

The University of Manitoba

AN INVESTIGATION OF THE DAILY ACTIVITIES OF
CANADIAN SCHOOL PSYCHOLOGISTS

by

Valerie Harrison

A Thesis Submitted to the Faculty of Graduate Studies

In Partial Fulfillment of the Requirements

for the Degree of

Master of Education

Department of Educational Psychology

Winnipeg, Manitoba



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ABSTRACT

This thesis examines the role of Canadian school psychologists based on a description of their daily activities. A national sample of practising school psychologists responded to a questionnaire measuring certain demographic characteristics, descriptions of their current job functions, as well as perceptions of their training. The main focus of the investigation aimed at providing an objective listing of current job functions, with the school psychologists recording their activities on a specific school day. Results indicated that school psychologists in Canada appear to spend the largest amount of time on the assessment process and on consultation activities. Demographic characteristics were analyzed to determine effects on both job functions and perceptions of training. Finally, various recommendations are suggested for training and for future research in Canada.

TABLE OF CONTENTS

Acknowledgements	ii
Abstract	iii
Table of Contents	iv
List of Tables	v
Introduction	1
Statement of the Problem	1
Review of the Literature	6
Summary	24
Method	25
Subjects	25
Instrument	27
Procedure	28
Results	29
Methodological Difficulties	29
Daily Activities	34
Contextual Factors	38
Perceptions of Training	42
Discussion	45
References	60
Appendix: Survey	

LIST OF TABLES

TABLE		PAGE
1	Mean Time Spent on Daily Activities	35
2	Comparison Summary for Daily Activities	36
3	Frequency of Demographic Characteristics	39
4	Perceptions of Training	44
5	Most Useful Part of Training	46
6	Not Enough Emphasis in Training	47

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Statement of the Problem

Purpose

What do Canadian school psychologists actually do all day? The purpose of this study is to investigate the role of Canadian school psychologists based on a description of their daily activities. Such a list of daily job activities would provide the basis for a more objective description of the actual role of the Canadian school psychologist, in contrast to the ideal role model that generally arises from the school psychology literature. At the same time, training implications are suggested by both the literature review and Canadian school psychologists' perceptions of their own training.

Background of the Problem

Role theory provides a framework, a conceptual language for understanding and describing the problem. Role can be defined as "the set of activities required of an individual occupying a particular position" (Katz & Kahn, 1978, psychologists. 755). However, the school psychologist is not an individual working in isolation, but is part of a complex human organization known as the educational system, a dynamic organization consisting of a network of individuals whose behavior affects the roles of its members. Role theory takes a combined sociological-psychological perspective, wherein the concept of role is the basis upon which the human organization is constructed, and that concept is a three part paradigm described by: 1) normative culture patterns (the norms or rules inherent within the organization), 2) the

expectations held by the people interacting within the organization, and 3) the actual behavior of the occupants of the role positions (Roos & Starke, 1981). Thus, the organization is a structure of roles, or clusters of activities, in which the structure consists of acts or events rather than unchanging physical components (Katz & Kahn, 1978). Ultimately, the structure of an organization is contained in its various functions, the set of activities required of each role. However, those activities occur within a broader, and largely given context, a situational context which forms the organizational antecedents of these roles (Kahn et al., 1981). That context includes more than just normative culture patterns, but is extended to include other organizational factors, such as the physical properties of the environment, the structure of interrelationships between persons involved in the organization, and the enduring properties of the individual (Kahn et al., 1981).

Roles give form to an organization, but are not constant; in the dynamic human organization, they develop through the continuing processes involved in role enactment. Basically, the process is composed of a cyclic and ongoing sequence in which certain role expectations or standards are communicated by the expectations of role senders (the people interacting with the role participant), then these expectations are perceived by the role receiver and translated by him into role behavior (Katz & Kahn, 1978). This process is itself shaped by contextual factors. Thus, an understanding of a specific role necessitates an awareness of its contextual influences and dynamic interactions, so as to place it into a perspective that would explain

how that role emerged and developed. Role can be described either by examining the present state of the model, or by inquiring into the preferred state (Katz & Kahn, 1978), but the means for measuring whether any change has taken place must consist of an investigation of actual functions.

The issue of role definition in school psychology has gradually developed over the past several years, propelled partially by outer forces altering the generic educational system in which the school psychologist works. At the same time, the school psychologist's role has also been altered by changing expectations of those people who interact with the psychologist within this system. General economic restraint requires school psychologists to justify their existence in the schools (Bowser, 1982), while at the same time, government legislation has required organizational changes in the school system to accommodate the handicapped, who have been guaranteed a right to an education (Kratowill, 1985). The psychologist's role has become increasingly complex due to the increased need for specialists in various areas of exceptionality such as learning disabilities, communication disorders, etc. (Hohenshil, 1975; Seaton, 1975; Fenton et al., 1977; Hendrix, 1981; Murray & Wallbrown, 1981; Timm, 1982). Mainstreaming has placed increased pressure onto the psychologist for specific advice which would provide practical help for the regular classroom teacher, not vague reports that lack relevance (Monroe, 1979; Ysseldyke, 1979). Such expectations for multiple role enactment create role conflict and a possible impetus for direct change in the role structure of the educational system. Further, and more fundamental to

the school psychologist's basic role, the traditional assessment role, and the tests used in this process, have been seriously criticized in the literature (Brown, 1977; Wallace & Larsen, 1978; Ysseldyke, 1979), although psychodiagnosis for classification purposes is still identified as the psychologists' primary function (Winikur & Daniels, 1982). A common theme runs through the school psychology research (expressed most succinctly by Maggs & White, 1982): the psychologist is facing a new era of professional accountability, in which assessment is no longer acceptable as the role *raison d'être*. Hayes and Clair (1978) claim that the traditional role is no longer tenable, that death of the profession is imminent unless a new image and role are surfaced. However, before accepting this opinion, it is important to investigate the current status of the profession.

Significance of the Problem

The theoretical significance of the issue surrounding role definition is reflected in the professional literature, which has increasingly been dominated by discussions on the proper role of the school psychologist (Clark & Reynolds, 1981; Ysseldyke, 1982; Bardon, 1982, 1983). However, such discussions, almost exclusively American, may be based within a socio-cultural context that differs from that of the Canadian school psychologist, and therefore the model suggested by the literature may be less relevant for Canadians. Also, many research articles studied role definition solely on the basis of expectations and perceptions, a method which includes only one part of a comprehensive study of role theory, and which may give a somewhat distorted view of the actual role and limit the resulting picture of the school

psychologist. A more objective investigation of role model based on the daily functions actually performed by school psychologists would add to the current research, to provide a more theoretically complete concept of the school psychologist's role. More important, actual activities are the basic units of role theory (Katz & Kahn, 1978), and as such, should not be ignored.

An investigation into the role of the school psychologist would have practical significance as well. Literary discussions of an exemplary school psychology practice do provide a model for school psychologists in the field, communicating the kinds of services that should be offered (Ysseldyke, 1978), and providing a guide for professional development efforts (Sandoval & Lambert, 1977). Psychologists must keep abreast of recent research to improve their everyday practice, and ultimately to take control of their own professional destiny (Grimes, 1981; Rosenfield, 1981). Finally, role model investigations suggest training needs in graduate programs at universities and direct a similar revision of certification requirements. Universities (and certification boards) should adapt to changing trends within the profession by requiring coursework relevant to the actual practice of school psychologists in the field. Research into the role and function of school psychologists has significant value for the profession.

Review of the Literature

Organizational Context

The definition of role - "a set of activities required of an individual occupying a particular position" (Katz & Kahn, 1978) - can be explained, according to role theory, in three conceptual parts: organizational context, expectations, and actual behavior. Organizational context refers to the particular position that role occupies conceptually within the human organization, so that role is indigenous to the position rather than to the person occupying that role. (That is, the person may change, but the role endures.) That position is influenced by both the socio-cultural background and the situational factors, which interrelate to form a setting in which role behavior takes place. Thus, the organizational context consists of the norms or standards of the organization, its hierarchical structure, and the physical environment, but can be extended to include the enduring properties of the individual (Katz & Kahn, 1978; Kahn et al., 1981). Norms or standards are not role specific, but are accepted organization-wide. For example, the school psychologist's role is shaped by the general goals and values of the profession, whether those may be improving mental health in the schools (Maroldo, 1972; Cowen & Lorion, 1976; Oakland, 1976), or improving the quality of instruction and learning (Maggs & White, 1982; Reilly, 1984), or simply serving children and the schooling process as effectively as possible (Barbanel & Hoffenberg-Rutman, 1974; Ysseldyke, 1982). However, cultural norms are but one of many factors involved in the definition of a role.

In addition, properties of the organizational structure, such as

the role participant's position within the network of interrelated sets of roles, also affects the content of his role. School psychologists may occupy various types of role sets. Depending on the type of school division, psychologists may work alone (as the only nonteaching specialist in the district), they may work as one member of a team of different specialists (including speech pathologist, social worker, etc.), or they may work in a clinical setting with a group of colleagues (Fagan, 1981). Previous theorists believed that the structural properties of any human organization are of such importance in providing the context for role enactment within that organization that these existing elements predetermine the content of tasks in a given role, to result in a fixed-role concept (Roos & Starke, 1981). Elements of the organizational structure do have a powerful influence for change on the individual roles within that organization, but probably more appropriate is an eclectic view, in which organizational structure is one of many important factors that combine to determine role.

