ABSTRACT

Title of thesis:	TIME USE STUDY OF URBAN SCHOOL PSYCHOLOGISTS
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The current study employed Eitel et al.'s (1984) observation and self-recording methodology to measure the time use of four school psychologists in an urban school district across two school days. Knowledge of the daily time psychologists spend in key activities and domains provides information about how school psychologists supply urban children with quality psychological services.

Results indicated that the Logistical and Other domain consumed more time (54.9%) than the Assessment domain (29.9%), unlike Eitel et al.'s (1984) study. In contrast, the Consultation, Counseling and Meetings domain occupied a modest amount of the psychologists' time (6.2%). Most activities in the "Other" category (35.6%) consisted of time spent waiting for others (lag time), while less than 1% of the psychologists' time was spent in essential intervention or professional development activities. Results have implications for the implementation of building-based assignments, a consultation model, and role expansion.

TIME USE STUDY OF URBAN SCHOOL PSYCHOLOGISTS

by

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Chapter 1: Introduction

Rationale

Urban school districts have long been plagued with difficulties that impede them from providing a quality education for children. The lack of financial resources, inadequate working conditions, lack of prereferral interventions, and violence are just a few of the factors that contribute to the inability of urban schools to provide adequate learning opportunities for children (Mandlawitz, 2003; Setzer, 1992). Along with affording children with a good education, urban schools are responsible for delivering adequate psychological services to children from populations that are at-risk for performing poor academically in school, a group which comprises a substantial percentage of students in urban schools (Mandlawitz, 2003). These children include those with disabilities, those from low-income families, English language learners (ELLs), and ethnic minorities (Mandlawitz, 2003). Since these children are the ones who are most likely to fall short of academic expectations and to require the best psychological services, it is imperative that we address the issues that urban schools confront in the provision of psychological services to children.

Accordingly, through a collaborative relationship with an urban school district in the area, the administrators of the urban school district asked that consultants from the University of Maryland assist them in enhancing their psychological services. They recognized that their school district had been facing a plethora of problems in supplying quality psychological services to children, particularly in meeting IDEA requirements for timely assessments. It was agreed that an examination of the time use of the school psychologists, using Eitel, Lamberth, and Hyman's (1984) observation methodology,

would assist the district in addressing the issue of how to provide services most conducive to learning effectively in school. With data about the school psychologists' time use, the district would be informed about supports and structures to enhance based on both the psychologists' productive use of time and challenges that lead to lack of productivity. Consequently, the district would be better equipped to augment these supports and structures to improve psychological services.

School psychologists in urban school districts are expected to provide quality psychological services to urban children, quality psychological services being those listed in the National Association of School Psychologists' blueprint for training and practice (Ysseldyke, Dawson, Lehr, Reschly, Reynolds, & Telzrow, 1997). However, apart from lack of resources, these school psychologists also encounter stressors such as too much paperwork, backlogs of timely assessments, and compliance issues (Kaplan & Wishner, 1999) that make it difficult for them to deliver quality psychological services to urban children. Furthermore, stressors could be due to "case overload, insufficient evaluation time...working conditions, lack of professional respect and unrealistic expectations by others with regard to the work of school psychologists" (Kaplan & Wishner, 1999, p.61). It is evident that school psychologists in urban school districts may face environmental problems beyond their control. While they often possess few resources and little support, they are serving the children most in need; thus, it is critical to address the role of the school psychologist. Knowledge of how school psychologists function within an urban school district can supply information that will help to develop support systems for them to combat challenges they confront. For example, if an urban school district is informed about the lack of material resources required for test administration, the district can take

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measures to ensure that these resources are in place for the school psychologists. These added resources and support systems will then assist psychologists in enhancing their psychological services.

The role of the school psychologist has traditionally centered on assessment (Farling & Hoedt, 1971), particularly in urban schools, where the primary daily job responsibility of urban school psychologists is assessment (Hughes & Clark, 1981). A school psychologist assuming this role likely spends a majority of time on assessment activities, such as test administration, classification, and report writing. These assessment activities, though essential and often in response to legal mandates, may limit the time available to perform other psychological services that may be more beneficial to children. Unfortunately, urban school psychologists do not appear to have the opportunity to engage in other activities, for the continual rise in caseloads require them to remain in an assessment role (Kaplan & Wishner, 1999).

If possible, urban school districts should take measures to support their school psychologists so that the psychologists are afforded with an opportunity to provide children with high-quality psychological services. First, however, administrators need to know what their school psychologists are doing, for they do not know what actually transpires during an urban school psychologist's day. Traditionally, time use measurement of personnel has been connected to economic concerns and has offered information for program evaluation and cost-benefit analysis (Wilson, 2000), as well as budgeting for services (Lichtenstein & Fischetti, 1998) and providing supervision. These factors are important to consider, for urban school districts frequently confront fiscal difficulties; hence, knowledge of time use would assist them in budgeting adequately for

psychological services, leading to improved funding for psychological services. Since school psychologists are the principal providers of psychological services, knowledge of the time use of individual school psychologists is imperative (Wilson, 2000). This knowledge will enable administrators of the school system to develop support and augment resources necessary to achieve optimal functioning by their school psychologists. As Eitel et al. (1984) noted, though "there is a need for more adequate evaluation of outcome, research on process variables also needs to be improved" (p.329).

Time use measurement not only benefits school systems, but also school psychologists themselves, assisting them in dealing with professional issues such as accountability, productivity, and role expansion (Eitel et al., 1984). First, self-monitoring their time use enables school psychologists to allocate more time to activities in which they should devote more time and less time to the activities in which they should devote less time. For example, if psychologists learn that they spend little time engaging in a critical service such as direct intervention, they may budget their time use so that they allocate more time to this service. Accountability is key when evaluating psychological services, since knowledge of time use can help school psychologists learn how to best manage their time to provide enhanced psychological services. Moreover, school psychologists in urban school districts are usually called upon to present evidence of their productivity in terms of number of psychoeducational evaluations completed.   However, psychologists who are low in productivity—those unable to fulfill the required number of evaluations per week—may have legitimate reasons for their inability to meet criteria. Measuring time use may reveal the causes for lack of productivity and help administrators understand psychologists' productivity in other domains.

Knowledge of time use of school psychologists, however, may present some drawbacks for and lead to unfavorable assumptions about school psychologists. Lichtenstein and Fischetti (1998) warn that knowledge of a considerable amount of time spent on an evaluation may lead to assumptions about the squandering of time by school psychologists, while knowledge of a small amount of time spent may lead to more assignment of assessments. Furthermore, they point out that more time spent on evaluation does not automatically imply quality of the evaluation, for the school psychologist who spends more time on evaluation may be unable to engage in other functions that are just as important. Despite these potentially negative perceptions of school psychologists' functioning, time use measurement can benefit a school psychologist. Because school psychology as a field is currently moving towards a broader role definition, an understanding of time use can potentially uphold the need to expand the school psychologist's role, particularly if the school psychologist is found to be performing several functions efficiently.

The purpose of the present study is to determine the time use of school psychologists in a particular urban school system who primarily serve an assessment role. Hence, the present study is an action research project designed to produce data that may offer insight to assist the urban school district's efforts in augmenting psychological services. To accomplish this, the researcher will employ Eitel et al.'s (1984) observation methodology from their study on time utilization of school psychologists in an urban setting.

Statement of the Problem

It is evident that knowledge of time use of school psychologists in an urban school district is vital and can contribute to the enhancement of psychological services. However, in this district, it was not apparent what occurs in a school psychologist's day that may play a part in the difficulty delivering quality psychological services. Therefore, one must record the daily activities of school psychologists to investigate how they use their time, as initially examined by Eitel et al. (1984) 20 years ago. The present study will employ Eitel et al.'s observation methodology to measure the time school psychologists in this urban school district spend on various activities. Additionally, the present study will record the nature of activities that do not appear to fall under specified categories. Thus, this study seeks to answer the following research question:

- How do school psychologists in a particular urban school district spend their day, in terms of key activities and domains?

Definition of Variables

This section defines the variables used in the above research question:

- **Key activities** are the primary daily functions of a school psychologist, which comprise activities such as assessment activities, consultation activities, counseling and other direct interventions, conferences and meetings, and research and program evaluation.

- **Domain** is defined as the four broad areas set forth by Eitel et al. (1984) that encompass these activities: (1) Assessment; (2) IEP; (3) Consultation, Counseling, and Meetings; and (4) Logistical and Other. The "Other" category is one of the

categories of time use that does not fall into one of the predefined activities

delineated above.

