy and speed at which one reads, either aloud or silently

Responding – ability to reply orally or in writing to what was read or said (i.e. being able

       to answer questions aloud and/or write about a passage)

Comprehension – ability to confirm, predict, reflect upon, and retain the author's

       message (grasping the meaning of what has been said or read)

Meta-Cognition – ability to monitor and reflect on one's own learning (i.e. use of

       strategies to monitor one's own comprehension

Other – all reading concerns which do not fit into one of the above categories or which

       are not yet specifically defined

Mathematics

Numbers and Numeration – names of numbers, signs, and symbols; place value, relative

value; fractions and decimals

Patterns and Relationships – all logical patterns; connections between differences,

similarities, proportions; identifying missing information

Operations & Computation – computational skills, operational properties, facts and

algorithms (includes times tables, addition facts, etc.)

Probability & Statistics – logical approximations, projecting outcomes, displaying data

graphically

Measurement – distance, time, weight, money; geometric parameters (area, volume,

circumference, etc)

Geometry and Multiple Representations – solids, shapes, figures; symmetry and

congruence; angles in polygons, plotting coordinates on graphs, tables, etc.

Reasoning – understanding math problems and the ability to logically know how to go

about solving them

Connecting – linking clues with appropriate procedures, rules, and strategies for solving

problems

Communicating – expressing the steps and solutions to math problems effectively

Problem-Solving – reasoning through math problems, applying rules and strategies

appropriately, and communicating answers and solutions effectively

Other – all math concerns which do not fit into one of the above categories or are not yet

specifically defined

Writing

Penmanship – legibility and clarity of the individual letters and words

Structure – includes organization, sequencing, and cohesiveness

Usage/Mechanics – includes capitalization, punctuation, grammar, and spelling

Composing – includes formal/informal, informational, persuasive, creative, and
evaluative writing

Written Expression – includes descriptive and figurative language, voice, and tone

Purpose/Audience/Ideas – includes awareness of the purpose and/or audience of the
writing and targeting the writing to it

Revising/Editing – includes knowledge and use of revising and editing strategies on
written work

Other – all writing concerns which do not fit into one of the above categories or are not
yet specifically defined

Other Academic

Any concern that is academic in nature, but which does not fit into one of the above
categories (i.e. needs testing for special education, needs update of academic
testing, generally below grade level)

Work Completion

Any concern which includes the student not completing his or her work in the expected
time frame; may refer to class work or homework

Behavior
Study/Learning Skills – includes study skills, organizational skills, coming prepared to class, etc.
Attending/Off-Task – includes inattention, activity level, daydreaming, off-task, etc.
Behaving Appropriately Towards Peers –includes physical aggression towards peers, getting along with others, etc.
Behaving Appropriately Towards Teachers/Adults – includes disrespect towards adults, physical aggression, etc
Following Directions – following directions given by teachers and/or staff
Other – concerns that are not clearly stated and do not provide enough information to fit into one of the above categories (i.e. angry, immature, frustration tolerance, etc.)

Other
Any other concern that does not fit into any of the above categories

In addition to the types of concerns addressed, each concern was scored in terms of whether it is observable and measurable. A coding scheme was developed based on the necessary characteristics of an observable and measurable behavior statement (i.e. that the statement must include the "who, what, where, and when" of the behavior to be observed). Concerns received a rating from zero to four based on the presence of these indicators. Concerns that included none of the characteristics of an observable and measurable behavior were rated as zero, while those that contained all four

characteristics, meaning they stated who would be observed, explicitly described what

behavior, and stated where and when the behavior would be observed, were rated as four.

Inter-rater Reliability

After the development of the two coding schemes, approximately 20% of the

cases were coded by the researcher and a second rater to establish the reliability of the

coding scheme. The second rater was a graduate student in a school psychology

program, and this second rater received training by this researcher on the use of both

coding schemes before and during the data coding process. Piloting of the coding

scheme was done to clarify category definitions.

Cohen's kappa is an index of inter-rater reliability that may be used with

categorical data (Cohen, 1960). Kappa levels at or above 0.70 are considered to be

acceptable reliability, and this was the target level of reliability for both coding schemes

(Cohen, 1960). Through piloting and training, an initial inter-rater reliability kappa of

.73 was established. Next, data from all the cases were coded by this researcher. During

this time, a second sample of 20% of the cases were coded by the second rater to ensure

that the coding scheme continued to be applied reliably by the primary rater. Inter-rater

reliability on this sample of cases was calculated to be .71, which represents acceptable

reliability for inter-rater agreement.