Organizational factors also include enduring background characteristics of the individual (such as training), which influence the content of role because these characteristics usually relate directly to one's position in the authority hierarchy, and also because the emphasis of these specific cultural influences affects how the role and function is perceived by each psychologist. Training, which includes academic education, practical experience, and continuing professional development (Engin & Johnson, 1983), largely determines both the nature of the services provided and the school psychologists' competence (Ysseldyke, 1978). For example, those trained by Education

departments would probably stress the importance of instructional intervention, while those who received clinical training might favour an emphasis on mental health (Bardon, 1982, 1983). Whether the psychologist holds a Masters or a Doctoral degree could also influence the kinds of duties involved (Meacham & Peckham, 1978; Kratochwill, 1985; Fisher et al., 1986), especially if it leads to a supervisory position. Although some role theorists minimize the importance of individual factors in changing a role (Katz & Kahn, 1978; Kahn et al., 1981), training must be an important factor in role determination due to its multifaceted effects as an individual characteristic, cultural influence, and organizational property, all exerting influence on role behavior. Thus, training is an important organizational factor to consider in any study of role behavior.

In the school psychology literature, the characteristics of the setting in which psychologists work is an organizational variable that receives considerable attention. For example, physical properties of the environment, such as urban vs rural, may dictate role emphasis. Compared to urban settings, those who work in rural school districts apparently have a more diverse role, spend less time in traditional assessment activities, and are more likely to engage in activities involving them at the systems and community levels (Hughes & Clark, 1981). In addition, school psychologists working in rural settings have special problems serving minority children due to isolation of schools, and due to local biases and values (Gerkin, 1981). One environmental factor, size, raised conflicting views of the research literature, with one study suggesting that size of school district may have little

relationship to role definition (Benson & Hughes, 1985), while another (Evans, 1979) found that reducing the ratio of pupils per psychologist was a frequently recommended means of improving psychological services. It seems clear that characteristics of the setting may impose limitations on the kinds of services provided by the school psychologist, and therefore must be included in any investigation of their role.

Most research available to Canadian school psychologists has been conducted in the United States, which may provide a different social, cultural, and legal context for psychologists, one that may not be generalizable to Canadian school psychologists. However, Canadian research into the role of the school psychologist has been scarce. One study (Schapira et al., 1977) compared the training and practice of school psychology in the U.S. and in Ontario, Canada. Results showed that the role functions were very similar, providing some justification for using American literature to study role model. However, this research, limited to only one province, may not be generalizable to the whole of Canadian school psychologists. Another (Violato et al., 1981) investigated the general public's perceptions of the role of school psychologists. While this study may point out the need to educate the general public about school psychology, it offers no useful information about role model due to invalid sample selection procedures and lack of evidence regarding the accuracy of the public's perceptions. Since most of the available research was carried out in the United States, more Canadian studies are needed to confirm whether the role model presented by American literature actually exists in Canada.

Expectations

In addition to organizational factors, the definition of role alludes to another major concept in role theory when it describes "the set of activities required of an individual", (Katz & Kahn, 1978), suggesting that some forces are exerting pressure on the individual. These influential forces consist of role expectations; that is, the other members of the organization in which the person belongs form expectations, develop beliefs and attitudes about what the role participant should do, and subsequently require these activities of the role participant (Katz & Kahn, 1978). Thus, the role of the school psychologist is often described on the basis of information provided by the members of his role set, the other professionals in the school system - teachers and administrators.

Results of research since 1970 indicate that perceptions of teachers and administrators were somewhat similar. Both viewed the psychologists' major function as assessment and diagnosis of individuals, although administrators would prefer to employ a school psychologist functioning primarily as a generalist, capable of performing many functions (Kirschner, 1971; Vance, 1971; Kaplan et al., 1977; Lesiak & Lounsbury, 1977; Landau & Gerkin, 1979). The ideal school psychologist described by the administrators functions in a change agent role, a facilitator of personnel and a major resource person in providing in-service training to staff members (Granowsky & Davis, 1974; McBride & Morrow, 1977; Carroll et al., 1978), and serving as liaison agent between schools and the community (Senft & Clair, 1972; Lesiak & Lounsbury, 1977). Similar to the administrators, teachers also

perceived the psychologist as primarily a psychometrist and diagnostician, but their perspective tended to be less broad. Teachers often viewed the psychologist as a specialist in emotional rather than academic problems (Gilmore & Chandy, 1973; Kahl & Fine, 1978; Dean, 1980; Bowen & Dalton, 1981), and highly favoured the psychologist in a consulting role (Waters, 1973; Medway, 1975; Kahl & Fine, 1978), working as the assessment and psychology expert on a multidisciplinary team which directly serves the child (Oakland, 1976; Winikur & Daniels, 1982; Maher & Yoshida, 1985). Both suggested that psychologists engage in more student counseling (Evans, 1979; Bowen & Dalton, 1981; Hartshorne & Johnson, 1985). Typically, teachers and administrators each preferred the psychologist helping in areas most closely related to their own job function. Thus, these role senders - teachers and administrators - have an important influence on role definition by communicating their expectations to the school psychologist.

Although teachers and administrators might appear to be a logical population to survey regarding the school psychologist's role, role theorists suggest that members of a role set are often in disagreement with respect to what a focal person should do (Katz & Kahn, 1978); and, as a result, problems exist that cause the accuracy of their reports to be questioned. For example, administrators are often only peripherally involved in most psychologists' activities, and thus would have limited knowledge about the school psychologists' role (Sandoval & Lambert, 1977). Also, teachers have a response set designed to show preference for psychological services which do not intrude on their prerogatives (Roberts, 1970; Vance, 1972; Ford & Migles, 1979). Generally, survey

experts suggest that reports about others are 10 to 20% less accurate than reports about the respondents' own behavior (Sudman & Bradburn, 1983). In fact, teachers' perceptions of how psychologists spend their time were found to be inaccurate when compared to the psychologist's actual daily log (Roberts, 1970; Davis, 1977; Medway, 1977; Abel and Burke, 1985). We cannot measure the behavior of the role participant solely in terms of the perceptions of role senders, since their perceptions are affected by the state of their interpersonal relations with the role participant and by the aspects of their own personality, which cause some perceptual distortion. Finally, this type of population is difficult to define statistically. The researcher faces two options: surveying every teacher and administrator, which includes in the population many who have had no contact with a psychologist, or choosing a biased population by allowing the psychologists to distribute the questionnaire to their clients. (Medway, 1977, created a particularly biased group of participants by asking 15 school psychology interns to nominate teachers from those with whom they had contact during their internship.) Thus, studies based on teachers' or administrators' perceptions of psychological services tend to reflect subjective opinions, biased by their own individual needs and amount of contact with the psychologist. Although teacher-administrator surveys can give psychologists useful feedback about what services consumers want, these surveys can only provide a description of their ideal role model for the school psychologist, which may be unrealistic. The expectations of these role senders have an important influence on the role of the school psychologist; however, by themselves expectations

form an incomplete concept of role, and thus are inadequate. Further, expectations of others have been thoroughly studied in the school psychology literature, while additional research is needed in other areas, such as actual behavior.

The definition of role ("the set of activities required of an individual occupying a particular position" (Katz & Kahn, 1978) emphasizes the importance of the individual role participant in the determination of role behavior. Thus, the expectations of the individual role participant are considerably important (Benson & Hughes, 1985), for he receives and interprets expectations sent by others, and brings a set of his own attitudes and beliefs, values and expectations, to the role. As role receiver, the participant not only receives the role communication from others, but is motivated by that communication in varying ways (both positively and negatively), and is, finally, the one who actually acts and behaves in the role (Katz & Kahn, 1978). Indeed, in choosing a population to survey regarding the role of the school psychologist, recent research has often focused on the perceptions of school psychologists themselves. Such surveys of psychologists consistently agree that the most time consuming function of their job is assessment, although they would prefer to spend more time in consultation activities (Cook & Patterson, 1977; Bowen & Dalton, 1981; Lacayo et al., 1981; Winikur & Daniels, 1982; Eitel et al., 1984). When psychologists' perceptions of role functions are compared to teachers' and administrators' descriptions, psychologists tend to define their role more narrowly (Fenn, 1977), probably because a heavy case load restricts the time available for developing more diverse activities

(Evans, 1979). Some role theorists believe that individual characteristics are less important for shaping role than other contextual factors or than expectations of others, especially as an impetus for change (Katz & Kahn, 1978; Kahn et al., 1981). However, the importance of the role receiver function interacts with specific individual characteristics, magnifying the importance of the individual role participant. Thus, the school psychologist is the most objective and accurate person to survey regarding his own role description.

Although psychologists provide a more accurate and realistic picture of their role than teachers or administrators, difficulties still exist with research that elicits psychologists' perceptions and expectations. One difficulty, sample selection, is a methodological consideration. Many studies defined their population of school psychologists by surveying national associations of school psychologists (Meacham & Peckham, 1978; Lacayo et al., 1981; Graden et al., 1984; Kaulfam et al., 1984; Benson & Hughes, 1985; Copeland & Miller, 1985; Fisher et al., 1986). Less than half of all school psychologists are members of the national association (Reschly, 1984; Fagan, 1987), and therefore a sample based on such membership would not really represent the population of interest.

National surveys often produced poor response rates, compounding the difficulty regarding representative data. Response rates of these national surveys varied from 19% (Meacham & Peckham, 1978) to 45% (Lacayo et al., 1981). Better response rate (84%) was found in one national survey (Davis, 1977), but the population was restricted to special IGE schools in the U.S., with a small sample (50), where

telephone follow-up could be used. Some researchers failed to report the response variable (Schapira et al., 1977; Evans, 1979; Bowen & Dalton, 1981; Winikur & Daniels, 1982). Representative national surveys are important for producing general role descriptions. However, some of the studies in this literature review used convenient, restricted, or captive samples (Giebink & Ringness, 1970; Medway, 1977; Carroll et al., 1978; Senf & Senf, 1982; Eitel et al., 1984) which produced biased results. Some researchers surveyed psychologists by personal interview (Keogh et al., 1975), or used case studies (Briggs, 1973; Robinson et al., 1985), which produced small samples with resulting limited generalizability. One neglected to describe his sampling techniques (Evans, 1979). These sample selection problems do raise questions regarding the validity of the research results.