Chapter 2: Review of the Literature

Introduction

This review will first examine three chief methods of measuring time use (surveys, time diaries/logs, and observations) and then present studies about the time use of school psychologists in schools. It will organize these studies with respect to assessment role and type of school system in which the studies were conducted: all school system types; comparisons of urban, suburban and rural school systems; and urban school systems. Due to the lack of studies conducted solely in rural school systems, this review will not examine exclusively rural studies. There are also no studies that compare urban and suburban school systems. Moreover, this review will serve to validate the reasons for measuring time use of school psychologists in urban school districts and examine differences in time use between school psychologists in urban and non-urban school districts.

To achieve the above goals, the literature selected for inclusion in this review consists of both unpublished and published studies representative of the application of time use research in schools. The selected unpublished and published studies are deemed "representative" if they fit three criteria: utilized one of the three time use methodologies (survey, time log, or observation), occurred in a school, and measured some aspect of the time use of school psychologists performing comparable functions. First, while other measures of time use are utilized in schools, the vast majority of time use research in schools uses one of these three methodologies, so only these methodologies are included. Observation studies should have incorporated both a self-report and an observation measure—the observation data serves as validation for the self-report data—for a dual

approach will be used in the design of the present study. Second, location of the study is

clearly important, for an individual may behave differently in various settings; thus, the

studies included must have taken place in schools, to accurately reflect the school

psychologist's time use. Time use refers to various functions performed and not various

roles undertaken, although studies that discuss both role and function are included in this

review.

<div align="center">*Time Use Methodology*</div>

As noted above, time use studies in schools employ three types of methodologies

for measuring time use: (a) surveys that require participants to estimate the time spent on

predefined activities; (b) time diaries/logs that require participants to self-record their

activities and the duration of these activities; and (c) direct observations that require an

outsider to observe live a participant performing activities in the school setting (Juster,

1985). In this review, a brief section will describe each of these methodologies.

Survey Methodology

The first methodology, the survey, typically takes on a questionnaire format that

requires the participant to answer a succession of questions concerning the frequency and

duration of specific activities (Juster, 1985). Though the most prevalent methodology for

measuring time use, surveys are the least reliable measure, for people often overestimate

their actual hours worked when asked to estimate daily and weekly time spent on

activities (Robinson & Godbey, 1999) and may only recall days when the activities being

surveyed were the most salient (Juster & Stafford, 1991). As a consequence, the days not

recalled will not be represented on the survey—the loss of this data can strongly impact

accuracy of an individual's actual time use. As Robinson and Godbey (1999) have noted,

survey estimates are actually very complicated, for they require the respondent to: (a) possess the same definition of categories as the researcher; (b) distinguish the primary activity surveyed from secondary activities that may occur simultaneously; (c) recall every instance of the activity that occurred; (d) recall the duration of each activity that occurred; (e) publicly describe the duration of the activity; and (f) remain impartial to societal norms that dictate the "normal" person's time use. It does not seem likely that respondents will achieve all these tasks without some uncertainty or inaccuracy, resulting in unreliable time use estimates.

Moreover, the self-report format of the survey poses several problems, such as recall abilities, limited reporting, and presentation concerns. Since surveys do not require respondents to report their daily time use chronologically, it is possible that essential activities may be overlooked and only the most salient activities will be recalled. Respondents may also only report what is questioned on the survey—the survey may guide their answers without offering them the opportunity to record significant activities that are unquestioned. Most surveys, for instance, are often in the form of a checklist and require participants to provide data about the frequency and duration of particular activities (Harvey & Pentland, 1999). Additionally, it is common knowledge that the self-report format may cause respondents to alter their answers due to presentation concerns. Respondents may wish to present themselves in a positive light; hence, they may overestimate time spent in an activity that they believe they should be performing (Robinson & Godbey, 1999). Thus, surveys may not reflect the actual behavior being performed by a respondent.

Another potential problem with surveys is their definitions of categories: if a category encompasses several activities, a respondent will be unable to provide a specific and accurate account of his or her activities. Activities of brief duration or routine activities that are critical portions of an individual's time use may disappear into a larger, more general category, not allowing researchers to capture the exact time use of an individual. If a survey is designed to incorporate narrowly defined activities, the sheer number of these activities will add to the length of the survey and deter participants from completing the survey (Harvey & Pentland, 1999). Understandably, surveys have frequently been used in spite of their shortcomings, because they are the cheapest and least invasive measure and are practical to carry out in schools. However, due to their unreliability and inaccuracy, surveys should be used only to determine the time use of activities that are frequent and consistent (Juster, 1985). It is unfortunate that most time use research conducted with school psychologists has used surveys—obviously, a school psychologist's activities can vary greatly on a day-to-day basis and may not be fairly represented on a survey.

Time Diary/Log Methodology

The second methodology for measuring time use, time logs or diaries, request the respondent to recall his or her activities during specified time periods on a particular day. It breaks down the time period to facilitate recall of daily time use (Robinson & Godbey, 1999), instead of requesting a respondent to recall a vague time period as on a survey. Alternately, respondents may record for several days or weeks, perhaps allowing the researcher the opportunity to detect a pattern in the individual's use of time. Time diaries provide detailed and accurate data and are much more reliable than surveys.

The standard time diaries entail keeping a log of one's activities in sequence from the beginning to the end of the day, recording the start and end times of activities either immediately afterward or at the end of the day or week. As expected, the individual is simply asked to write down the activities performed in his or her own words, without any assistance from the researcher (Ziegler & Michelson, 1981)—the researcher later codes each activity into various categories for analysis. The open-endedness of the time diary allows for infinite possibilities of behavior that offer more insight to what the individual is doing, as well as supplying contextual information about the activity performed (Harvey & Pentland, 1999). This standard form of time diary is a called the mail-back diary, for the researchers usually mail the diaries to participants and ask that they be completed on the date specified. Time diaries can take two other forms: a telephone diary, in which the researcher asks the participant to recount the previous day over the telephone, and a personal diary, in which an interviewer conducts home visits to obtain retrospective diaries for the previous day ("yesterday" diary) and leaves behind diaries for participants to complete for the subsequent day ("tomorrow" diary) (Robinson & Godbey, 1999). The yesterday diary's advantage is that it allows the interviewer to ensure that the participant accounts for each time period, while the tomorrow diary allows the participant to record his or her activities in real time. Of the three time diary forms, the mail-back diary (in the "tomorrow" format) is the form used in the studies presented later in this section.

The reliability and validity of time diary forms have been well demonstrated in time use literature. Studies have shown that time diaries are the most reliable when data is recorded immediately after an activity and during weekdays (Juster, 1985). The

reliability of time diaries is high among all three of the time diary forms described above, and a high correlation exists between the tomorrow and yesterday diary approaches (Robinson & Godbey, 1999). Research investigating time use methodology concludes that the time diary is the only valid measure of time use over the day (Juster & Stafford, 1991). Several studies support the validity of the time diary methodology. For example, Robinson conducted a study utilizing a telephone interview to ask respondents how they spent a random hour in their day, even though they had previously completed a time diary for that day. Results revealed that a high correlation existed between what respondents reported for the random hour and the diary entry for that hour (Robinson & Godbey, 1999). Other studies (Eitel et al., 1984) used a supplementary form of time use measurement such as observation to confirm diary estimates.

In spite of the validity and reliability of time diaries, when individuals wait an extensive length of time to record their activities, accuracy is called into question due to recall abilities. If the recall period for weekday estimates of time use is more than 24 hours, then time diaries can be inaccurate (Juster & Stafford, 1991). Time diaries may also be inaccurate when an individual is simultaneously engaging in multiple activities and is uncertain which to record (Wilson, 2000). Respondents tend to record primary activities or activities of longer duration, unlikely to note those that are "passive, routine, and/or punitive" (Ziegler & Michelson, 1981, p.327). Thus, the time diary is effective in recording time consuming activities, but unlikely to capture brief ones, which presents an imprecise view of what activities individuals perform and how much time an activity consumes. In a school psychologist's varying schedule, many vital activities may be of brief duration and should be recorded to attain a thorough assessment of the

psychologist's allocation of time. Thus, the open-endedness of time diaries, while an advantage, does not provide guidance for the respondent to record brief activities that are notable contributions to their time use patterns.