Data Analyses

There were two primary comparisons in this research. First, the teacher's request

for assistance form were compared to his/her response to the "initial concerns" question

on the Teacher LOI Interview form, in order to see how accurately teachers recalled their

concerns about referred students. Second, both of these sources of concern descriptions

were compared to the teacher's response to the "focus" question on the Teacher LOI. The goal of this comparison was to see whether and how the teacher's concern changed during the problem identification process for content (academic versus behavior) and specificity. Third, student demographic information, including race, gender, and grade level, was included in the analysis to see if these variables had any relationship to the types of concerns found at each point in the consultation process.

The first research question was: what are the general and specific types of initial written concerns that teachers documented on the IC Team Request for Assistance form (point 1)? To address the question of what types of referral concerns occur in Instructional Consultation, descriptive statistics, including percentages of concerns and frequencies, was calculated for the concerns written on the Request for Assistance form at the start of the Instructional Consultation case.

The second research question was: (2) what are the general and specific types of concerns that teachers report that they recall bringing to the problem solving process after the process has been completed, as documented in the IC Team Teacher Level of Implementation interview (point 2)? Again, as with the first research question, descriptive statistics were calculated to analyze the frequencies and percentages of the broad and specific concern types identified by teachers in the teacher LOI.

The third research question was: (3) what are the general and specific types of concerns that teachers report were focused on during the problem solving process, as documented in the Teacher LOI interview (point 3)? As with questions 1 and 2, descriptive statistics were calculated to look at the frequencies and percentages of the broad and specific types of focus concerns reported by teachers.

The fourth research question was: what is the relationship between the initial concerns that teachers recall bringing to the IC process (Request for assistance form, point 1) and those they report at the end of the Instructional Consultation process during the teacher (point 2)? Conceptually, this question evaluated whether teachers accurately recalled the concerns that they had reported on the Request form. To address this question, the level of agreement between the teacher responses on the IC Request for Assistance form and on the Teacher LOI Interview form were obtained using Cohen's kappa statistic.

The fifth research question to be addressed was: (5) Do the initial referral concerns (as written on the Request for Assistance form) vary according to the race, gender, and grade level of the student? Again, descriptive statistics were calculated to show which types of concerns occur for students at various grade levels and students of different races and gender. Chi square analyses were completed to analyze the relationship between these variables and the types of concerns that teachers initially report.

The sixth research question that was to be addressed was: at different points in the IC problem solving process, what changes occur:

a. What proportion of initial concerns (point 1) that start out as behavioral become academic in nature (point 3)? If so, which types of academic concerns become more frequent?

b. What proportion of concerns become more specific as a result of the Problem Identification process (point 1 to point 3)?

To address the first part of this research question, frequencies of the various concern types at all three points in the evaluation process were compared to investigate the changes in types of concerns as a result of the problem identification process. In order to address the second question, concerns as reported on all three sources were compared. First, descriptive statistics were calculated to evaluate how many concerns at each stage met the criteria for "observable and measurable." Second, a chi square analysis was used to evaluate whether there was a shift in the specificity of the concerns from the initial statement of the concern to the "focus" concern.

Chapter 4

Results

In this chapter, results of the analyses will be presented. First, demographic data on the students involved will be presented. Next, data indicating the types of concerns teachers reported as their initial concerns when entering the process will be reported, as indicated on both the Request for Assistance form and during the teacher Level of Implementation interview. Next, results of the analyses looking at how the reported concerns varied across these two data sources will be reported. An analysis of the relationships between the reported concerns and demographics will be reported next. Following those results will be the reported types of concerns indicated as the "focus" concern during the teacher LOI interview. The relationship of these concerns to demographics of the student and to the concerns reported on the Request for Assistance form will be reported next. Finally, the level of specificity ratings from all data sources will be reported and analyzed for patterns.

Demographics

As described in chapter three, the first step of analysis for this research was to analyze the demographic characteristics of the students who were involved in these cases. Across the 67 cases, grade information was available for all but one of the students. The following is a table presenting the grade levels of the students supported through these IC cases.

Table 3.

Grade Levels of Students Served

Grade level of student	Frequency	Percent of total cases
Kindergarten	6	9.0
First	20	29.9
Second	21	31.3
Third	9	13.4
Fourth	8	11.9
Fifth	2	3.0
Missing	1	1.5
Total	67	100.0

In addition, student gender information was available on all but two of the students. The majority of students supported through IC in this sample were male (51 students) as compared to female (14 students).

Finally, student racial background was reported for 62 out of the 67 Instructional Consultation cases. Table 4 presents the breakdown of student racial backgrounds reported in the sample.