Other difficulties with surveys of school psychologists are more basic to role theory considerations. Expectations make up only one part of a concept of role, yet are often used as the basis for research. In the research literature, surveys of school psychologists too frequently focused on perceptions and preferences, attempting to describe the role model by asking respondents to rate job functions according to what they would prefer to do, to express an opinion by rating the perceived importance of their job functions (Cook & Patterson, 1977; Schapira et al., 1977; Meacham & Peckham, 1978; Evans, 1979; Benson & Hughes, 1985; Fisher et al., 1986). This method cast doubt on the accuracy of the results, because such a rating scale distorts answers by the tendency of responses to gravitate towards the median. Similarly subjective, one survey rank ordered the job functions according to perceived importance

(Meacham & Peckham, 1978). Thus, although psychologists appear to be the most informed population to survey in seeking information about role model, a survey of their perceptions and preferences tends to describe a model of the ideal role that psychologists would like to fulfill, rather than what is actually happening. Information on ideal role, or the preferred state of the system, mainly shows the measure of satisfaction or dissatisfaction with the present role, rather than an accurate description of the content of that role. Role content would be better described by more direct reporting methods.

Our definition states that role is the "set of activities required of an individual occupying a particular position" (Katz & Kahn, 1978), identifying activities as the basic act or function that constitutes a role. If functions or activities are the basic components of role model, the foundations upon which the educational organization is structured, it is important to find out what are the typical job functions of the school psychologist. The functions described in the literature are not actual activities performed, but are those preferred or judged most important, suggesting a model of the ideal role of school psychologists.

The literature indicates that these role functions can be described under five main headings: assessment, consultation, program development, counseling, and research (Murray & Wallbrown, 1981). The ideal role model portrayed by the literature includes a broad, flexible assessment function, which relies upon multiple sources of information, including a variety of tests, behavioral observations, and interviews with significant others (Cook & Patterson, 1977; Fagan, 1981; Ysseldyke,

1982; Scholl, 1985). Ideally, assessment practices should be directed toward planning instructional interventions (Maggs & White, 1982; Ysseldyke, 1978, 1982). Although most of their time is spent in assessment, another activity, consultation, is sometimes described as the most important function of the profession today (Briggs, 1973; Cook & Patterson, 1977). The school psychologist may serve as a consultant in a variety of ways (Alpert, 1977; Murray & Wallbrown, 1981; Fairchild, 1982), including mental health consultation (Maroldo, 1972; Cowen & Lorion, 1976), organization development consultation (Illback & Maher, 1984), and behavioral consultation (Gresham, 1982; Robinson, 1985).

Program development is another area in which the psychologist can serve the child, turning a broad general background of knowledge in learning theory, child development, behavior disorders, behavior modification, etc. into effective remedial and prescriptive programs (Murray & Wallbrown, 1981; Maggs & White, 1982). Psychologists are in a unique position to recognize and identify problems that may be related to a particular school or a particular grade level, and to use this knowledge on committees charged with recommending curriculum changes; they can also be powerful advocates for the child in obtaining appropriate services (Scholl, 1985). The psychologists can also become involved in counseling individual students or developing counseling programs for groups of special needs students (Shellenberger & Couch, 1984; Hartshorne & Johnson, 1985).

Finally, a vital part of the psychologist's rôle is research, for the psychologist is the ideal professional within the school setting to affect a linking of formal knowledge to educational practice (Miller,

1978; Maggs & White, 1982; Stewart, 1984). The psychologist can identify specific unmet needs of the school and community, and generate interest in research, as well as ensure that prescriptive programs are based on current and proven practices. Thus, the research literature describes many diverse and complex functions, which essentially describe a model of the ideal school psychologist, and which also provide the content for further research surveys into the role of the school psychologist.

Actual Behavior

As stated previously, role can be defined partly by the given context provided by organizational factors, and partly by the expectations of both others and the role participant himself. Finally, role is explained through the enactment of role behavior, which consists of the specific actions of the individual. These functions, the set of activities that describe the content of that role, are the essential components for describing the actual behavior of the role participant. Actual behavior shows the initial state of the system, and provides a baseline against which future change can be measured (Katz & Kahn, 1981). Activities or functions also reveal whether any change has taken place, acting as the basic units for documenting change and development in the role.

Despite numerous articles consisting of theoretical discussions of role definition (Hayes & Clair, 1978; Miller, 1978; Maggs & White, 1982; Ysseldyke, 1982; etc.), the research literature has largely failed to present an accurate description of the school psychologists' role because it has not focused on this basic concept of role. Most studies

investigated perceptions of ideal role, rather than actual role. Research must provide a knowledge base describing the realities of the field, to ensure a balance between the 'real' and 'ideal' in school psychological services (Conoley & Gutkin, 1986). In the final analysis, actual behavior is the most definitive component of the concept of role. What the school psychologist does, the actual daily functions or set of activities, provides the basic description of role.

Direct research into the functions of school psychologists is needed. A direct method of describing their activities would be to record actual time spent on each activity. Time is important not only because it can be objectively counted or tallied, but also because time is an important concept in itself. How a person chooses to spend his time gives valuable corroborative information about values and expectations, about what activities are judged important enough to spend time doing (Capelle, 1979). In addition, this information provides insight into a source of role conflict, if a person spends little time on those activities he values highly (Kahn et al., 1981). Primarily, however, measuring time spent on an activity is an objective method of describing actual behaviors.

Unfortunately, some surveys purported to describe the actual functions of school psychologists, but failed to use objective methodology. Instead, psychologists were asked to estimate the amount of time spent on general job functions based organization their perceptions of what they usually do, by retrospectively estimating amount of time as a percent averaged over the week (Keogh et al., 1975; Cook & Patterson, 1977; Hughes & Clark, 1981; Benson & Hughes, 1985).

Winnikur and Daniels (1982) used a forced-choice format, wherein psychologists checked the category estimating amount of time spent on each function. All of these methods are highly subjective, rely on retrospective judgements and general estimates, and ultimately produce a distorted picture of the school psychologist's role. These studies attempted to describe actual role functions by means of opinions and general estimates, which causes the accuracy of the results to be questioned. More objective research methods are needed. One researcher (Eitel, 1984) collected objective data using trained observers to record the daily activities of psychologists in one school division, but this sample was so small (11 psychologists) that it would be inappropriate to generalize the results to other days, or to all school psychologists.

Lacayo, Sherwood, and Morris (1981) improved on the available research by using an objective method while still maintaining the national representation possible in a self-report survey of school psychologists. Their study was objective in that it required psychologists to record their activities on a particular day (not a rough estimate generated over 'usual' weekly functions), which forced the self-reporter to focus on factual data, and, preferably, to reduce the recall factor by consulting a daily log or appointment book (Moser & Kalton, 1974; Sudman & Bradburn, 1983). The day chosen was within the past week, so that selective memory was less involved. Also, the daily activities record consisted of already existing occurrences, which left little room for subjective judgements. Listing the actual time spent on each activity in minutes, rather than as a percent, was a particularly objective method. In addition, Lacayo and his associates produced a

more comprehensive list of suggested activities, including various kinds of counseling and consultation, and including routine daily functions (such as driving or lunch), as well as an opportunity for respondents to add categories not covered. Finally, Lacayo confirmed the appropriateness of the activities chosen by conducting a pilot study which included over 200 psychologists.

Although Lacayo and his associates produced an objective study of the daily activities of school psychologists, supplemental research is needed to improve on a number of areas. First, research carried out in the United States, a different social, economic, and cultural setting, may not be generalizable to Canadian school psychologists. Also, the demographic items on the survey were limited, omitting such important variables as experience, certification, type of school district, and administrative position. More fundamental, Lacayo's literature review was extremely brief and provided no conceptual framework for the study of role. It focused primarily on the need for representative research, limiting the discussion of research on preferred role to five studies, and missing some important issues, such as the general goal to focus on learning. As a result, classroom intervention and program development were omitted from the list of activities. The assessment-observation activities and consulting with other professionals, which would give an indication of how broad a function the assessment process is, were also not included. As well, 'other office duties' were included in the category 'report writing', making it impossible to separate assessment activities from other activities, and thus confounding the results. The Lacayo study neglected to inquire whether the activities reported

comprised a typical day, creating uncertainty about the veracity of the aggregate results. Finally, the introduction commented on the need for information to suggest training needs in graduate programs, but the authors asked no questions in this area and made no training suggestions in their discussion of the results. Supplemental research is needed to investigate the daily activities of school psychologists, and to suggest training methods.

Training Implications

It is important to investigate perceptions of training in conjunction with an investigation of the daily job functions of school psychologists, because job activities are often related to previous training (Meacham & Peckham, 1978; Fisher et al., 1986). A review of the literature suggests possible improvements in the content of training programs to the universities who educate the school psychologists. Some researchers concluded that more training was required in specific areas, such as neuropsychology (Hynd et al., 1980; Cruickshank, 1981), behavior change techniques (Giebink & Ringness, 1970; Miller, 1974; Robinson et al., 1985), promoting the health and well-being of children (Shellenberger & Couch, 1984), or teaching exceptional children (Keogh et al., 1975; Hayes & Clair, 1978; Cegalka, 1982). Many felt that teacher training is essential to accomplish effective communication with teachers (Keogh, 1975; Hayes & Clair, 1978; Ysseldyke, 1978; Cruickshank, 1981; Cegalka, 1982). These researchers favoured more specialization in specific competencies that would be functional in the field. Grubb (1981) summed up this viewpoint, stating that too many contemporary school psychologists were 'overgeneralized generalists'.