Furthermore, the open-ended format can lead to variability in recording, creating problems in diary analysis. Respondents differ in the manner of recording their own behavior, for some participants are exceedingly detailed while others are meager in their entries (Robinson, 1999). This lack of consistency seems an obstacle in coding and analysis of the diaries. Additionally, the encumbrance of learning how to use the time diary and keeping such a detailed account of one's activities may deter respondents from filling out every entry or completing the entire time diary (Lawton, 1999). Open-endedness may also create problems when the researcher translates the recorded activities into codes for data analysis: error may be possible if the researcher and respondent have differing definitions on the term(s) used to describe an activity. Lastly, time diaries must be collected for an extensive period of time, in case of atypical days or weeks that distort the individual's time use. Moreover, they should be collected at appropriate times of year, according to the population and behavior of interest (Harvey, 1999). For brief time use research, Niemi (as cited in Harvey) declared the average time of year for time diary collection to be from October to November.

Apart from inaccuracy, time diaries may also be biased, in terms of participants: busier individuals are more likely to complete time diaries than less industrious individuals (Robinson & Godbey, 1999). Therefore, studies employing the time diary methodology draw conscientious workers, whose time use estimates may reflect more productive work time and less idle time, making overall time use appear more productive

than warranted. Despite the possible disadvantages of inaccuracy and bias, time diaries

can dependably capture the school psychologist's use of time.

Observation Methodology

The third methodology, observation, requires a disinterested spectator to observe

live a participant carrying out his or her activities in the school setting. Observation is

the most reliable and valid type of methodology in measuring time use (Juster, 1985). In

addition, observation is normally conducted simultaneously with time diaries completed

by individuals being observed to provide verification of time use (Robinson & Godbey,

1999). Furthermore, Ziegler and Michelson (1981) asserted that it is easier to collect

self-report data in "certain urban settings," but observations are crucial for validation of

self-report. Clearly, observation by the researcher or videotape can offer direct evidence

of time use, without concerns about inaccuracy or presentation by the individual whose

time use is being recorded. Hence, the advantage of observation is its objective nature:

any observers who are observing the same individual should interpret that individual's

activities in an equivalent manner (Lawton, 1999). Therefore, observation is the most

suitable methodology for capturing an individual's true behaviors. Observers can also

note subtle behaviors and activities such as nonverbal behaviors and brief activities

integral to the study that self-report data may not include (Ziegler & Michelson, 1981).

Like the time diary, observation can make note of subjective dimensions of behavior

(such as attitudes or preferences) that enrich the conclusions generated about the behavior.

Therefore, observational data are generally much more thorough than self-report data.

For instance, Szalai (1972) noted that observation can verify whether activities are

alternating rather than simultaneous, or consecutive rather than concurrent, while time

diaries as described earlier lack this capacity. In addition, individuals being observed

need not recall their time use as in surveys and time diaries, and lengthy observations

may "give much dynamic insight into where these various activities fit into the overall

lifestyles of the individuals being observed" (Robinson & Godbey, 1999, p.62).

A main concern with observation, however, is reactivity: participants often

change their behavior when they are aware they are being observed. Observation

necessitates that the observer be in physical proximity to the observee: the observee is

under careful scrutiny and can become self-conscious. If observation occurs

simultaneously with a self-report method such as the time diary, the observer may have

an effect on the observee's recall of the activities being performed in two ways. Either

the observee has better recall of the activity due to the presence of the observer rendering

them self-conscious, or the observee is not as meticulous in recalling and recording the

activity due to the realization that the observer is also recording (Ziegler & Michelson,

1981). Even prior to the onset of research, soliciting participants for an observation study

is extremely difficult, for participants rarely consent to be observed due to feelings of

discomfort (Harvey & Pentland, 1999).

Another concern with using observation is the excessive cost and complexity in

implementation in terms of human time or observation equipment (Juster, 1985); thus,

observation is typically impractical to use in schools and it is not surprising that few

studies have used this methodology. Not only is observation exceedingly time

consuming, but observers must also be adequately trained in making the required

observations. However, observation should not be replaced by self-report methods, for

observation can confirm self-report data and these two methods may be used in concert to portray a more comprehensive picture of an individual's time use.

<center>*Time Use Studies in Schools*</center>

The following section presents studies conducted using the three methodologies above, the studies depicting the time use of school psychologists in schools. As explained in the introduction, studies are grouped based on assessment role and the type of school system examined (all school system types; comparisons of urban, rural, and suburban; and urban) and are presented in chronological order.

All School Systems Types Studies

There have been a plethora of studies about the time use of school psychologists conducted across all types of school systems (rural, suburban, and urban), and results suggest that school psychologists' spend most of their time in assessment. As early as 1971, Farling and Hoedt carried out a national survey of 3,138 school psychologists to explore numerous issues of and patterns in school psychologists. Their overall results on role and function showed that school psychologists' time was devoted predominantly to psychoeducational evaluations, report writing, and parent-teacher conferences. Over 50% of the school psychologists also noted that individual counseling was a primary role. School psychologists spent much less time in consultation activities (18% described themselves as personally performing these activities), and half of the school psychologists spent no time in regular school program evaluation, research, or group testing. Concerning their ideal role, the majority of school psychologists desired to spend more time in consultation activities.

These results indicating the substantial amount of time spent in assessment activities, small amount of time spent in research, and preference for more time spent in consultation activities are supported by similar findings in the succeeding studies presented. However, while Farling and Hoedt's (1971) study was exceptionally comprehensive, it reported activities school psychologists found the most time-consuming, but not how much time they spent per activity.

Keogh, Kukic, Becker, McLoughlin, and Kukic (1975) interviewed 58 school psychologists in California about the number of hours they spent per week on 13 activities: the author learned that the majority of the school psychologists' time was spent on testing (38% spent 6-10 hours) and report preparation (50% spent 1-5 hours) and comparable assessment activities. The least amount of their time was spent on research (80% spent no time), supervision (91% spent no time), and parent education (69% spent no time).

Also specifying activities, Winikur and Daniels (1982) sought to determine the percent of time New Jersey school psychologists devoted to eight activities or functions, operating under a team decision-making model. These functions were as follows: diagnostic work, teacher consultation, curriculum development, administration, in-service training, parent counseling, and other. Moreover, this study was notable in its longitudinal coverage, surveying the years 1973-1974, 1974-1975, and 1977-1978. Results revealed that in each of the three years surveyed, diagnostic work consumed the bulk of the school psychologists' time—even in a state with a mandated team-based model, the school psychologist's role has not evolved and remained psychometric in nature.

Goh, Teslow, and Fuller (1981) further investigated the assessment activities of 274 school psychologists in various geographical regions across the United States, asking about years of experience, training level, educational population served, assessment instruments used, and percentage of time allocated to assessment. They found that school psychologists on average spent 47.9% percent of their total work time in assessment, and this percentage was consistent across each of the geographical regions sampled. Moreover, their study revealed that doctoral school psychologists spent less time in assessment than non-doctoral school psychologists, while years of experience had no impact on time consumed by assessment.

Anderson, Cancelli, and Kratochwill (1984) found similar results: they asked 145 school psychologists from 33 states and the District of Columbia about their about professional orientation and activities, social-emotional assessment activities, and demographic information. Results indicated that approximately half of the psychologists spent 41-80% of their time in assessment, while 73% of the psychologists spent 0-20% of their time performing research. Clearly, the findings from these five studies imply that the school psychologist's primary role in schools is performing assessments, with little involvement in research, although training level may affect time devoted to assessment.

Smith (1984), in a comprehensive nationwide study, gathered information from a sample of 962 school psychologists to determine their demographic characteristics, actual and desired activities, and actual and desired populations served, using the National School Psychology Questionnaire (NSPQ) devised specifically for the study. To preclude possible biases that may ensue from belonging to professional psychology organizations, Smith first attempted to recruit school psychologists who were members of

departments of education, before turning to membership lists of state school psychology organizations and subsequently, NASP membership. Unlike all the preceding studies mentioned, Smith's study was the first that made efforts to form a more representative sample of the "average" school psychologist, rather than drawing a sample from members of professional psychology organizations.

Results revealed that in order from the most time spent to the least, assessment activities were first, followed by intervention, consultation, and research. Assessment activities consumed 54% of school psychologists' time: intellectual assessment consumed 26% of their time, report writing consumed 15%, personality assessment consumed 9%, and student observation consumed 6%. Thus, Smith's (1984) study confirms the findings of prior studies that identified assessment as the category that occupied the majority of school psychologists' time. Next, intervention activities consisted of student, teacher, and parent counseling, child-study meetings (IEP meetings), and program development, these activities totaling 23% of school psychologists' time. Student counseling (7%) and child-study meetings (8%) consumed the most intervention time, while program development (2%) occupied the least. The third-ranked category, consultation, occupied 19% of the school psychologists' time, and consisted of activities such as teacher consultation (8%), parent consultation (6%), and in-service activities (2%). Finally, consistent with several of the previous studies discussed, research activities occupied the least amount of time, merely 1%.