Table 4.

Racial Makeup of Students Served

Student ethnicity	Frequency	Percent of total cases
White/Caucasian	41	61.2
African-American	19	28.4
Hispanic	2	3.0
Missing	5	7.5
Total	67	100.0

Research Question 1 – Request for Assistance Concerns

The first research question to be addressed was: (1) what are the general and specific types of initial written concerns that teachers documented on the IC Team Request for Assistance form (point 1)? A total of 253 concerns were reported, an average of 3.78 concerns for each case, with a range from 1 to 10 concerns reported per case. The following table presents the presence of the broad types of concerns reported by teachers on the Request for Assistance form (Point 1), as well as on the Teacher LOI (Points 2 and 3).

Table 5.

Summary of Concern Frequencies and Percentages by Broad Category

Type of broad concern	Point 1		Point 2		Point 3	
	Number of concerns	Percent	Number of concerns	Percent	Number of concerns	Percent
Reading	75	30%	77	40%	64	57%
Writing	37	15%	21	11%	22	19%
Math	15	6%	5	3%	2	2%
Other academic	31	12%	9	5%	1	1%
Work completion	6	2%	5	3%	5	4%
Behavior	64	25%	48	25%	16	14%
Other	27	10%	26	13%	3	3%
Total	253	100%	191	100%	113	100%

As the above table indicates, reading was the most common type of concern reported on the Request for Assistance form, followed by behavior and then writing.

Additionally, within these broad areas, concerns were also identified as falling into a more specific category. The following tables present the frequencies and percentages of the more specific concern categories for reading, writing, math, and behavior. Again, Point 1 on each table refers to the Request for Assistance form, while Points 2 and 3 refer to the Teacher LOI.

Table 6.

Summary of Concern Frequencies and Percentages in Reading

Specific category	Point 1		Point 2		Point 3	
	Number of concerns	Percent	Number of concerns	Percent	Number of concerns	Percent
Language/prior knowledge	0	0%	4	5%	2	3%
Word recognition	27	36%	31	40%	44	69%
Word study	6	8%	5	7%	3	5%
Fluency	3	4%	2	3%	2	3%
Responding	3	4%	1	1%	1	2%
Comprehension	9	12%	4	5%	3	5%
Other	27	36%	30	39%	9	14%
Total	75	100%	77	100%	64	100%

Note. Meta-Cognition was not reported across all three data points.

Table 7.

Summary of Concern Frequencies and Percentages in Writing

	Point 1		Point 2		Point 3	
Specific category	Number of concerns	Percent	Number of concerns	Percent	Number of concerns	Percent
Penmanship	7	19%	4	19%	5	23%
Structure	1	3%	0	0%	3	14%
Usage/ mechanics	10	27%	2	10%	8	36%
Purpose/ audience/ideas	2	5%	0	0%	0	0%
Other	17	46%	15	71%	6	27%
Total	37	100%	21	100%	22	100%

Note. Composing, Written Expression, and Revising/Editing were not reported across all three data points.

Table 8.

Summary of Concern Frequencies and Percentages in Math

	Point 1		Point 2		Point 3	
Specific category	Number of concerns	Percent	Number of concerns	Percent	Number of concerns	Percent
Numbers and numeration	6	40%	3	60%	0	0%
Patterns and relationships	0	0%	0	0%	1	50%
Operations and computation	0	0%	0	0%	1	50%
Measurement	1	7%	0	0%	0	0%
Geometry and multiple representations	1	7%	0	0%	0	0%
Other	7	46%	2	40%	0	0%
Total	15	100%	5	100%	2	100%

Note. Probability and Statistics, Reasoning, Connecting, Communicating, and Problem-Solving were not reported across any of the three data points.

Table 9.

Summary of Concern Frequencies and Percentages in Behavior

	Point 1		Point 2		Point 3	
Specific category	Number of concerns	Percent	Number of concerns	Percent	Number of concerns	Percent
Study/learning skills	2	3%	0	0%	0	0%
Attending/off-task	15	23%	11	23%	3	19%
Behavior towards peers	16	26%	3	6%	4	25%
Behavior towards adults	5	8%	2	4%	0	0%
Following directions	4	6%	4	8%	2	12%
Other	22	34%	28	58%	7	44%
Total	64	100%	48	100%	16	100%

Within each broad category, other concerns tended to be the most frequently-reported type of concern across categories on the Request for Assistance form (Point 1). Examples of these concerns included "reading skills", "math", "misbehaving", "acts out", "immaturity", "behavior", "control behavior", and "tantrums".