Other researchers (Meacham & Peckham, 1978; Bevan, 1981; Trachtman, 1981) argued that too much specificity in training would be inappropriate, producing narrow specialists lacking an understanding of psychology.

Discussions of training often focused on assessment, which is seen as the subject most emphasized by training programs. Indeed, Genshaft (1984) viewed assessment as the conceptual core of training that is expected and even demanded by consumers of psychological services. However, training in assessment apparently still requires improvement. When asked to rate the quality of their training, students and practitioners perceived that they were trained best for assessment, but the quality was never rated higher than average and the need for more training was indicated (Graden et al., 1984). Other researchers have stressed the need for additional training in special types of assessment, such as reading assessment (Lewis, 1984), neurological assessment, infant and preschool assessment (Copeland and Miller, 1985), and a particular need for training in the assessment of special populations, such as the severely handicapped (Robinson, 1983; Forcade, 1984), and the hearing impaired (Trott, 1984). A broader assessment course was desired, including psychoeducational assessment, prescriptive program planning, and follow-up evaluations (Vance et al., 1974; Cegalka, 1982). Other training recommendations included the importance of internship and practical experience (Giebink & Ringness, 1970; Weininger, 1971; Copeland & Miller, 1985), and the need for school and clinical students to view each others' different role conceptions (Tolor & Brannigan, 1976). As well, training in applied research (in

cooperation with practitioners in the field), would benefit the school system generally and also influence the school's perception of the school psychologist's role (Stewart, 1984). Universities can use such research results to better prepare their students by matching ideal functions described in the literature with various training components of their program, and by incorporating research recommendations into their training requirements.

Summary

The role of the school psychologist is defined by its environmental context, the expectations of significant others in the same organization, the expectations of the role participant himself, and the actual behavior of the role participant. All have an important influence on role definition, with the context creating a given setting for role behavior, and expectations shaping the enactment of that role behavior. Essentially, the actual behavior of the role participant conforms to certain aspects of the given context, is translated from the expectations, and finally becomes the content of that role. The activities involved in the actual behavior of the role participant thus ultimately define the role and provide a baseline against which to measure future role behavior, eventually documenting future change and development of the role. In defining the role of the Canadian school psychologist, previous studies have often focused on expectations and preferences, rather than on more factual information. The psychologist is the most knowledgeable person to ask for information about role, and actual behavior is the fundamental unit for describing that role. In addition, information about which training programs are most useful to

school psychologists in the field can be valuable to school psychology students and universities. Thus, two main issues are the focus of this study. 1. What are the actual activities of Canadian school psychologists in practice? 2. How useful was the school psychologists' training, and what area of training was given insufficient emphasis? Further elaboration would find out whether the daily activities vary as a function of certain background variables (such as training and certification of the psychologist or characteristics of the environmental context in which the psychologist works), and whether perceptions of training are affected by the kind of training a person has received.

Method

Subjects

The school psychologist was defined as that psychologist who has chosen to work in the school. Psychologists were chosen as the target population to eliminate inaccuracies inherent with perceptions of others. However, problems were encountered in surveying school psychologists. First, the definition of a school psychologist is not exclusive, since the population apparently varies considerably, with some people who work as school psychologists coming from certification or training in areas other than formal school psychology programs (Meacham & Peckham, 1978; Evans, 1979; Fisher et al., 1986). In an effort to clarify that each respondent actually was working as a school psychologist, respondents were asked to list their job title, as well as information about their certification, training and experience.

Second, it was difficult to obtain a list of the target population. Many American surveys used members of school psychologist associations as their population. In Canada, it was found, this method would not produce a representative sample, since not all provinces boast a local association of school psychologists, and there is no Canadian national association of school psychologists. Some belong, instead, to the American association, or to the Canadian association of psychologists in general. Therefore, the individual school divisions in Canada were used as the medium for reaching the school psychologists in their employ. Such a cluster type of sampling method is useful when it is impractical to compile an exhaustive list of the subjects in the target population (Babbie, 1973). It was assumed that each school division could identify their own school psychologist. Questionnaires were mailed to 630 boards of education in Canada, including the 10 provinces and the northern territories.

Unfortunately, a number of problems were encountered due to this method of subject selection. Estimating the size of the survey population was the first problem encountered, due to the fact that large urban school divisions typically employ a number of school psychologists, while smaller rural divisions often share one psychologist. Therefore, the number of questionnaires mailed (630) did not necessarily equal the number of psychologists sampled. An attempt was made to describe the population more fully (Moser & Kalton, 1974), by asking each respondent to list the number of school psychologists employed by their school division. Another problem resulted from each school division receiving only one questionnaire: there was a

possibility that urban psychologists would be underrepresented, thus creating a biased sample. This problem was controlled by asking respondents to report whether they were urban or rural. Finally, sending only one questionnaire to each school division weighted the possibilities in favour of the chief psychologist becoming the respondent. Any bias resulting from this possibility was controlled by asking whether the respondent held an administrative position.

Instrument

A research questionnaire (see Appendix) was designed according to the recommendations in the literature regarding important role functions of the school psychologist (Cook & Patterson, 1977; Schapira et al., 1977; Evans, 1979; Lacayo et al., 1981; Murray & Wallbrown, 1981; etc.), and following suggestions for constructing a brief, simple, and cleanly designed questionnaire (Gay, 1981; Sudman & Bradburn, 1983). The questionnaire was divided into three sections, each serving a specific function. The Demographics section was designed to obtain a description of the individual characteristics, training, and work setting of each psychologist. A measure of the amount of time spent on each activity was obtained in the second section, which entailed a description of one day's work activities, similar to the study by Lacayo, Sherwood & Morris (1981). The response spaces were divided into 15 minute intervals over a nine hour day, to allow flexibility for responses to be entered. A suggested activity list was provided which included 16 possible activities, but psychologists were free to write in their own. The activity list was similar to that of Lacayo et al. (1981), but with the addition of the activities: assessment-observation, classroom

intervention, program development, and consultation with other specialists. In addition, a sample activity list was attached to ensure clarity of instructions. Finally, in the four open-ended questions, the psychologist was requested to discuss the usefulness of his training, and was allowed to express any opinions or perceptions not previously covered by the structured questions. The questionnaire was validated by personal interview with a selected sample of 4 psychologists, who were encouraged to make comments concerning clarity of instructions, recording procedures, and specific items. The questionnaire was then revised accordingly.

Procedure

The questionnaire was mailed in conjunction with Dr. Riva Bartell's research survey, as part of a package which included questionnaires to school superintendents, principals, and teachers, as well as school psychologists. The package was addressed to the "school psychologist", then mailed to 630 school boards across Canada. A table of random numbers was used to randomly select the school boards that would be surveyed. Mailing took place during the first part of May, to avoid school holidays. The deadline for replies was listed as May 31, although returns were accepted until the end of the school year. The questionnaire was accompanied by a stamped return envelope and a cover letter explaining the issue and its significance (see Appendix). On the Daily Activities part of the survey, psychologists were asked to describe their job activities for yesterday (or the last working day). Finally, to provide an indication of whether the particular day chosen might have affected the accuracy of the results, psychologists were

asked if this was a typical day, and if not, to explain.

Results

Methodological Difficulties

Returns

Using school divisions as the target for mailing meant that the potential sample size was indefinite, because an unknown number of school divisions had no school psychologist. As a result, response rate was difficult to determine. If the number mailed was used as a basis for calculating return rate, 245 of the 630 questionnaires mailed were returned, yielding a 39% return rate. However, response rate should be based on net sample size, omitting those that could not be delivered (Babbie, 1973). A detailed analysis of the 108 blank returns revealed that 81 (33%) stated "no school psychologist in this division" as the reason for returning a blank questionnaire. Assuming that one third of the total sample was undeliverable, response would remain unchanged, at 39%. Twenty-two of the respondents gave no reason for the blank return, and five others had various reasons for not completing the questionnaire, including: too time consuming, not a typical day, too near the end of the school year, and the questionnaire arrived after the deadline. Seven others excluded were either incomplete or were completed by administrators who indicated that the questionnaire was not appropriate to their present job. Returns were accepted from all those who identified themselves as occupying the role of the psychologist in their school division, either by their job title, education, certification, or work experience. Finally, 130 questionnaires were

deemed usable.

Sampling Method

In an effort to estimate how thoroughly this sampling method covered the total population of school psychologists, respondents were asked to list the number of school psychologists in their division. Of the 147 who completed the demographics section of the questionnaire, 55 indicated that there were 2 or more school psychologists in their division. A total of 450 school psychologists worked in the school divisions of the respondents, with the number per school division varying from 1 to 55 psychologists, while, in other cases, as many as six school divisions shared one psychologist. In estimating how thoroughly this survey method samples school psychologists, it seems appropriate to conclude that at least one third of the surveys were redundant (that is, sent to school divisions that had no school psychologist), while the others samples only about 37% of the possible population of school psychologists.