Furthermore, Smith's (1984) results suggested that school psychologists desired to spend less time in assessment and more time in intervention, consultation, and research. However, even if time devoted to assessment activities decreased and time devoted to

research increased, school psychologists would still continue to spend the most time in assessment and the least time in research. Smith also found slight regional differences among the school psychologists: school psychologists in the Southeast spent the most time in assessment activities (63%), while spending the least time in intervention activities (17%); school psychologists in the Northeast spent the most time in intervention (27%) and the least time in assessment (48%); and school psychologists in the Northeast (10%) and Western (9%) regions spent the most time in student counseling.

From these results, Smith (1984) concluded that since school psychologists in the Northeast have the most experience, perhaps years of experience determine involvement in assessment. That is, the more experience a school psychologist possesses, the less time she or he spends in assessment. This assumption, nevertheless, does not hold true for urban psychologists, who remain in a narrow assessment role despite their amount of experience (Hughes & Clark, 1981). Since Farling & Hoedt (1971), Keogh et al.(1975), Goh et al. (1981), Winikur & Daniels (1982), Smith, and Anderson et al.'s (1984) studies were conducted from the early seventies to mid-eighties, it might be expected that the current emphasis on broad roles for school psychologists would reveal different use of time. However, the more recent studies examined below continue to show the assessment role as the primary role assumed by school psychologists.

Lacayo, Sherwood, and Morris (1981) conducted their survey in the same time frame as the above studies, but they designed an "activity questionnaire" to determine the daily activities of school psychologists. Three hundred thirty-three respondents, all NASP members, were asked to describe their activities for one full day from the previous work week by indicating the activity they were performing in each 30-minute time

interval of that day. They received a list of 13 activities with corresponding codes and were instructed to enter these codes in the appropriate 30-minute time intervals. This activity questionnaire resembles a time log, for school psychologists were self-recording their activities and duration of activities not more than five days after performing them.

Lacayo et al. (1981) found that psychoeducational assessment consumed most of the psychologists' time (one-fifth of the psychologists' day), followed closely by report review and report writing, which consumed 18% of their time. In contrast, research and program evaluation occupied very little of the school psychologists' time (2%). In addition, the 13 categories were grouped into five domains: assessment, consultation, counseling, nondirective services, and noncategorical (driving and lunch or free time). Lacayo et al. discovered that assessment occupied almost 40% of the school psychologists' time; however, in contrast to the earlier survey studies presented, they noticed that consultation activities occupied just as much time (33%). Finally, Lacayo et al. noted that a relatively high percentage of their respondents recorded giving a workshop as one of their activities for the selected day. They pointed out that assessment was not the principal function of the school psychologists. In spite of their claims, Lacayo et al.'s results indicate that assessment occupied the highest percentage of the school psychologists' time and thus was the major function. Therefore, their findings converge with those of Anderson et al. (1984), Farling & Hoedt (1971), Goh et al. (1981), Keogh et al. (1975), Smith (1984), and Winikur & Daniels (1982), whose results showed assessment to be the primary function.

In a more recent study, Roberts and Rust (1994) examined roles and functions of school psychologists to determine differences between reported time spent on activities

of school psychologists in two states, Iowa and Tennessee. A total of 147 psychologists

from urban, suburban, and rural areas responded to the questionnaire. Unlike the

previous studies discussed, Roberts and Rust used a specially designed instrument for

measuring time use: the National School Psychology Questionnaire II-Revised, which

asks respondents to rate the actual and desired percentage of their time spent on particular

activities in the four domains of assessment, intervention, consultation, and research.

Results from the questionnaire revealed that Tennessee school psychologists spent

the majority of their time in assessment, while Iowa school psychologists balanced their

time among five functions (assessment, intervention, consultation, prereferral, and

curriculum-based assessment). Nonetheless, Iowa school psychologists spent more time

in assessment than in the other functions. School psychologists in both states reported

the same amount of time spent in prereferral; however, Iowa psychologists spent more

time in curriculum-based assessment. Roberts and Rust (1994) concluded that though

some school psychologists are moving towards broader roles, others continue to spend

the majority of time in assessment. Thus, while recent research emphasizes changing

roles for the school psychologist in certain states, the traditional role still holds in other

states, so measuring time use may justify the need to shift towards broader roles.

In another study on roles and functions of school psychologists, Huebner (1993)

drew from a sample of NASP members who worked at secondary schools, for he

hypothesized that psychological services at secondary schools differ from those at

primary schools. The questionnaire asked 173 psychologists about their demographics,

role and functions, job satisfaction, and training needs. Their role and functions

encompassed the percentage of time they spent on 10 various activities:

administration/supervision, psychological assessment, staffing, consultation, individual counseling, group counseling, family counseling, program development, research, and other.

Huebner (1993) found that school psychologists spent the most amount of time in assessment (36%) and consultation (15%) and the least amount of time in family counseling (2%) and research (0.5%). As in the seventies and eighties, assessment remained the predominant function and research remained the least common function. However, Huebner noticed that the sum of time spent in interventions such as consultation and counseling (33%) was approximately equivalent to the time spent in assessment. From this data, it appears that secondary school psychologists are balancing their assessment and intervention roles. Huebner's study is noteworthy in its outlining of broad categories.

Even more recently, Hosp and Reschly (2002) surveyed 1,056 school psychologists who were NASP members to find out whether differences existed in their demographic characteristics, roles, job satisfaction, assessment practices, and system reform beliefs with respect to geographical region. The roles category included functions of the school psychologist; the school psychologists were asked how many hours per week they spent on five different activities (assessment, intervention, consultation, research, and eligibility services) and how many hours per week they preferred to spend on these activities. Results showed discrete differences in the hours devoted to psychological assessment among the nine geographic regions, the hours ranging from under 19 hours per week (East South Central) to over 26 hours per week (Northeast and Mid-Atlantic). These results are different from those of Smith (1984), who reported that

school psychologists in the Southeast spent the most time in assessment, while those in the Northeast spent the least amount of time in assessment. On the other hand, Hosp and Reschly's use of nine geographical regions rather than the five used by Smith (1984) may have impacted the results, allowing for more specificity and likely resulting in more accurate findings.

Like previous studies presented, Hosp and Reschly (2002) discovered that in each geographical region, school psychologists spent at least one-half of their time in assessment activities. Similarly, in every geographical region, between one-half and two-thirds of school psychologists' time was spent determining children's eligibility for special education. Differences also existed among the geographical regions on time spent in direct interventions, which occupied 25% or less of school psychologists' time: regions that spent the most time in psychoeducational assessment spent the least amount of time in interventions, and vice versa. School psychologists in the Middle-Atlantic region spent the most amount of time in direct interventions. No regional differences existed among time spent in the categories of consultation and research: consultation occupied about 25% of the school psychologists' time (6.6 hours per week), whereas research occupied 2.5% (1 hour per week) of their time. However, Hosp and Reschly distinguished between the type of consultation conducted, which was unseen among previous studies and may have been due to the recent emphasis on the consultation role of the school psychologist. They discovered that problem-solving consultation consumed 16.5% of school psychologists' time, while systems/organizational consultation consumed 6.5% of school psychologists' time.

Hosp and Reschly's (2002) results indicating the small amount of time spent in research and the extensive amount of time spent in assessment also mirrored the findings from most of the studies described earlier (Anderson, Cancelli, & Kratochwill, 1984; Farling & Hoedt, 1971; Goh, Teslow, & Fuller, 1981; Huebner, 1993; Keogh, Kukic, Becker, McLoughlin, & Kukic, 1975; Smith, 1984; Winikur & Daniels, 1982), which were conducted starting in the early seventies. Since Hosp and Reschly achieved comparable results to Smith (1984), a sample of NASP members appears to reflect the "average school psychologist." In addition, akin to Smith's results, Hosp and Reschly's results suggested that school psychologists generally prefer to spend less time in assessment and more time in direct interventions, problem-solving consultation and research. In brief, even with the current emphasis on role shift away from assessment, school psychologists across all school system types generally continue to devote one-half or above of their time in assessment-related activities.