Research Question 2 – Teacher LOI Interview Initial Concerns

The second research question is: (2) what are the general and specific types of concerns that teachers report that they recall bringing to the problem solving process after the process has been completed, as documented in the IC Team Teacher Level of Implementation interview (point 2)? The total number of concerns reported decreased from 253 to 191, while the average number of concerns per case decreased to 2.85, down from 3.78 concerns reported on the Request for Assistance form. The range of concerns reported also decreased, from a high of 10 concerns on the Request form to a maximum of 8 concerns during the Teacher LOI.

As with the first research question, frequencies and percentages were calculated for the broad and specific concern categories. Table 5 presents the initial concern frequencies and percentages of the broad category types as reported by teachers during the Teacher LOI interview (Point 2). As on the Request for Assistance Form, reading was the most frequently reported area of concern, representing 40% of the reported concerns, followed by behavior. Concerns categorized as "other" were third-most-common, while writing was fourth.

Again, within these broad areas, concerns were also identified as falling into a more specific category. Tables 6 through 9 present the frequencies and percentages of the more specific concern categories for reading, writing, math, and behavior, as reported during the teacher LOI interview (Point 2). Again, as on the Request for Assistance Form, other concerns tended to be the most common within each category of concerns.

Research Question 3 – Teacher LOI Interview Focus Concerns

The third research question was: (3) what are the general and specific types of concerns that teachers report were focused on during the problem solving process, as documented in the Teacher LOI interview (point 3)? A total of 113 concerns were reported, with an average of 1.69 focus concerns were identified, a decrease of 44% from the Request for Assistance form. The range also decreased, with the maximum number of concerns reported dropping to 6 (from 10 concerns at point 1 and 8 concerns at point 2). Descriptive statistics on the concerns identified by the teacher as areas of "focus" for the broad categories are presented as Point 2 in Table 5. As with the Request for Assistance form and the initial concerns reported in the teacher LOI, reading continued to be the most common broad area of concern, representing 57% of all concerns. Writing was second-most common, followed by behavior concerns.

Frequencies and percentages for each of the more narrow concern areas (reading, writing, math, and behavior) are reported in Tables 6 through 9 as Point 3. Within reading, word recognition was the most common identified area, and usage and mechanics was the most common concern in writing. Across all four areas, concerns that were reported by teachers in response to the "focus" question often fell within one of the defined categories, instead of within the "other" category as observed at the earlier two points, as indicated by the decrease in the frequency and relative percentage of the "other" category.

Research Question 4 – Relationship Between Request and Teacher LOI initial concerns

The fourth research question looks at the relationship between the initial concerns that teachers recall bringing to the IC process (Request for assistance form, point 1) and

those they report at the end of the Instructional Consultation process during the teacher

(point 2). As indicated in chapter three, Cohen's kappa was conducted to look at the

level of agreement between the concern types indicated on the Request for Assistance

Form and those reported by the teacher during the teacher LOI interview. Because of the

small numbers of cases in each narrow category (i.e. reading fluency, following

directions, etc.), this analysis was conducted solely at the level of the broad categories

(reading, math, writing, etc.). The results are presented in Table 25.

Table 10.

Level of agreement for initial concerns recorded on the Request for Assistance forms and

Teacher LOI form

Type of broad concern	Cohen's kappa
Reading	0.50*
Writing	0.36*
Math	0.25
Other academic	0.00
Work completion	0.17
Behavior	0.47*
Other	0.00

*$p < .01$

As indicated in the above table, teachers were consistent in reporting the presence of

initial concerns in the areas of reading, writing, and behavior on both the Request for

Assistance form and the recall question on the Teacher LOI, while they were not

consistent in reporting their concerns in the categories of math, work completion, other academic, and other.

Research Question 5 – Demographics and Request for Assistance Concerns

The fifth research question concerned whether and how the initial referral concerns (as written on the Request for Assistance form) varied according to the race, gender, and grade level of the student. Analyses included descriptive statistics of the concerns reported on the Request for Assistance Form across these three variables. Data on student grade level was unavailable for one case, student ethnicity was unavailable for five cases, and student gender was missing for two cases. Due to the small sample sizes in this study, chi-square tests were used to see if the frequencies of concern types varied across each of the three variables. The following table presents the results of the chi-square tests for each area of concern.

Table 11.