Typical Day

The question about typical day was intended to serve as an indication of the psychologists' perceptions of whether the day sampled provided a reasonable estimate of their usual job functions. However, while most of the respondents (74 or 57%) indicated that this was a typical day, thirty (23%) said it was not a typical day, and 26 (20%) gave no reply to the question. It seems that those who did not reply may simply have missed the question, due to its unobtrusive position on the questionnaire, immediately under the diary of the day. Those who gave a 'no' response were closely examined in an effort to explain why

so many replied that this was not a typical day. Many (43%) indicated that their job offered such variety that there was never a typical day, while others (26%) reported that the manner in which they organized their time into large blocks of one job function on one day (ie. a whole day of consultation while visiting a rural school, or a whole day of writing reports back at the office) resulted in never having a 'typical' day. A few (4%) suggested that the time of year (ie. more consultation with parents near the end of the school year, or more meetings generally) could affect the functions performed on a particular day. Some (13%) did most of their report writing and some parent consultation in the evenings and on week-ends. The rest (14%) did perceive that day to have more or less testing, driving, meetings, etc. than on a usual day. Since only one person failed to give a reason for his 'no' response, the above represents a fairly accurate description of those respondents who stated that the day in question was not typical.

With only 57% of the respondents perceiving the day in question as typical, confidence in the results is reduced. It might be prudent to use only the results from those psychologists who described their day as typical, but this would greatly reduce the generalizability of the results because of the smaller number remaining in the sample. A decision about whether to use the whole sample of 130 or whether to use only the 74 who answered 'Yes, this was a typical day', becomes a trade-off between weakening the study by including all or weakening the results by using a smaller number. From the reasons given by the 'no' respondents, it seems that many of them regard their job as so varied that there is no such thing as a typical day. Thus, it seems reasonable

that, if many said there is never a typical day, perhaps that is typical of the school psychologist's role, and the overall averaging of activities will hide those atypical days. Based on this rationale, it seems preferable to include in the study all 130 cases. Although the school psychologists' job apparently offered much variety of function, the overall aggregate of reported daily activities should give a reasonably typical profile of how the school psychologists spend their time.

The three groups of Typical Day responses ('Yes', 'No', and 'No Response') were analyzed to determine whether the groups varied as a function of demographic variables, using Chi Square as a measure of significance. No significant differences were found between the groups. The three groups were further analyzed on the basis of the Daily Activities, to determine whether they differed according to the activities performed on that day. Analysis of variance was used to determine significant interactions, and the Scheffe test was then conducted to identify which means were significant. In addition, the Bartlett-Box F test was used to measure homogeneity of variance. Results showed significant differences between the groups on two activities: the 'No' group did no research ($F(2,127) = 4.21, p < .05$) and less testing ($F(2,127) = 6.31, p = .01$).

Because no differences were found on the demographic variables using Chi Square, and because Chi Square tends to increase the probability of finding chance significance, perhaps this no difference result can be viewed with some confidence. On the other hand, Chi Square may be unsuitable for use in making conclusions about a

population that may not be normal (Weinberg & Goldberg, 1979), so the issue remains unresolved.

When Daily Activities were analyzed, the analysis of variance showed significance on the variable Research, but this is not a true significance because the mean amount of time spent on research was very small and almost all of the time involved was attributed to the smallest group (No Responses (N=26) = 6.3 minutes; Yes (N=74) = .6 minutes; No (N=30) = 0 minutes). Therefore, one cannot be sure that the significance indicated by ANOVA is not a function of sample size (Roscoe, 1975). Also, the variances were not homogenous (Bartlett-Box $F = 73.66$, $p < .01$), although the groups may be large enough to negate the effects of heterogeneity (Walker, 1985). Little confidence can be placed in this result.

However, on the Testing activity, the Scheffe test confirmed significance, and the variances were sufficiently homogenous. The 'No' group did only half as much testing as the other two groups (No Response = 124.8 min.; 'Yes' = 124.2 min.; 'No' = 63 min.). This seems to suggest that this group answered 'No' to the question, "Was this a typical day?" because they did less testing on that day. However, this assumption is not compatible with their comments, which suggested that many of them believed there is no typical day in their job. Therefore, this statistically significant difference on the testing function may not have any real significance in practice. The 'No' group may actually do less testing, but this may have no bearing on their reply to the Typical Day question. If the significance is, indeed, credible, it would still be better to include the whole group in the study, rather

than reduce the sample group to a very small size, while acknowledging that the results may underestimate the amount of testing typically conducted by the sample group.

Daily Activities

Based on the 130 usable questionnaires, results were analyzed using the aggregate mean to describe the time spent on each activity. The mean was used because mean time is more accurate than opinion scales, a more powerful indicator than simple frequency counts, and the arithmetic mean is more sensitive to any change in data values and more suitable for ratio data than other measures of central tendency (Babbie, 1973; Weinberg & Goldberg, 1979; Gay, 1981). The actual daily functions of the school psychologists were examined according to the amount of time spent on each activity, to provide objective data about which role activities Canadian school psychologists chose to occupy their valuable time. Table 1 shows the mean time in minutes on a given day over the entire group for each activity. In addition, standard deviations were reported for each activity to give an indication of the variability of time spent on each task within the sample of psychologists. The five major activities that occupy the psychologists' day are summarized in Table 2, showing what percent of the day each occupied, to provide a more generalized conception of their role functions.

Insert Table 1 and Table 2 about here

Note that these data were computed for the entire survey as a whole, not only for those who reported participating in each individual activity. This was done in an attempt to provide a profile of the typical school

TABLE I

Mean Time Spent on Daily Activities		
Activity	Mean Time/Day ^a	SD ^b
Assessment - Testing	110	86
Assessment - Reports	67	63
Assessment - Observation	12	31
Consultation/Teachers	86	52
Consultation/Specialists	33	51
Consultation/Parents	38	44
Class Intervention	6	27
Counselling Individual Students	18	38
Counselling Groups of Students	2	9
Research	2	9
Program Development	8	30
Conducting Inservices	7	37
Attending Inservices	1	10
Driving	41	51
Personal	48	29
Other	20	47

^atime in minutes on a given day for the entire group (n = 130)

^bstandard deviation

TABLE 2

Comparison Summary for Daily Activities				
(Time spent on major activities for present and similar research)				
Activity	Present Study ^a		Lacayo et al., 1981 ^b	
	M Minutes	%/Day	M Minutes	%/Day
Assessment	189	38%	194	39%
Consultation	157	31%	159	33%
Other (Inservices, Intervention, etc.)	64	13%	57	12%
Personal (Lunch, coffee)	48	10%	50	10%
Driving	42	8%	29	6%
Totals	500	100%	489	100%

^a_n = 130

^b_n = 335

psychologist's day on a national basis (Lacayo et al., 1981). The proportion of time spent on the five major activities in a similar study by Lacayo, Sherwood, and Morris (1981) is included in Table 2, based on the mean time and percent of the day for each of the five major activities.

The five major activities conducted by school psychologists included assessment, consultation, 'other' activities, personal activities, and driving. Assessment activities consisted of testing, writing reports, and naturalistic observation. School psychologists in Canada appeared to spend the largest amount of time (38%) on assessment activities. Consultation activities included meeting with teachers, consulting with other specialists, and interviews with parents. Consultation appeared to be a primary activity for the group of psychologists, with the second highest amount of time (31%) spent on this function. A wide variety of 'other' activities (including classroom intervention, counseling students, program development, inservices, and research) occupied 13% of the psychologist's time. Also included in this category were additional activities such as university teaching, locating prescriptive materials, preparation, committee meetings, working on summary statistics or budgets, as well as correspondence and telephoning. Apparently school psychologists' time for personal activities, such as lunch or coffee breaks, was brief, averaging less than an hour a day. Some psychologists spent their lunch hours in meetings or driving to another school. Finally, driving from one educational facility to another occupied a considerable portion of the school psychologists' day. On the given day, the entire group of

psychologists surveyed spent an average of 42 minutes driving.

Contextual Factors

To determine whether contextual factors may interact to affect the content and performance of role, the sample of school psychologists was analyzed on the basis of several contextual factors, including individual characteristics (education level, specialization in training, and certification, etc.), and the physical properties of the organization in which they work (size and type of school setting, and type of job context). Background characteristics of the psychologists who responded are presented in Table 3, listed according to frequency of occurrence.

Insert Table 3 about here

The actual functions of the school psychologists were broken down according to certain background characteristics suggested in the literature review to see whether these background variables appeared to have any effect on role function. Analysis of variance was used to determine significance ($p = <.05$).

Data Analysis

Analysis of variance was chosen because it is a powerful technique for examining the interactions of two or more variables, robust to departures from normality (Gay, 1981), and thus is suitable for analyzing the results of a survey with poor returns. If no differences were found, there would be no need to examine the means further by other statistical methods, because it could be concluded that no difference exists, except for random error (Hopkins & Anderson, 1973; Hopkins &

Frequency of Background Characteristics (n=130)

		Count	Percent ^a
AGE	- 25	2	1%
	26-35	34	26
	36-45	57	44
	46-55	27	21
	55+	10	8
GENDER	F	59	45%
	M	71	55
JOB TITLE	Psychologist	75	58%
	Coordinator	23	18
	Director	9	7
	Senior Psychologist	7	5
	Consultant	7	5
	Supervisor	6	5
	Assistant Superintendent	2	2
EXPERIENCE	0 - 1	3	2%
	1 - 5	44	34
	6 - 10	44	34
	11 - 20	32	25
	20+	5	4
EDUCATION	Doctor	26	20%
	Master	85	65
	Bachelor	18	14
NUMBER OF PUPILS	- 5000	69	57%
	5000 - 10000	22	18
	10000+	31	25
TYPE OF SCHOOL SETTING	Rural	48	37%
	Suburban	15	12
	Small Town	37	28
	Urban	28	22
TYPE OF JOB CONTEXT	Alone	40	31%
	Team of Professionals	44	34
	Team of Psychologists	45	35
ADMINISTRATIVE POSITION HELD	No	78	60%
	Yes	51	39
SPECIALIZATION ^b	School Psychologist	60	33%
	Counseling	41	22
	Clinical	35	19
	Special Education	28	15
	Development Psychology	9	5
	Administration	4	2
	Other	7	4
CERTIFICATION ^b	Teacher	67	36%
	Psychologist	57	31
	School Psychologist	38	20
	Counseling	14	8
	Not Applicable	7	4
	Other	2	1

^aPercents are based on those respondents who replied to the item.