Studies of Assessment Role

A few of the more current time use studies have also looked at narrower functions of the school psychologist, particularly psychoeducational evaluation times. The San Diego City Schools (1995) study assessed psychoeducational evaluation time with time logs, defining evaluation time as total time spent on referrals. They discovered that initial special education referrals took an average of 9.9 hours to complete. The San Diego study recorded time spent on various types of referrals and found that special education placement reviews took an average of 9.4 hours; three-year reviews took 7.6 hours; administrative placements took 5.2 hours; and general education referrals such as

counseling, crisis intervention, early identification, and Section 504 assessments took 4.6 hours.

Likewise, Lichtenstein and Fischetti (1998) measured the psychoeducational evaluation time use of 59 school psychologists from five urban school districts in Connecticut. They desired to explore the variation in evaluation time by student and school district characteristics, as well as variability due to number of cases. They were interested in the total amount of time needed to carry out a psychoeducational evaluation, as well as the amount of time required per component (described in the suburban section) of the evaluation.

Asking participants to record the total amount of time spent on their first five initial referrals, Lichtenstein and Fischetti (1998) discovered that evaluation time ranged widely from 3.75 to 24.25 hours, with a mean evaluation time of 12.31 hours, in contrast to the San Diego (1995) study. Also, Lichtenstein and Fischetti recorded evaluation time spent on initial referrals, while the San Diego study examined various types of referrals. Apparently, test administration was the activity that consumed the majority of the school psychologists' evaluation time (2.94 hours), followed closely by report writing (2.38 hours). The mean total time needed for RIOT (reviewing records, interviewing, observing, and testing) assessment categories was 6.34 hours. From their findings, Lichtenstein and Fischetti concluded that variability in evaluation time was due to student and school district characteristics. Students such as English Language Learners (ELLs) and socially and emotionally maladjusted individuals required a longer amount of time to evaluate. For the school district with the highest number of caseloads, evaluation times were shorter, while the school district with the highest socioeconomic status (SES) spent

more time on evaluations. Unfortunately, Lichtenstein and Fischetti reported the total number of evaluations as unavailable for the latter school district, so we cannot assume that this school district had a lower number of caseloads.

One similarity existed between the two recent evaluation time studies: both suggested that ELLs or Limited English Proficient (LEP) children take longer to assess than English-speaking children. Due to the significant number of ELL and LEP students in urban schools, the extended time needed to assess these students may contribute to the time spent in urban schools on assessment. However, Lichtenstein and Fischetti (1998) contend that the difference in evaluation time is minimal. In line with Lichtenstein and Fischetti, the San Diego (1995) study's results indicated that assessment occupied 35.1% of the school psychologists' time, followed by consultation, report writing, and meetings. It is apparent that assessment remains a key job function for urban school psychologists even in the last decade or so.

Fischetti (2000) replicated Lichtenstein and Fischetti's (1998) study of time spent on psychological evaluation in urban Connecticut school districts (the urban study will be described in the urban school system studies section). In contrast to the urban study, the suburban study was conducted in suburban Connecticut school districts and only examined effects of student and school district characteristics on psychological evaluation times, disregarding effects of caseload. Fischetti invited 22 school psychologists from nine affluent suburban school districts to keep time logs by recording the time required for each component of three psychological evaluations. The components included folder review, classroom observation and other observation, conferencing with team members, parent interview, parent conference, teacher

conference, test administration, student interview, outside agency contact, scoring, interpretation of data, report writing, planning and placement team meetings, and miscellaneous time. Some of these activities were calculated as part of the general assessment categories of reviewing records, interviewing, observing, and testing (RIOT).

Fischetti (2000) found that the average time spent on psychological evaluations was 15.66 hours, with a range from 7.25 to 32.75 hours. Compared to Lichtenstein and Fischetti's (1998) urban study, the average time spent on evaluations in suburban school districts is much longer than that of urban school districts. This data is consistent with findings that affluent school districts spend more time on psychological evaluations, as suburban school districts are typically located in more affluent neighborhoods (Fischetti, 2000). As also highlighted in the urban study, test administration (3.24 hours) and report writing (3.37 hours) occupied the bulk of the suburban school psychologists' time, while placement team meetings, parent conferencing and interviewing consumed a great deal of time as well. In addition, socially and emotionally maladjusted individuals required the longest evaluation time, requiring an average of 24.67 hours. Furthermore, time devoted to evaluation varied by school: high schools required the most amount of time, while elementary schools required the least amount of time. Similar to the urban study, Fischetti concluded from all these data that evaluation times differed as a function of student and school district characteristics.

Comparisons of Urban, Suburban and Rural District Time Use of School Psychologists

Unfortunately, very few studies have compared different types of school systems, most looking at all types or one type of school system. Hughes and Clark's (1981) study was the only study that contrasted time use of rural school psychologists to time use of

urban school psychologists. Analyzing surveys from 25 rural school psychologists and 33 urban school psychologists, Hughes and Clark hypothesized that differences would exist between the two groups and compared the groups on demographic variables, training, and job satisfaction. They hypothesized that rural school psychologists had a more diverse role than urban school psychologists, spent less time in assessment activities, and participated less in continuing education.

Hughes and Clark's (1981) indicated that large differences exist between the rural and urban school psychologists. They found that rural school psychologists did assume a statistically significant more diverse role than urban school psychologists. While rural school psychologists reported a total of 13.29 job duties during a six-month time period, urban school psychologists reported only 10.03. The primary activities of the rural school psychologists were consultation with board members, parent interviews in home settings, and school-wide or system-wide program design. Rural school psychologists also revealed significantly less time consumed by assessment: assessment consumed an average of 49.7 percent of rural school psychologists' time, in contrast to 67.23 percent for urban school psychologists. No significant differences were detected between the two groups on participation in continuing education. Hughes and Clark's (1981) efforts to establish a dichotomy between the time use and roles of rural and urban school psychologists is notable.

Urban School System Studies

As verified by Hughes and Clark's study (1981) and studies of assessment role, studies conducted in urban school systems reveal that urban school psychologists' time is predominantly occupied by assessment activities. In a seminal study, Fairchild (1974), a

school psychologist at a Midwestern urban school district, completed time logs to examine his own activities as a school psychologist. He kept details on his time use under two different roles of a school psychologist: the first half of the year he functioned as a diagnostician and the second half of the year he functioned as a consultant. His time logs encompassed 800 hours of service and were recorded every day at mid-day. Furthermore, Fairchild compiled a monthly summary and a final yearly summary of his records, which suggested that he spent most of his time in assessment (40%). Regrettably, Fairchild did not disaggregate his results based on his change in role from diagnostician to consultant in the middle of the school year, so it is unknown how his time spent in assessment compares across the school year. Time spent in intervention (25%) and administration (24%) was approximately equal and the least amount of time was spent in program evaluation (12%). Fairchild asserted that even though assessment appeared to occupy the majority of his time, administration and scoring of tests comprised just a third of the total assessment time, or 13% of the total time he spent per year. Thus, he claimed that the time spent on direct testing and scoring is much less than would be assumed. On the other hand, he revealed that report writing occupied a third of the assessment category, or 11% of the total time he spent per year. This data undermines his claim about less time spent on direct testing, for report writing is an integral part of direct testing, so Fairchild's time spent in the predominant assessment activities of test administration, scoring, and report writing consumed nearly a quarter of his total time.

Based on his data, Fairchild (1974) contended that measurement of time use is key to providing accountability, which is essential when endeavoring to develop psychological services in schools. Accountability may in turn lead to more efficient time

use among school psychologists, upgrading their work performance. It is important to mention that although Fairchild's results and conclusions are valuable, they should be interpreted with caution, for awareness of eventual public presentation and publishing of his time use may have altered his behavior. Presentation concerns are likely, for Fairchild may have self-reported his time use so that he could present himself in a positive light.

A decade later, Eitel et al. (1984) conducted a time utilization study of school psychologists from a moderate-sized urban school district in Connecticut and found an assessment trend similar to Fairchild's (1984). They desired to establish a valid observation methodology for determining the daily activities of urban school psychologists. To control reactivity, observers did not notify psychologists that they were coming until the morning of the observation. Each psychologist was assigned to a particular date, and 13 graduate students were then each assigned one of these dates to observe the school psychologist for an entire day. Since there were 13 observers, 2 of the 11 psychologists were observed twice. Though Eitel et al. did not mention any unique patterns of activity from the psychologists observed twice, it is evident that conducting more than one observation of a school psychologist would help account for probable variability in activities. Also, if the school psychologist was having an atypical day, a second observation would prove to be more reliable.