Chi-Square analyses of concern types by gender, grade level, and ethnicity of students

	Chi Square		
Type of broad concern	Gender	Grade level	Ethnicity
Reading	2.19	4.83	1.36
Writing	0.27	6.79	5.43
Math	0.82	8.13	2.20
Other academic	0.03	7.61	0.80
Work completion	1.17	3.81	1.06
Behavior	2.97	4.42	6.73*
Other	0.73	4.63	0.85

*$p < .05$

Only the behavior by ethnicity comparison was significant. Again, small sample sizes likely impacted the strength of these tests, as many cells consisted of fewer than five occurrences across analyses. Because of the number of chi-square tests included in these analyses, these results should likely be considered as nominal tests of significance, at best, as the results may be over-estimates of significance.

Research Question 6 – Request for Assistance and Teacher LOI Focus concerns

The sixth research question was to consider the nature of the changes that occurred between the concern identified on the request for assistance form (point 1), the "initial" concern that the teacher reports in the Teacher LOI interview (point 2), and the "focus" concern that the teacher reports later in the Teacher LOI (point 3).

Chi-square analyses were used to look at the changes in proportions for each

concern area from the Request for Assistance Form to the focus concerns in the Teacher

LOI. Analyses of the changes in concern types from the Request for Assistance Form to

the initial concerns in the LOI were analyzed and reported previously. Tables 12-14

present the results of these analyses.

Table 12.

Chi-Square analyses for Request for Assistance to LOI Focus concern types

Type of broad concern	X^2
Reading	14.31**
Writing	4.80*
Math	1.23
Other academic	0.50
Work completion	1.90
Behavior	13.17**
Other	0.00

*p < 0.05

**p < .01

As indicated in Table 12, the presence of reading, writing, and behavior concerns

were consistent from the Request for Assistance Form (point 1) to the focus concern

expressed by the teacher during the LOI interview (point 3). Teachers who initially

identified a concern for a student in one of these three areas continued to see that area as

one in need when selecting areas of focus for consultation and problem-solving.

However, math, work completion, other academic concerns, and other concerns were not

consistently identified at both points, suggesting that the frequencies of these types of

concerns changed during the teachers' work with their IC Team case managers.

Concern Specificity

In addition to the types of concerns addressed, the level of specificity for which

those concerns were described was also an area of interest in this research. Table 12

indicates that both concerns categorized as "other academic" and "other" decreased

overall and in relative frequency to more focused categories suggests that teacher

concerns may have become more specific, and therefore more specific category

descriptors were appropriate.

Additionally, teacher concerns in all categories were rated from zero to four based

on the criteria of an observable and measurable behavior, as described by the teacher in

the interview. Table 13 presents the frequencies of concerns at each coded level of

specificity, reported on the Request for Assistance Form and as the focus concern on the

Teacher LOI.

Table 13.

Frequencies of Specificity Levels of Concerns by Source

	Request for Assistance Form		Focus – Teacher LOI	
	Frequency	Percentage	Frequency	Percentage
Level 0	169	67%	70	62%
Level 1	83	32%	43	38%
Level 2	1	1%	0	0%
Total	253	100.00%	113	100.00%

Note: Specificity levels three and four were not coded for any concerns on either the

Request for Assistance form (point 1) or the LOI (point 3).

A review of the frequency data indicates that the majority of concerns were not described

by the teachers in observable and measurable terms. The vast majority of concerns

contained no observable or measurable characteristics, while a few contained one or two

characteristics.

In addition, specificity ratings were analyzed across cases to look at how many

teachers reported concerns at each specificity level. Table 14 presents the frequencies

and percentages of the 67 teachers by specificity level for the Request for Assistance

form and the focus concerns reported in the Teacher LOI.

Table 14.

Frequencies of Specificity Levels reported by Teachers

| | Request for Assistance Form | | Focus – Teacher LOI | |
	Frequency	Percentage	Frequency	Percentage
Level 0	24	36%	34	51%
Level 1	42	630%	33	49%
Level 2	1	20%	0	0%
Total	67	100%	67	100%

Note. Specificity levels 3 and 4 were not coded for any concerns.

Almost two-thirds of teachers reported a concern of level 1 or above on the Request for Assistance form, while just under half reported a concern coded at level 1 during the Teacher LOI.

Additionally, chi square analyses were conducted to evaluate whether there was a change in how specifically the concerns were described (i.e. whether they were described in observable and measurable terms) from the Request for Assistance Form to the Teacher LOI focus concern. A review of the frequency data suggests that this was not the case, and chi-square analyses for each level of concern confirms this indication, as presented in the following table.

Table 15.

Chi-Square analyses for concern specificity

Rating level	X^2
Level 0	0.16
Level 1	1.37

Note: Chi-squares could not be calculated for levels 2 through 4 due to non-occurrence of these ratings.