^bMultiple responses were given.

Glass, 1978). Where a significant F value was found on the analysis of variance, further a posteriori procedures for multiple comparisons (the Scheffe test) were conducted on those variables to identify which differences among the means were significant (Hopkins & Anderson, 1973; Roscoe, 1975). Since the Scheffe test is even more conservative than ANOVA (Hopkins & Anderson, 1973), there should be little possibility of finding significant values where none exist (Type I error). In this analysis, comparing the amount of time spent on each activity by background could produce misleading results if the number of each group is very small (as was the case in some areas of specialization, where, for example, only one person listed research as his specialty). This problem was overcome by combining all groups containing less than 15 observations into one larger category, thus reducing the degree of sample error associated with small groups (Moser & Kalton, 1974; Benson & Hughes, 1985). Using the aggregate mean should also mask differences between the individuals.

Another problem existed with the unequal sizes of the groups created by the demographic variables. Unequal sample sizes could cause heterogeneous variances, which would violate an important assumption of analysis of variance (that of homogeneity of variances), and increase the possibility of a Type I error (Walker, 1985). This problem was controlled by the use of the Scheffe test, which is suitable for unequal sized samples. Since the Scheffe is also insensitive to departures from normality and homogeneity of variances (Hopkins & Anderson, 1973; Roscoe, 1975; Gay, 1978), the use of the Scheffe test a posteriori guards against excessive Type I error (Walker, 1985). In cases where

the Scheffe test could not be applied (such as in analysis with only two groups), homogeneity of variance was measured by means of the Bartlett-Box F test (Kirk, 1968; Norusis, 1983), as an additional check. However, in the case of the administrators, the group sizes were large enough (more than 30) to make the effects of heterogeneity essentially negligible (Weinberg & Goldberg, 1979; Walker, 1985).

A further potential difficulty was anticipated with the variables Specialization and Certification, because multiple responses were given, making the groups within these variables randomly interrelated, although the categories themselves were theoretically independent. However, because no treatment was administered, and because group means (rather than individual means) were used for each activity in the analysis, it would seem that the effects of any possible nonindependence would be negligible (Peckham et al., 1969). Also, there was no overlap in the certification categories of school psychologist and psychologist, with none of the respondents listing certification in both, so lack of independence was reduced for that factor. Indeed, the results found no significant interaction between the daily activities and Specialization and Certification, so a Type I error was avoided. However, it is possible that using analysis of variance in this instance may have decreased the power of the test (Walker, 1985), increasing the probability of finding no difference when in fact a difference does exist.

Significant differences were found for only three demographic variables. The results show that those holding an administrative position did significantly less testing, $F(1,126) = 10.31$, $p < .001$. On

the other hand, administrators spent more time consulting with other specialists than did psychologists who were not in an administrative position, $F(1,126) = 5.79$, $p < .05$; and also spent the most time on 'other' activities (such as budgets, telephoning, etc.), $F(1,126) = 5.09$, $p < .05$. Psychologists who worked in school divisions with pupil populations over 10,000 spent the most time consulting with other specialists, $F(2,128) = 3.79$, $p < .05$; while driving took up significantly more time in rural areas, $F(3,123) = 3.02$; $p < .05$.

As an additional check, type of school setting was reorganized into two larger groups, combining Rural and Small Town into one group labelled 'Rural' and combining Urban and Suburban into one group labelled 'Rural'. (This was done to determine whether the rather small numbers in some groups, such as only 15 in the Suburban category, may have confounded the results.) Then, type of school district was analyzed by means of analysis of variance to determine whether the disproportionately large number of rural psychologists in the small group may have affected the activities reported. Results similar to previous analysis were obtained, with significant effects on the variables consultation and driving. In addition, results now suggest that the 'other' variable was significantly affected ($F(1,125) = 4.98$, $p < .05$), with rural psychologists participating in less other activities (such as teaching, budgets, correspondence, etc.).

Perceptions of Training

Perceptions of training are listed in Table 4, which shows the percent of respondents who rated their training by using a scale from 1 to 5 to describe how adequate it was.

Insert Table 4 about here

When asked to comment on the value of their training in preparing them for their current job functions, psychologists generally gravitated toward the median response, with 24% stating that their training was less adequate, 31% rating it as adequate, and 33% rating their training as more adequate. Few took the extreme position, as only 6% thought their training was very adequate, while 4% thought it was not at all adequate. Perceptions of training were then compared to demographic information to determine whether training background might have an effect on the psychologists' perception of their training, using analysis of variance, at the $p = < .05$ level of significance. Again, the Scheffe test was used to control for unequal group sizes. No significant differences were found for certification, area of specialization, nor level of education. Table 5 shows the subject matter named by the respondents as the most useful part of their training, showing the percent cited for each. School psychologists most frequently listed training in testing (42%) as the most useful part of their training. Also, many (24%) thought that practicums were most useful, while others (8%) mentioned training in counseling skills. When asked to identify areas that were given insufficient emphasis in training, a wide variety of subjects were suggested. Table 6 shows the subject matter listed by the school psychologists in which there was not enough emphasis in their training.

TABLE 4

Perceptions of Training

Training Adequate?	Frequency	Per Cent
Not at all adequate	5	4%
Less adequate	31	24%
Adequate	40	31%
More adequate	43	33%
Very adequate	8	6%
(No response)	3	2%
TOTAL	130	100%

Inset Tables 5 and 6 about here

According to those surveyed, not enough emphasis was placed on counseling (19%), program planning (22%), and school systems (10%). A variety of other suggestions were made for training, including more emphasis on diagnosis of learning problems, practicums, testing, education, diagnosis of abnormality, mental illness, and behavior management. Some psychologists commented that more training in counseling young children and adolescents was needed, as well as more training in the application of test data.

Discussion

Methodological Difficulties

The return rate (39%) is much lower than the recommended rate of 50% to 70% (Babbie, 1973; Gay, 1981), but is not dissimilar to national surveys in the U.S., where the majority of returns were in the 30 to 40% range. Generally, it is more difficult to obtain membership lists and ensure returns with a national survey (Babbie, 1973). Poor returns may have been partially caused by the difficulty in identifying the population of school psychologists, and the cluster sampling technique subsequently used. However, the cluster technique was useful for identifying a national sample of school psychologists, and its use does not invalidate the methods of statistical analysis used. For statistical purposes, the cluster sampling method employed in this study is sufficient to allow analysis of the results, although the conclusions may be weakened (Babbie, 1973; Winberg & Goldberg, 1979). Low returns may also have been partially caused by respondents viewing the

TABLE 5

Most Useful Part of Training		
Subject	Frequency ^a	Per Cent
Testing	59	42%
Practicum	34	24%
Other (Administration, research, etc.)	15	11%
Counselling & Consultation	11	8%
Behavior Management	6	4%
Clinical	5	3%
Diagnosis of Abnormality	4	3%
Diagnosis of Learning	4	3%
Program Planning	3	2%
Total	141	100%

^an = 123 (Multiple responses were given.)

TABLE 6

Not Enough Emphasis in Training		
Subject	Frequency ^a	Per Cent
Program Planning	27	22%
Counselling	23	19%
Other	13	11%
School Systems & Organizational Psychology	12	10%
Diagnosis of Learning	7	6%
Testing	6	5%
Practicum	6	5%
Education	5	4%
Mental Illness	4	3%
Diagnosis of Abnormality	4	3%
Behavior Management	4	3%
Educational Psychology	3	2%
Personality Testing	3	2%
Prepare Inservices	3	2%
Practical Information	3	2%
Total	123	100%

^a_n = 112 (Multiple responses were given.)

daily activities list as too time consuming, since a large number (about 22) returned blank and partially completed questionnaires.

The low returns affected not only the confidence placed in the results, but the small sample that resulted caused difficulties when an attempt was made to divide it into groups for analysis. Thus, highly stringent methods of data analysis were used, to avoid making overgeneralizations from a small sample. This meant that some effects of the background variables were probably not detected. However, in any survey research, some compromise must be found between maximizing the information obtained and allowing for the limitations of the sample selected. Similarly, the lack of consensus over whether this was a typical day increased the need to substantiate the present findings through broader population sampling. However, these difficulties do not mean that the entire research project should be abandoned. Instead, it does seem better to use the data with caution, recognizing the limitations, but also recognizing that flawed results are better than no results at all (Sudman & Bradburn, 1983).

Daily Activities

The results of the daily activities analysis are very similar to the American research. For example, Lacayo et al. (1981) reported that assessment was the main activity for American school psychologists, with 39% of the day spent in assessment, while Canadian school psychologists occupied 38% of the day with assessment. However, Canadian school psychologists spent little time on the observation function, which would indicate a less broad focus for assessment than that depicted by the literature's ideal role model. One must conclude that, if this sample

can be viewed as representative of Canadian school psychologists, Canadian psychologists are largely preoccupied with assessment activities, in keeping with the traditional model of school psychology.