Observers recorded the school psychologists' daily activities with a recording instrument that listed 26 explicit categories of all possible activities of a school psychologist. These categories were grouped into four domains: Assessment; IEP; Consultation, Counseling and Meetings; and Logistical and Other. Eitel et al.'s (1984)

explicit categories permitted the observer to depict the exact nature of the school psychologists' time use. Using a time point system, observers recorded the activity in which the school psychologist was engaged at the end of 15-minute intervals. If the psychologist switched activities during the interval, observers make a note of this change with a code denoting the changed activity. In their data analysis, Eitel et al. assumed that the switched activity occurred at the midpoint of the interval (7.5 minutes). Furthermore, though the observers were well-trained, if they were at all uncertain of the activity, they asked the psychologist what she or he was doing.

Results of the observation showed that 39% of the psychologists' time was spent in assessment, while up to 28.2% of psychologists' time was devoted to IEP activities. The percentage of time spent on assessment was comparable to data from the national sample. Consultation and Counseling only accounted for 15.7% to 19.1% of the psychologists' time, while Logistical and Other activities consumed 25.5% to 34.1% of the psychologists' time. These findings have major implications; with the heavy emphasis on special education assessment activities, school psychologists in urban school districts are unable to devote time to direct and indirect interventions, which are vital in providing adequate psychological services to children. Apart from observations, 8 of the 11 psychologists in the study self-recorded their activities with the identical data instrument used by the observers for a period of one week. The self-recording data was analyzed for comparison with the observed results; Eitel et al. (1984) found no significant differences in time use. Aside from self-recording, a time estimation study of the same psychologists had been conducted two years prior to the study, and these results were compared to data from a national school psychologist survey. Eitel et al. observed that

school psychologists underestimated the amount of time they spent in assessment activities in the time estimate survey, when compared to the self-recording and observation methodologies employed in the study. There were two methodologies of data collection (self-recordings and observations), so the aggregate results from this study seem to be fairly valid.

Summary

In this review of literature, three types of time use methodology were presented and studies on time use in schools were synthesized and organized according to assessment role and type of school system (all school system types; comparisons of urban suburban, and rural; and urban). The literature shows that observation is the most reliable and valid methodology for measuring time use. From the majority of the studies presented, regardless of methodology, school psychologists were found to allocate most of their time to assessment activities. However, rural school psychologists spend less time in assessment activities than urban school psychologists. In addition, school psychologists in general spend anywhere from 3.75 to 32.75 hours per psychoeducational evaluation, but evaluation times vary depending on student and school district characteristics. School psychologists from geographical regions that spent the most time in assessment activities spent the least time in interventions, but secondary school psychologists reported effectively balancing their assessment and intervention roles, and rural school psychologists had more diverse roles as well. In addition, school psychologists spent much time in conferences, spending the least time in research and program evaluation. Time occupied by counseling, consultation, and administration activities was much less than time occupied by assessment. School psychologists

themselves disclosed that they desired to spend more time in consultation, intervention, and research. Therefore, we need to acquire data about school psychologists' time use to discover how to provide school psychologists the resources for completion of their assessments, ultimately enabling them to assume broader roles and provide better psychological services.

Aside from results and conclusions of the research studies presented in this review of literature, the strength of their participant sampling and limitations of their focus can shed light into goals for further research. Urban school psychologists have been the focus of much of the research regarding time use, perhaps in attempts to understand how they balance the legal demands to which they must adhere because of the federal legislation, namely the Individual with Disabilities Education Act 1997 (IDEA, 1997). Additionally, most studies emphasize role and function of the school psychologist, some of which were presented, and few studies reveal the daily activities of the school psychologist (Eitel et al., 1984). Unfortunately, Eitel et al.'s study is the sole time use study investigating the daily activities of a group of school psychologists in an urban setting; there needs to be further research on daily time use of such school psychologists.

Chapter 3: Methods

Introduction

This chapter presents the specific methods used in the current study. It includes a description of the procedures used to recruit participants, the data instrument, the process of obtaining approval from the urban school district and the University of Maryland Institutional Review Board (IRB), and the procedures used in measuring time use of the urban school psychologists. It concludes with an explanation of the data analysis procedures that were used to generate results from the study.

Participants

Participants were urban school psychologists recruited by a letter of invitation (see Appendix A) from the researcher. The Coordinator of Psychological Services of the urban school district in which the data were collected identified 20 potential participants from the staff of 76 psychologists. Since the 20 participants were selected based on availability and likelihood to participate, they comprised a convenience sample. Out of these 20 participants, four expressed interest in participating in the study, so the Coordinator of Psychological Services supplied the researcher with their contact information. Demographic information on the four participants is not listed to uphold the agreement of confidentiality. For those individuals with e-mail addresses, the researcher sent them an electronic letter of invitation. For individuals without e-mail addresses, the Coordinator of Psychological Services supplied them with a hard copy of the letter of invitation. The letter of invitation had a tear-off slip at the bottom for the participants to indicate whether or not they wish to participate. Participants returned their letter of invitations by e-mailing the completed forms back to the researcher or returning them in

person to the researcher on the first observation date. All participants elected to participate in the observation and self-recording procedure. Based on the small number of responses, the researcher selected all four of the interested school psychologists to participate in the observation and self-recording portion of the study.

On the first observation date, the researcher requested that the participants sign the informed consent form for the observation procedure (see Appendix B) before the observation began.

Instrument

The time use data recording instrument (see Appendix C) was a time sampling form developed by the researcher, using a modified version of Eitel et al.'s (1984) 26 activities of a school psychologist. Since Eitel's et al.'s categories were somewhat outdated, the researcher and Coordinator of Psychological Services modified them to reflect the current functions of the school psychologists in the urban school district and reworded to facilitate use by the participants when self-recording. The following categories were changed: (1) Review Referral and Records; (2) Intake Conference; (4) Interview Ancillary Personnel; (7) Writing/Dictating Report; (10) Classification Conference; (11) Develop and Write Instructional Guidelines; (12) Placement Procedures; (13) Conference with Parent of Nonclassified Child; (15) Therapy; (16) Giving In-service Training; (17) Attending In-service Training; (18) Consultation; (19) Meetings; (20) Professional Development; and (24) Paperwork. The categories that were overly broad (1, 4, 18, 19, 20, 24) were further elaborated, while categories that were out-of-date were updated (7, 10, and 13). Categories that did not reflect the functions of urban school

psychologists were replaced with more suitable activities (2, 11, 12, 15, 16, and 17). The original and modified categories for observation are listed in Appendix F.

The instrument took the form of a grid, allowing the recorder to place a check mark in the box of the corresponding activity and time interval. On the top of the data instrument, the activities were numbered from 1 to 26 and grouped by the broader domains of Assessment; IEP; Consultation, Counseling and Meetings; and Logistical and Other. To facilitate comparison, these original domains from Eitel et al.'s (1984) study were retained on the data instrument, and the interpretation will focus on both the specific categories within each domain and the domain. The leftmost column of the instrument listed the 15-minute time intervals from the possible start (7:30am) to the end (4:30pm) of the psychologists' workday, resulting in nine hours of potential data, although it is expected that psychologists would not work all these hours. In order to include all 36 time intervals from 7:30am to 4:30pm, the instrument was two pages in length, and the pages were numbered for clarity. Each page contained the entire list of 26 activities. For an activity that fell in the "Other" category, the participant was asked to describe the nature of the activity at the bottom space of the instrument and list them in sequence with their respective times. At the top of the instrument, the participant was asked to check whether she or he worked at an elementary, middle, or high school, and whether or not the day observed and recorded was a typical day for him or her by indicating "yes" or "no." The instrument also included a space to specify the date of the self-recording or observation.

School District Approval

With the assistance of the Coordinator of Psychological Services, the researcher requested written approval from the Chief of Special Education Reform of the urban school district to conduct the observations and self-recordings in the schools. The Coordinator of Psychological Services and researcher composed an e-mail to him introducing the study and requesting his permission. In addition, the researcher presented the Chief of Special Education Reform with a one-page executive summary (see Appendix D) about the purpose and procedures of the study, accompanied by the data instrument to be used. The Chief of Special Education Reform granted permission by signing a letter of approval.

Institutional Review Board Approval

Apart from permission from the urban school district, the researcher also obtained permission from the University of Maryland Institutional Review Board (IRB). The application consisted of the IRB application cover form; an abstract about the study; a summary of the methods, risks and benefits, and confidentiality; the informed consent form; the data instrument; and the letter of invitation. The IRB granted approval with a signed letter and a stamped copy of the informed consent form.