*p < .05

Consistent with the initial review of the frequency data, these results indicate that the concerns reported on the Request for Assistance Form and reported by the teachers during the focus section of the LOI interview typically were not in specific, observable, and measurable terms.

Chapter 5

Discussion

The primary goals of this research were to investigate what types of concerns teachers seek and receive assistance for with Instructional Consultation Teams, whether and how those concerns might change during the Problem Identification phase of IC, and how those concerns related to student demographics. This chapter will begin with a discussion of the results presented in the previous chapter. Results related to the concern categories will be discussed first, followed by specificity, teacher recall, and the impact of student demographics. Limitations of this research will be discussed next. Finally, suggestions for future research and potential training modifications for future IC Teams trainings will also be presented.

Concerns Reported

Overall, the observed decrease in the number of concerns from the Request for Assistance form (an average of 3.78 concerns per case) to the focus concerns reported in the Teacher LOI (an average of 1.69 concerns) suggests that the IC process reduced the number of concerns. This is consistent with two of the primary tasks in the Problem Identification process, clarifying the problem area and prioritizing concerns, and it suggests that to some extent, teachers' perceptions of the referred student's needs changed in response to working through Instructional Consultation (Rosenfield, 1987). Many teachers identified multiple initial areas of concern, and through the Problem Identification process, some teacher-consultant dyads prioritized only one focus concern, while others decided to focus on more than one.

Reading was the most common type of concern reported by teachers. This is consistent with previous research (Anderson, Cronin, & Miller, 1986; Bramlett et al, 2002) that indicates reading is a primary area of concern. This emphasis on reading is also consistent with government initiatives focusing on improving student performance in reading, including Reading First grants and the No Child Left Behind legislation of 2001 (PL 107-110).

Regarding student behavior, Moniodis (1996), in an earlier analysis of referral concerns, suggested that behavior concerns were the most common issues addressed by Instructional Consultation Teams, and other researchers have pointed to behavior as a common area reported in student referrals (Anderson et al, 1986; Eidle, Truscott, Meyers, & Boyd, 1998; Harris, Gray, Rees-McGee, Carroll, & Zaremba, 1987). In the present study, the frequency of behavior concerns varied throughout the IC process. Behavior concerns were reported as the second-most frequent type of concern both on the Request for Assistance form and as initial concerns that teachers recalled during the Teacher LOI interview.

However, there was a shift as the consultation process progressed. Behavior concerns became the third-most frequent area of concern, while writing became the second-most frequent concern area, when teachers described what concerns they decided to focus on with their IC case managers (point 3). Additionally, it was noted that reading, writing, and behavior concerns were the only areas that were consistently reported as concerns from the Request for Assistance form (point 1) to the focus concern of the Teacher LOI (point 3).

Math concerns were relatively infrequent in this sample (about 8% of concerns identified on the Request for Assistance form and just over 2% of the focus concerns). The fact that math concerns were not typically prioritized as an area of focus for consultation may be due to several factors, such as teacher preference for addressing another focus area (such as reading), lack of consultant skill or confidence in addressing math concerns, or a combination of the two.

Concern Specificity

Concerns that were defined as "other academic" or "other" indicated teacher concerns that could not be more specifically categorized into an academic area or as a behavior. Examples of some concerns that were coded as "other academic" included "parent has suggested the student has a cognitive delay" and "[student] didn't know how to do work." Examples of concerns coded as "other" included "student dismissed from IEP services," "motor skills," and "slow progress." As such, these concerns indicate cases where the teachers may not have had a clear sense of what their concerns were regarding the students. If this is true, the consultant's role should have been to help the teacher better define his or her concerns, and therefore allow the concern to be coded into one of the other categories. The results indicate that almost 23% of the concerns reported on the Request for Assistance form fell into one of these two categories, while less than 5% of the concerns reported as areas of focus in the Teacher LOI were identified as "other academic" or "other." Additionally, neither category was consistently represented by teachers at both points of analysis, as demonstrated by the non-significant chi-square analyses. As such, the results indicate that there may have been some impact of the consultation work in increasing the clarity of the teachers' concern statements.

Additionally, although the number of concerns reported overall decreased, as did the number of vague/other concerns, the statements themselves did not become more specific or observable. . Since the use of a specific, observable, and measurable behavior has previously been identified in research as a key component to developing an effective intervention (Flugum & Reschly, 1994), the interventions that were later developed in these cases may not have been as effective as they could otherwise have been. However, one possibility for why this may have been observed is that the LOI interviewer does not specifically ask the teacher to report the concerns in observable and measurable behaviors. As such, these results may be an underestimate of whether or not IC case managers and teachers actually develop and use an observable, measurable, and specific statement of the target behavior. Further research, possibly using the Student Documentation Form, which is used by the dyad to document the process during their work together and which has a section specifically targeted toward this question, would help to clarify the presence of this important aspect of high-quality problem-solving. What is clear here through this research is that the teachers did not spontaneously provide a measurable definition of the concern when asked during the LOI interview.