The consultation activity was similarly congruent with the Lacayo et al. (1981) results, with consultation ranking second on the list of important activities. One might infer that those activities which consume the most time are the most centrally important to the role, and, if not, too much time spent on less important job functions would produce conflict and role dissatisfaction (Kahn et al., 1981). The 'other' category of activities consumed a considerable amount of time when added together, but, taken individually, none of these activities occupied much of the psychologists' day. Unfortunately, driving - a mundane chore that would obviously be low in priority on any list of important role functions - nevertheless required a substantial portion of time, possibly causing some stress on role performance and job satisfaction. Although perhaps not directly pertinent to the role of school psychologists, personal time is of practical importance, necessary to a person's physical and psychological well-being, and thus the amount of time spent on personal activities could as as a stressor to influence role. The school psychologists appeared to have little time for personal activities.

Within limitations, this study does offer some indication of the unique aspects of the role of the school psychologist in Canada. Some conclusions can be formed about their role based on the list of daily activities, since these acts are the building blocks of the role model. School psychologists are depicted in a fairly traditional

assessment-oriented role model. They function primarily as assessment experts within the school system, working more independently and less often in the multidisciplinary team setting than the U.S. educational policy demands. Apparently, Canadian school psychologists may spend less time in developing broad assessment practices, learning-oriented interventions, and change agent functions than the ideal presented by some research literature. However, the activities described by this survey are quite similar in both content and time to the American study by Lacayo et al. (1981), which used basically the same method of obtaining the information. Perhaps, when opinions and subjective judgements are reduced, results that depict a more realistic description of the role of school psychologists differ somewhat from the ideal presented by opinion surveys and theoretical discussion papers. The present results suggest that Canadian school psychologists indicate a broad and varied array of job functions, but are primarily occupied with their traditional assessment role.

Contextual Factors

Because contextual factors may be an important factor in defining role, the demographic characteristics were examined thoroughly. Although few research surveys reported detailed demographic data, the present sample seems quite similar with respect to variety of specialization in training and the number of psychologists with teacher certification, but does seem somewhat different from other research samples on the basis of education (others reported only 1 to 2% Bachelor level), rural/urban setting (12 to 22% rural), and administrative position (7 to 9%) (Keogh et al., 1975; Meacham & Peckham, 1978; Evans,

Fisher et al., 1986). These differences could be interpreted either as resulting from a biased sample, or from real differences in a Canadian population.

Individual Characteristics

Role theory suggests that characteristics of the individual, such as type of education or standard of training, are contextual factors that may have an influence on role functions. For example, certification is a normative procedure that forces certain professional standards on the individual. Certification requirements varied from one province to another in Canada, with some provinces requiring no special certification for people working as school psychologists, so that only 73% of this sample (95 subjects) were certified psychologists. A fairly substantial portion of the respondents (52%) held teacher certificates, which would lead one to expect a closer understanding and involvement in classroom activities. Also, since almost 14% of the respondents were educated only to the Bachelor degree level, one would expect level of education to have some effect on the duties undertaken by this group. However, when unequal size of the groups was controlled, no significant differences could be found for certification, for specialization in training, nor for education. Training does not seem to have as dominant an effect on role function as one might expect. However, effects could be undetectable due to the small returns, since studies involving groups with few observations have little power to detect differences (Peckham et al., 1969).

Organizational Structure

Organizational variables, such as those which describe the status or position of the role in the organizational hierarchy, also (according to the literature) should have some influence on the content of that role. However, type of job content (whether one works alone, as a member of a group of psychologists, or as the only psychologist in a team of other professionals) seemed to have no effect on the specific job functions, despite the fact that almost thirty-one percent of the sample worked as the only specialist in the school division. One would expect that administrative position might have a significant effect on the daily activities of those school psychologists, since thirty-six percent of the respondents were in this position. The amount of time spent on testing, consultation, and 'other' activities was significantly affected by the disproportionately high number of administrators in the respondent group.

Organizational Properties

Finally, the physical properties of the organization apparently form a given determinant for role sending, by setting the environment for role enactment. Size and population of the school district in which the psychologist works could affect the form and content of the role in a qualitative as well as quantitative way, through both work load and distribution in space. Also, because 37% of the returns came from rural school districts, rural psychologists appeared to form a disproportionately high number in this sample. Based on the research literature, one would expect many role activities to vary as a result of the importance of urban-rural differences. However, type of school

setting had an influence on only two factors in this analysis - consultation and driving; and a third variable, 'other' activities, showed significance when the rural-urban groups were combined into larger groups. The addition of a third significant result when groups were made larger seems to indicate that influences on at least one of the demographic variables were not detectable due to the rather small sample group. A larger sample is needed to properly assess the effects of demographics.

Thus, some demographic variables did affect a few activities, including driving, 'other', and consultation, and it does seem logical that these particular activities would be affected. But why were other activities mentioned in the literature, such as assessment, not affected? Many of the articles that emphasized the importance of contextual factors were discussion papers rather than research studies (Ysseldyke, 1978; Bardon, 1982; Kratochwill, 1985). Those who did conduct actual research often used ratings and opinions, and further increased the inaccuracy of their results by using multiple t tests and multiple chi-square to analyze their results (Meacham & Peckham, 1978; Evans, 1979; Hughes & Clark, 1981; Fisher et al., 1986). The use of these techniques increased the probability of obtaining chance significant differences (Babbie, 1973). It would seem that perhaps the literature overemphasized the importance of contextual factors, and that the reality is more in line with role theorists, who recently gave contextual factors a lessor part in role determination. However, only a larger, more representative sample can resolve this question.

Role theory and the literature review suggest that background

variables should have some effect on the activities of school psychologists, although those literature results are somewhat questionable and some theorists minimize the effects of individual characteristics. Indeed, no differences could be found in the present results when daily activities were varied as a function of factors such as training background. However, it seems implausible that training background would have no effect on role activities, despite theoretical arguments to the contrary. In the present study, small or even medium amounts of influence could have been missed due to the fairly stringent methods used to analyze the results, combined with the relatively small sample size. In an effort to compensate for the limited returns, we may have failed to get the maximum amount of useful information from our data (Peckham et al., 1969). The daily activities of school psychologists did vary as a function of a few contextual factors, including administrative position, size of pupil population, and rural vs urban school district, but these results may be biased. The researcher must make judgements based on knowledge of the subject (Eckhardt & Ermann, 1977), and it seems logical that Canada may provide a unique setting for school psychologists, in that many of them work in settings in which the population is thinly and widely scattered, resulting in more time wasted on travelling, and fewer opportunities for consultation. Limited by the practical considerations of their environment, psychologists may have responded by focusing on their major role function - assessment. Also, a tendency toward education at the Masters level (with quite a few having qualifications below that level), as well as additional training in teaching, may tend to foster a more

narrow, child-oriented (rather than systems-oriented) approach. Thus, this study improved on previous research by thoroughly describing and analyzing the effects of demographic variables, a factor too often neglected. However, due to the sampling problems and the method of statistical analysis used, the question regarding the importance of contextual factors to the role of the school psychologist in Canada remains unanswered.

Training

Canadian psychologists appeared to be generally satisfied with their university training (adequate or better = 69.8%), although many useful suggestions were offered for additional courses needed. The general consensus seems to be that the role of the school psychologist requires a broad background in both assessment and the various aspects of psychology and learning, with a flexible training program that provides opportunity for application of learning, and practical experience. Training suggestions, which included courses dealing with practical as well as theoretical information, tended to support the creation of an applied educational psychology specialty. Universities and professional development organizers could probably benefit from the recommendations for training. However, training suggestions were extremely varied, lacking the conviction that would have been provided by large numbers. A larger sample is needed to provide better quality information.

The Daily Activities questionnaire used in this survey had both advantages and disadvantages in its design and content. The questionnaire used by Lacayo et al. (1981) was improved by providing more flexibility of time categories (15 minute intervals), a thorough

but brief list of activities, a sample activity form, and an opportunity for psychologists to express their perception of how well this particular day sampled their usual job functions. However, other improvements could be added. First, the instructions given for the Daily Activities portion should have included a suggestion that the respondent consult a daily diary or log, to aid in recalling the time spent, instead of just assuming that this would happen. Another improvement could be brief definitions of the activities, to reduce any possible variation in interpretations. Also, the question on typical day could have been missed by the respondents, due to its position immediately under the daily activities diary. The question could be made more salient by wider spacing and some unusual kind of type, such as capital letters, italics, or darker print. Similarly, the comments question at the end of the questionnaire should have been separated in some physical manner from the open-ended questions on training. Many of the comments that were elicited discussed training, as a response set by the earlier questions, instead of focusing on a wide range of topics. Perhaps it would have been better to replace the open-ended questions on training with structured choices, to avoid the selective recall and lack of experimenter control associated with open-ended questions in mailed surveys. However, the open-ended questions did offer variety of format and response. For the most part, the questionnaire seemed to be short, simple, and easy to read.

This study improved on recent research into the role of the school psychologist in a number of ways. Research into the role of the Canadian school psychologist was greatly needed to supplement American

research, to provide information about the Canadian role and how it is unique. Describing role model from the perspective of time spent in daily activities offered a less subjective image of the school psychologist than most previous literature had provided, although this picture was distorted by the poor returns. Despite the methodological difficulties, this study did provide some sort of base upon which to build future research in Canada, a first step towards describing the Canadian school psychologist, by showing the present state of the role model. Future research could use this study as a model for determining actual role. However, if documenting change and development is the goal, future studies should investigate both actual role and expectations simultaneously. Comparing actual to expectations in this way would allow a more theoretically complete study of role, a method that has not been properly attempted in the past. This study has further added to the body of knowledge on school psychologists in Canada by analyzing demographics in detail, and by suggesting training needs. Future Canadian surveys should investigate demographics and their relation to job functions, to resolve the questions raised in this study. Finally, better quality information is needed on training needs.