Procedures

Participants agreed to both observation of their activities by the researcher and self-recording for two full days. First, upon receiving the letter of invitation slips from the psychologists, the researcher contacted all the psychologists who elected to participate in the observation and self-recording portion of the study to establish observation dates. The researcher requested that each psychologist provide a list of three

dates that were likely to be typical workdays, as well as their schedules for each of these dates. One of these dates was a "safety date," to be used in case the psychologist was ill on the date of observation. The observations took place over a period of three weeks, so the researcher asked the psychologists for feasible dates within the three specified weeks. The researcher observed no more than one psychologist per day. Three of the psychologists were observed at elementary schools for both observations, while one psychologist was observed at middle schools for both observations.

The assessment assignment procedure was unique in this urban school district, so it important to provide some context for the scheduling of observation dates. In this particular school system, assignments were based out of the central office and made by the Special Education supervisors. On Mondays, Wednesdays, and Fridays of each week, psychologists were each assigned to one particular school, in which they conducted any outstanding evaluations. On Tuesdays and Thursdays, these psychologists traveled to different schools to attend IEP meetings. The psychologists also were uninformed about which schools they would be working the following week until they received their schedules and assignments on Monday afternoons of that week. Since the administration assigned the psychologists to particular schools on particular days, the psychologists did not have control over their schedules; thus, it was doubtful that notifying them in advance about the observations would allow them to adjust their schedules.

On the morning of the observation, the researcher called the psychologist to be observed to ensure that she or he was at the specified school. If she could not reach the psychologist, she contacted the school in which the observed psychologist was working to ensure that the psychologist was expected there that day. If the psychologist was at

another school, the researcher reported to the alternate school, and if the psychologist was on medical leave or otherwise unavailable, the researcher contacted the psychologist to reschedule the appointment. If the observed school psychologist had to leave school early, the researcher discontinued observation, collected the self-recording data instrument from the psychologist, and made a note of the time of the psychologist's departure on the data instrument and in her notes. If the psychologist had to reschedule the observation for any reason, the researcher immediately rescheduled the observation for the next available date.

If she was able to contact the school psychologist, the researcher arrived at the psychologist's school at the start of the workday and asked that the psychologist simply carry out his or her routine activities for the day. She briefly discussed the procedures involved in the observation and requested that the psychologist sign the informed consent form. The researcher then observed the psychologist's activities for the full school day and recorded them using the data instrument. During the observation, at 15-minute intervals, the researcher checked the activity in which the school psychologist was engaged on the data instrument. If activities changed within the 15-minute time period, the researcher recorded the change on the data instrument with a check and the number code corresponding to the initial activity. The researcher did not interfere with the school psychologists' activities in any manner during the observation and recording. If the school psychologist required privacy at any time to perform an activity, as was expected during the administration of a psychoeducational assessment, the researcher exited the room or area and asked the psychologist what she or he was doing after the activity. The researcher inquired about the psychologist's activities if she was uncertain what the

psychologist was doing. At the culmination of the observation, the researcher asked the psychologist whether the observed day was typical and checked his or her response on the data instrument.

Apart from the time sampling procedure, the researcher took field notes on the school psychologists' activities, permitting her to obtain descriptive details about the school psychologists' activities. Though the researcher was a known observer, she recorded brief notes inconspicuously to minimize reactivity, translating these "jotted notes" into full field notes at the end of the observation day (Lofland, 1995). In her full field notes, the researcher recorded observations as thoroughly and objectively as possible, including if feasible not only what happened, but also who was involved, where and when the activity occurred, and why and how it happened (Groenewald, 2004). The researcher also described changes in people and physical surroundings (Lofland, 1995). The field notes were recorded using standard notebook paper, with the only identifying information being the type of school. As on the data instrument, the researcher recorded the date of the observation and whether the day observed was typical for the psychologist. In addition, the researcher recorded the exact nature of activities that fall under the "Other" category in the field notes. At the conclusion of the observation, the psychologist had an opportunity to explain to the researcher what happened that might have made the day atypical, and the researcher recorded the explanation in her field notes.

During both observations, the school psychologist was asked to self-record his or her activities using the data instrument, for agreement purposes and comparison with the researcher's recording. Since the first participant questioned why it was necessary to self-record while the researcher was recording, even though the informed consent form

explained the reason, the researcher explained to all the psychologists that self-recording was crucial for establishing agreement for the study. Prior to the observation, the researcher also met with the psychologist for about 10 minutes to give both written and verbal instructions on how to use the data instrument. Written instructions specified the date of the self-recording and the procedures, as well as examples and the researcher's contact information (see Appendix E). Each psychologist was asked to carry out his or her routine daily activities as a school psychologist and self-record these activities (using the data instrument) for the duration of the two full school days observed. At 15-minute intervals, the psychologist checked the activity in which she or he was engaged on the data instrument. At the end of the day, the psychologist returned the data instrument to the researcher in person or by fax. If the researcher could not remain at the school for the full school day, the researcher asked that the psychologist continue self-recording until the conclusion of the school day. Additionally, she provided the psychologist with her fax number so that the psychologist could fax the completed data instrument to her at the end of the school day. If the psychologist checked the "Other" category, she or he was expected to concisely describe the nature of the activity at the bottom of the data sheet and list them with their respective occurrence times in sequence. It was understandable that the psychologist was not able to record at every 15-minute interval; for instance, it was often unfeasible to record during test administration. The psychologist could record his or her activity afterwards, mid-day, or at the end of the day, but she or he was required to return the data instrument to the researcher at the end of the day in person or by fax.

Identical procedures were followed for the second observation of each school

psychologist. The second observation marked the culmination of the procedure. The

researcher provided the psychologist with a copy of her observations after the collection

of both self-recording data instruments and the completion of both observations. The

observation of the first psychologist was used as a pilot, and subsequent observations

were modified to discontinue observation whenever the psychologist traveled to a

meeting with the Coordinator of Psychological Services and other psychologists. This

modification was deemed necessary, because it protected the confidentiality of the

observed psychologists by allowing no opportunities for other psychologists and the

Coordinator to learn which psychologists were participating in the study. As specified

above, the researcher requested that the psychologist resume self-recording in this

situation and fax the researcher the completed data instrument.

Data Analysis

Using descriptive statistics, the time use of each school psychologist was

aggregated with the others to obtain a mean, standard deviation, and range on hours spent

per activity for all urban school psychologists. Activities that changed within an interval

were assumed to have occurred at the midpoint of the interval (7.5 minutes). Also, the

total number of checks for each activity were divided by the total numbers of checks for

all the activities combined to obtain a percentage of time for each activity. To gain a

general picture of the school psychologists' activities in broader domains, the total time

(in hours), standard deviation, range and percentages was calculated for each of the four

broad domains measured: Assessment; IEP; Counseling, Consultation, and Meetings; and

Logistical and Other. All of the above data was calculated separately for the observation and self-recording methods.

To determine interobserver agreement of this data, data from the observation procedure was compared with data from the self-recording procedure. The number of time periods in agreement between the two procedures for each observation and activity was summed and divided by the total number of time periods.

For psychologists who marked "no" for the statement "this was a typical day," their data was still included when calculating the means, standard deviations, ranges, percentages and agreement, to obtain the full possible range of time use for each activity.

Chapter 4: Results

Introduction

The purpose of this study was to determine the daily time use of urban school psychologists, in terms of hours and percentages of various predefined activities and domains, as well as activities that fall within the "Other" category. This section will address the purpose of the study by presenting the results. In the following tables, data are the averages of two observations for each of the four participants.

Hours Spent Per Activity

Urban school psychologists spent the most hours of their workday in the activity of Other, averaging 2.55 hours. The next two most time-consuming activities were Testing Child (.94 hour) and Lunch (.72 hour). No time was spent on the following activities: Interviewing Teachers, Writing IEP, Assisting in Writing IEP Goals, Meeting Regarding Placement Decisions, Conference with Parent of Child Found Noneligible, Annual Review, Counseling, Giving Workshops to Staff, Attending Workshops, Conferences, and Appointment Cancelled. These results are seen from the observed data in Table 1, which shows the mean, standard deviation, and range of hours spent per activity computed using descriptive statistics.