Teacher Recall

An additional goal of this research was to look at whether teachers reported the same initial concerns during the Teacher Level of Implementation interview at the end of the process, as they indicated on their Request for Assistance forms at the beginning of the process. The results indicated that teachers were consistent in recalling the presence of concerns in the academic areas of reading, math, and writing, and as well as recalling behavior, while they were not consistent in recalling the less specific categories (work

completion, other academic, and other). This finding is interesting, and suggests that going through the IC process had an impact on how teachers thought about the referred students. Within the broad categories of concerns coded, teachers moved away from reporting less specific categories and towards reporting the more specific categories. This finding provides some initial, tentative evidence that teachers may have clarified their views on the needs of their students as a result of having worked through the IC process with a consultant. However, additional data and research are needed to support this initial finding.

Student Demographics

In addition to the "what" of Instructional Consultation, this research was interested in "who" IC Teams were serving. As in previous research (Moniodis, 1997; Weiner, 2002), the vast majority of students served were males. Behavior concerns were reported much more frequently for males than for females, while reading concerns were reported in a higher percentage of females than males.

Again consistent with previous research (Moniodis, 1997; Weiner, 2002), the results of this study indicated that over 60% of children who were supported through IC Teams in this sample were either in the first or second grade. While indicating that IC is having an impact at intervening and supporting children early, the relative infrequency of IC cases at the intermediate grade levels suggests that the upper grades may be an area where IC Teams can continue to grow in their support of teachers. Alternatively, it might suggest that teachers view support services at the intermediate grades as less effective, in comparison to teachers of younger students.

Finally, regarding student ethnicity, the results of this study are limited. Since IC Team Facilitators were responsible for submitting all data included in this research, data regarding student ethnicity may not have been consistent from school to school in this sample (i.e. parent report, teacher report, school records, etc), and future research in this area might focus on more precise ways to collect this data. While Caucasian students were the most frequently-served group in this sample, data on the demographics of the populations from which these students were drawn were not available. However, behavior concerns were proportionally much more frequent for African-American students than for Caucasian students, occurring more frequently than any other concern. This finding is consistent with previous research indicating that African-American students are over-represented amongst students receiving special education support for behavior concerns (MacMillan & Reschly, 1998). Reading was the most common area of concern for students of Caucasian backgrounds, while reading and writing were most frequent for Hispanic students. There were no students in the sample who were identified as having Asian/Pacific Islander, mixed, or other ethnic backgrounds.

Limitations

A primary limitation of the current research is the small sample size. Additionally, many of the schools included in the sample were only in their first or second year of IC implementation, so small case loads for each building are not surprising. However, the small number of cases included here and the early implementation of the schools that were involved makes generalizations and conclusions beyond this sample tentative, at best.

A related limitation is that the measurement instruments used in this research were not originally designed for this particular set of research questions. The Teacher LOI was designed to be used as a tool for providing formative evaluation data to IC Teams' case managers regarding their implementation of the IC process. Teachers were not necessarily prompted to describe the focus area in specific, observable, and measurable terms when initially requesting assistance or during the post-intervention LOI interview. The information gathered via the LOI interview was intended to be used by teams in identifying areas for continued training or skill development, not for research evaluating the types of concerns being addressed in IC. As such, the teacher LOI interview was an imperfect measurement tool for this analysis.

Additionally, schools were permitted and encouraged to adapt the Request for Assistance form's open structure to meet their needs. Indeed, this form was not standardized within this dataset, adding to the variability in teacher responses. Some schools used a checklist form, where teachers checked off their areas of concern from a list, while others simply provided space for teachers to write about their concerns. Overall, teachers received little guidance on completing the form, and as such they wrote as little or as much as they wanted about their concerns regarding the student. One teacher reported ten different concerns on the Request form, while others reported only one. Again, this variability, along with the lack of structure and guidelines for teacher responses, likely contributed to error and inconsistency in the dataset.

Future Research

Knowing how the IC process impacts teacher thinking about student concerns is an important research agenda. Looking ahead to future research in this area, a primary

area of need would be the development of instruments that would allow specific data collection around teacher concern areas throughout the IC process. This tool might be an initial form that the teacher and consultant would complete together at the start of the IC case. Alternately, teachers might receive additional guidance regarding how much to write on Request forms, such that the concerns reported would be either an exhaustive list or a briefer description of the teacher's priorities for that student.