The study pointed out some of the methodological problems involved in Canadian research. The difficulty in contacting the population of school psychologists may suggest a weakness in their organization, a need for the stronger organizational structure that could be provided by a national association with national standards. In the meantime, perhaps higher returns could be accomplished by identifying a list of psychologists in a random sample of school divisions, then using a more

thorough cluster sampling technique. The entire sample of psychologists could then be randomly sampled, stratifying to ensure that every possible school division was included, and to ensure a proportional balance from rural and urban divisions. Random sampling within each division would also avoid an overabundance of administrators. However, this would be expensive and time consuming. Alternatively, the present survey could be followed by a more thorough sampling of one province, to obtain a larger research sample. In order to meet any or all of these recommendations, future surveys must make every effort to ensure a large sample.

Future researchers investigating the psychologists' role could benefit from the questions raised by this thesis. For example, what effect do contextual variables have on role? Role theory suggests that the organizational context forms a given setting into which the role participant must enter, so that the setting is an important variable to consider in studying role. However, researchers do not agree about how much importance should be attributed to contextual factors. Although all contextual factors are worthy of study, it would be particularly interesting to find out in more detail how the Canadian school psychologist is unique from the American counterpart, and to find out which differences can be attributed to being a school psychologist (as opposed to a clinical psychologist), and which can be attributed to a Canadian setting. One might ask, "Which is more important as an object of investigation: the Canadian school psychologist or the school psychologist in Canada?"

Another question concerns role definition in general. Who defines

the role of school psychologists, and who should have control over the shaping of their future destiny? Role theory gives equal importance to all three aspects of role definition: the organizational context in which an individual works, the expectations of other members of the role set, and the actual behavior of the role participant. None should be ignored in any investigation of role. Researchers have tended to overemphasize the investigation of expectations and neglect the study of actual behavior, yet more information is needed about the realities of the field. The question of who defines the school psychologist's role could be answered by simply asking them directly: "Whom do you perceive as the most influential person or factor involved in defining your role, and why?"

Further theoretical discussions and surveys are needed to elaborate how education and training, professional standards and associations, can influence school psychologists in Canada. School psychology appears to be a profession still in its formative stages in Canada, so that growth and development of the role provides a fruitful ground for future research.

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APPENDIX

School Psychologist Questionnaire



THE UNIVERSITY OF MANITOBA

Riva Bartell, Ph.D.
FACULTY OF EDUCATION
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Winnipeg, Manitoba
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April 26, 1985.

Dear School Psychologist:

Thank you for taking time from your busy schedule to respond to this national survey on the perceptions of the role and practice of school psychology in Canada.

I am the coordinator of the school psychology program at the University of Manitoba, Winnipeg, and a school psychologist myself.

The profession of school psychology has experienced an enormous and rapid expansion in recent years along with growing demands to meet the changing needs and expectations of children, schools, parents and the broader pluralistic Canadian society. As a result, the role of school psychologists has been increasingly defined and shaped by consumers of these services--teachers, principals, students--thus heightening the need for the profession to take stock and examine its own emerging identity.

The survey in front of you attempts to systematically examine the perceptions and the actual and desired role functions of school psychologists across Canada. It considers the perspectives of school psychologists (service providers) and those of principals and teachers (service consumers). This questionnaire has been mailed to the "school psychologist" of boards of education in Canada. In responding to and returning the completed questionnaire you ensure that your particular experience, circumstances and point of view will be taken into account in the comprehensive description of practice patterns, issues and challenges for school psychologists in Canada. At the same time, you are assured complete privacy as the questionnaire is totally anonymous.

The Planning and Research Branch of the Manitoba Department of Education is supporting this survey by providing use of their mail services. However, at all times I shall be solely and personally responsible for the careful handling of the information that you will provide. This information will be placed on computer tape at the University of Manitoba and once the accuracy of the tape has been verified, this questionnaire will be destroyed. The Ethics Review Committee of the Faculty of Education, University of Manitoba has given approval to this survey. ALL OF THE INFORMATION YOU PROVIDE IS CONFIDENTIAL. The results, in the aggregate form only, will be made available to professionals and academic researchers. I would be pleased to forward to you a summary report of this survey at your request.

You will notice that all the questionnaires in this package are marked with a matching code number. This will permit collating of responses from the same school boards. The numbered survey package that you have received was chosen randomly and does not in any way provide identifying information.

Feel free to change this number to some other six-digit number of your choice. If you do, please make the same change on all the other questionnaires in this package.

Please try to complete this survey as soon as possible and mail it back in the enclosed self-addressed, stamped envelope. It will probably take less than half an hour to complete.

Enclosed please find two envelopes addressed to "principal". Kindly forward these envelopes as promptly as possible to two principals of elementary schools (K-6) in your service area who meet the following criteria: (1) have served as principals in their respective schools for at least three years, and (2) whose schools have used school psychological services fairly regularly.

Please help to make the results of this survey truly representative of school psychologists in Canada. Your views are important.

Please mail the completed survey before May 30, 1985 if possible.

Thank you again for taking the time to complete and return this survey. You will have helped considerably.

Sincerely,

Riva Bartell, Ph.D.,
Associate Professor & Coordinator of
School Psychology Program.

SCHOOL PSYCHOLOGIST QUESTIONNAIRE

I. Background Characteristics

The following information is for statistical purposes only. Responses will be combined with others to provide group statistics only.

Please check () the appropriate response(s) for each question.

1. Age: under 25 ___ 26-35 ___ 36-45 ___ 46-55 ___ 56-65+ ___
2. Gender: Male ___ Female ___
3. Your current job title: _____
4. Years of employment experience as a school psychologist: _____
5. What is your highest earned degree:
B.A./B.Sc. ___ B. Ed. ___ M.A./M.Sc. ___ M. Ed. ___ Ph.D. ___ Ed. D. ___
Other (specify): _____
6. Area(s) of specialization in your training:
Special education ___ School psychology ___ School administration ___
Clinical psychology ___ Counseling & guidance ___ Development psychology ___
Other (specify): _____
7. Certification or licenses you hold:
Teacher ___ Psychologist ___ School Psychologist ___ Counsellor ___
Other (specify): _____
8. Approximate number of students enrolled in your school district: _____
9. Which of the following best describes the type of school setting in which you are employed:
Rural ___ Small town ___ Suburban ___ Urban ___
10. In your service area, do you work: Alone ___
With a team of psychologists ___ With a team of other professionals ___
(eg. social worker, speech pathologist, etc.)
11. Do you currently hold an administrative position? Yes ___ No ___
Please specify: _____
12. How many school psychologists are employed in your school division? _____

III. Daily Activities: The purpose of this section is to obtain a "feel" for a "day in the life of a school psychologist."

Please describe your job activities for yesterday (or your last working day). Provided below are response spaces divided into 15 minute intervals. An "Activity List" containing 16 possible activities of school psychologists and a sample "Daily Activities" sheet are provided below.

Time Spent on each Activity in One Day:

8:00 am -	-	1:00 pm -	-
8:15 -	-	1:15 -	-
8:30 -	-	1:30 -	-
8:45 -	-	1:45 -	-
9:00 -	-	2:00 -	-
9:15 -	-	2:15 -	-
9:30 -	-	2:30 -	-
9:45 -	-	2:45 -	-
10:00 -	-	3:00 -	-
10:15 -	-	3:15 -	-
10:30 -	-	3:30 -	-
10:45 -	-	3:45 -	-
11:00 -	-	4:00 -	-
11:15 -	-	4:15 -	-
11:30 -	-	4:30 -	-
11:45 -	-	4:45 -	-
12:00 -	-	5:00 -	-
12:15 -	-	5:15 -	-
12:30 -	-	5:30 -	-
12:45 -	-	5:45 -	-

Was this a typical day? _____ If not, explain. _____

Activity List:

- | | |
|---|--|
| 1. Assessment - test administration | 8. Counseling individual students |
| 2. Assessment - scoring, writing reports | 9. Group counseling |
| 3. Assessment - observation (in classroom, home, etc; of a student or instruction) | 10. Research |
| 4. Consultation - with teachers, school staff (individual or meetings) | 11. Program development |
| 5. Consultation - with other specialists | 12. Conducting in-services, workshops |
| 6. Consultation - with parents | 13. Attending workshop, in-service |
| 7. Classroom intervention - direct teaching, classroom management demonstration, etc. | 14. Driving from one educational facility to another |
| | 15. Lunch, coffee, personal time |
| | 16. Other |

(Sample Activity Form)

Time Spent on each Activity in One Day:

8:00 am -		- 1:00 pm -	
8:15 -		- 1:15 -	
8:30 -	} Consultation with teacher	- 1:30 -	} test
8:45 -		- 1:45 -	
9:00 -		- 2:00 -	
9:15 -	} observing a child in a classroom	- 2:15 -	} administration
9:30 -		- 2:30 -	
9:45 -		- 2:45 -	
10:00 -		- 3:00 -	
10:15 -		- 3:15 -	} preparing information
10:30 -	} coffee	- 3:30 -	
10:45 -		- 3:45 -	
11:00 -	} Consultation with the social worker	- 4:00 -	} handout for teachers
11:15 -		- 4:15 -	
11:30 -		- 4:30 -	
11:45 -		- 4:45 -	
12:00 -	} lunch	- 5:00 -	
12:15 -		- 5:15 -	
12:30 -		- 5:30 -	
12:45 -		- 5:45 -	

IV. Please respond to the following questions:

1. How adequately did your training prepare you for your current job functions? Circle the most appropriate number.

Not at all adequately 1....2....3....4....5 Very adequately

2. What was the most useful part of your training? _____

3. What area(s) was given insufficient emphasis? _____

4. Comments _____