Additional research might also be helpful in investigating the relative infrequency of math and writing concerns as compared to reading. Several possible factors exist for this pattern, including teacher and/or consultant preference for prioritizing reading over other academic areas, teacher and/or consultant skill needs in addressing math and writing concerns, or some combination of the two. Since the bulk of the referrals were at first and second grade, where reading has become a major issue, the math concerns might not emerge until later. However, further investigation is needed to clarify this question.

Finally, although the data here is preliminary, and while the measurement tools in this research were probably not ideal for evaluating whether IC case managers and teachers developed an observable and measurable target behavior, the results do indicate that most teachers did not describe their concerns in these terms. Additional research is needed, possibly through reviewing additional case documentation, to verify this finding. If, however, this finding is supported, additional training for IC case managers in the characteristics of observable and measurable behaviors might lead to teachers thinking about and describing their concerns in those terms.

Conclusion

This research provided some initial investigation and analysis of the changes in teachers' perceptions of their referral concerns in Instructional Consultation Teams. To date, minimal research existed in this area, and as such, this study represents an important first step in clarifying the teacher's experience regarding their student concerns. Future research, as described above, will be helpful in providing more clarity in the patterns found here, and will be useful to consultants and problem-solving teams working with teachers to address student concerns in schools.

IC Teams

Brief Request for Assistance

Code: _____

I need assistance with:

_____
_____
_____
_____
_____

I am available to meet (times and location):

_____
_____
_____

Does the parent(s) share your concern?

Yes   No   Don't Know

APPENDIX B: SUMMARY OF IC TEAM CASES 200_-200_

Student Code (Number)	Gr.	Referral Date	Type of Concern	Race	Sex	ESL	Existing Disability	Referred to the IEP Team	Referred for Eval	Found Eligible	What Disability
			Math Read WL Beh Sp/Lang Other_____	AA A C H N Other _____	M F	Y N	Y N	Y N	Y N	Y N	
			Math Read WL Beh Sp/Lang Other_____	AA A C H N Other _____	M F	Y N	Y N	Y N	Y N	Y N	
			Math Read WL Beh Sp/Lang Other_____	AA A C H N Other _____	M F	Y N	Y N	Y N	Y N	Y N	
			Math Read WL Beh Sp/Lang Other_____	AA A C H N Other _____	M F	Y N	Y N	Y N	Y N	Y N	

APPENDIX C: Consent for Release of Data for Future Research or Publication

Dear _____,

As part of the Goals 2000 Grant Program, the Lab for Instructional Consultation Teams conducts a thorough program evaluation of all IC-Teams each year. Data are collected on each team's level of implementation, documentation of cases, teachers' satisfaction, perceived team collaboration, student outcomes, student referral patterns, and the impact of IC training. This information is compiled and reported back to schools so teams may set annual goals and develop training plans.

In an effort to more systematically document the effects of IC-Teams across schools, the Lab for IC-Teams would like to create a comprehensive database for research purposes. You are being asked to provide consent for the use of the following data for future research or publications above and beyond the regular program evaluation required of the Goals 2000 Program.

Data to be coded and stored for possible future use, as applicable:
- Demographic Information (includes race, sex, experience, education)
- IC Team Case Summary Form
- Level of Implementation Interviews
- Student Documentation Form and Review
- Teacher Satisfaction Survey
- Impact of IC-Team Training Survey

All information collected in this study will be coded to protect your privacy. Under no circumstances will the actual names of participants be used. If at any time during the study you feel uncomfortable with the information you have disclosed you may ask that it be removed from the records and not included in the database for future research and publication. You are free to ask questions or withdraw your records at any time without penalty.

Please feel free to contact either of the directors of the Lab for IC-Teams, Dr. Todd Gravois or Dr. Sylvia Rosenfield, at any time during this process if you have any questions, comments, or concerns. We can be reached at (301) 405-6886. Please consider the above information and, if acceptable, sign below to agree to participate. Thank you for your consideration.

Sincerely,

_____   _____
Todd Gravois, Ph.D.   Sylvia Rosenfield, Ph.D.
Co-Director   Co-Director
Lab for IC-Teams   Lab for IC-Teams
University of Maryland, College Park   University of Maryland, College Park

I understand the above conditions and have had a chance to ask additional questions. I agree to the use of the above stated IC-Team related data for any future research and/or publication. I have received a personal copy of the consent form.

_____   _____
Signature of Participant   Date

_____   _____
Signature of Witness   Date

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