The self-recorded results were inconsistent with the results found in the observed data: the top three most time-consuming activities were the activity of Other (1.38 hours), Consultation with Staff Regarding Student (1.03 hours), and Testing Child (.97 hour). The large difference between the observed and self-recorded activity of Other may have been due to the difficulty psychologists had in selecting a category on the data instrument or differing definitions of the categories. Similarly, the considerable difference between

Table 1
Observed Daily Time Spent Per Activity

Activity	Time (Hours) M	SD	Range	Minimum	Maximum	% of Time Use
1. Review Records for Initial Referrals and Re-evaluations	.49	.65	1.44	.00	1.44	7.3
2. MDT Meeting	.16	.19	.38	.00	.38	2.4
3. Observe Child	.16	.24	.50	.00	.50	2.4
4. Interview Teachers	.00	.00	.00	.00	.00	0.0
5. Testing Child	.94	.93	2.07	.00	2.07	13.3
6. Test Interpretation/Data Integration	.08	.08	.19	.00	.19	1.1
7. Writing/Typing Report	.24	.47	.94	.00	.94	3.3
8. Writing IEP	.00	.00	.00	.00	.00	0.0
9. Conference to Develop IEP	.34	.40	.75	.00	.75	4.4
10. Eligibility Meeting	.28	.36	.75	.00	.75	4.0
11. Assisting in Writing IEP Goals	.00	.00	.00	.00	.00	0.0
12. Meeting Regarding Placement Decisions	.00	.00	.00	.00	.00	0.0
13. Conference with Parent of Child Found Noneligible	.00	.00	.00	.00	.00	0.0
14. Annual Review	.00	.00	.00	.00	.00	0.0
15. Counseling	.00	.00	.00	.00	.00	0.0
16. Giving Workshops to Staff	.00	.00	.00	.00	.00	0.0
17. Attending Workshops	.00	.00	.00	.00	.00	0.0
18. Consultation with Staff Re: Student	.44	.71	1.51	.00	1.51	6.0
19. Meetings with Student	.02	.03	.06	.00	.06	0.2
20. Conferences	.00	.00	.00	.00	.00	0.0
21. Travel	.25	.18	.38	.00	.38	3.8
22. Lunch	.72	.45	.94	.07	1.00	10.2
23. Appointment Cancelled	.00	.00	.00	.00	.00	0.0
24. Paperwork (Medicaid)	.31	.26	.63	.00	.63	4.4
25. Attending to Personal Needs	.06	.09	.19	.00	.19	0.9
26. Other	2.55	1.08	2.63	1.25	3.88	35.6
Missing Data	.63	.95	2.00	.00	2.00	4.3

Note: the Missing Data row refers to time periods when the researcher was unable to observe the psychologists.

the observed and self-recorded activity of Consultation with Staff Regarding Student

likely resulted from different definitions of consultation held by the psychologists and the

researcher. The category of Travel was also discrepant between the methodologies and

may have been impacted by instances of travel that transpired and were self-recorded by

the psychologist after the researcher departed the observation site. No time was spent in

the following activities: Interviewing Teachers, Writing IEP, Meeting Regarding

Placement Decisions, Conference with Parent of Child Found Noneligible, Annual

Table 2
Self-Recorded Daily Time Spent Per Activity

Activity	Time M	(Hours) SD	Range	Minimum	Maximum	% of Time Use
1. Review Records for Initial Referrals and Re-evaluations	.47	.70	1.50	.00	1.50	7.4
2. MDT Meeting	.35	.38	.88	.00	.88	4.9
3. Observe Child	.22	.21	.50	.00	.50	3.2
4. Interview Teachers	.00	.00	.00	.00	.00	0.0
5. Testing Child	.97	.97	2.25	.00	2.25	14.4
6. Test Interpretation/Data Integration	.13	.14	.25	.00	.25	1.9
7. Writing/Typing Report	.25	.42	.88	.00	.88	3.7
8. Writing IEP	.00	.00	.00	.00	.00	0.0
9. Conference to Develop IEP	.38	.44	.88	.00	.88	5.6
10. Eligibility Meeting	.28	.36	.75	.00	.75	4.2
11. Assisting in Writing IEP Goals	.00	.00	.00	.00	.00	0.0
12. Meeting Regarding Placement Decisions	.00	.00	.00	.00	.00	0.0
13. Conference with Parent of Child Found Noneligible	.00	.00	.00	.00	.00	0.0
14. Annual Review	.00	.00	.00	.00	.00	0.0
15. Counseling	.00	.00	.00	.00	.00	0.0
16. Giving Workshops to Staff	.00	.00	.00	.00	.00	0.0
17. Attending Workshops	.00	.00	.00	.00	.00	0.0
18. Consultation with Staff Re: Student	1.03	1.56	3.25	.13	3.38	14.7
19. Meetings with Student	.03	.07	.13	.00	.13	0.5
20. Conferences	.00	.00	.00	.00	.00	0.0
21. Travel	.41	.66	1.38	.00	1.38	6.0
22. Lunch	.63	.433	1.00	.00	1.00	9.3
23. Appointment Cancelled	.03	.07	.13	.00	.13	0.5
24. Paperwork (Medicaid)	.25	.31	.63	.00	.63	3.7
25. Attending to Personal Needs	.00	.00	.00	.00	.00	0.0
26. Other	1.38	1.23	2.88	.00	2.88	14.7

Review, Counseling, Giving Workshops to Staff, Attending Workshops, Conferences, and Attending to Personal Needs. The mean, standard deviation, and range of hours spent per activity are displayed in Table 2.

Agreement between the observed and self-recorded data was (85%). To compute interobserver agreement, the number of time periods in agreement (177) were counted and divided by the total number of time periods (208). Given that psychologists did not mark activities that changed during a time interval although the researcher did so, observed and self-recorded time periods that fell within .13 hour (half an interval) of each other were considered to be in agreement. Consequently, agreement is high despite considerable differences between observed and self-recorded time use.

Hours Spent Per Domain

Since the 26 activities composed four domains (see Appendix F), time use in each domain was also assessed to obtain broader patterns of time use. Urban school psychologists spent over half of their workday hours in the domain of Logistical and Other, as seen in Table 3. The next most time-consuming domain was Assessment. In contrast, IEP and Consultation, Counseling, and Meetings did not occupy much of the urban school psychologists' time. Descriptive statistics were used to compute the mean and standard deviation of hours spent per domain.

Table 3
Observed Daily Time Spent Per Domain

Domain	Time M	(Hours) SD	Range	Minimum	Maximum	% of Time Use
Assessment	2.05	1.68	3.82	.63	4.45	29.9
IEP	.63	.43	1.00	.00	1.00	8.4
Consultation, Counseling, and Meetings	.44	.71	1.51	.00	1.51	6.2
Logistical and Other	3.90	.76	1.76	2.82	4.57	54.9

As presented in Table 4, self-recorded results were different, with the domain of

Logistical and Other occupying the majority of the psychologists' time, followed by the

domains of Assessment, Consultation, Counseling, and Meetings, and IEP. School

psychologists self-recorded less time spent in the Logistical and Other domain than was

observed (3.90 hours), while self-recording more time spent in the Consultation,

Counseling, and Meetings domain than was observed (.44 hour). As suggested above,

the differences between self-recorded and observed domains resulted from uncertainty of

which category to select during self-recording or different definitions of categories. The

results of the self-recorded data were analyzed using descriptive statistics for

computation of mean and standard deviation.

Table 4
Self-Recorded Daily Time Spent Per Domain

Domain	Time M	(Hours) SD	Range	Minimum	Maximum	% of Time Use
Assessment	2.38	1.92	4.00	1.25	5.25	35.6
IEP	.66	.45	1.00	.00	1.00	9.8
Consultation, Counseling, and Meetings	1.06	1.63	3.37	.13	3.50	15.1
Logistical and Other	2.69	1.27	2.63	1.50	4.13	39.3

Percentage of Time Spent Per Activity

As outlined above, the majority of urban school psychologists' observed daily

time was occupied by activities that composed the Other category. Testing Child also

occupied a considerable amount of time, as well as Lunch and Review Records for Initial

Referrals and Re-evaluations. Although consultation activities seemed to occupy a

modest amount of daily time (6%), meetings (MDT Meeting, Conference to Develop IEP,

and Eligibility Meeting) and assessment activities (Review Records, Observe Child,

Testing Child, Test Interpretation/Data Integration, and Writing/Typing Report)

comprised much higher percentages of daily time (10.8% and 27.4%, respectively). On

the other hand, time spent on intervention activities (Counseling, Giving Workshops to

Staff, and Meeting with Student) was less than 1%. Moreover, these four urban school

psychologists spent 0% of time on the following activities during the two days each were

observed: Interviewing Teachers, Writing IEP, Assisting in Writing IEP Goals, Meeting

Regarding Placement Decisions, Conference with Parent of Child Found Noneligible,

Annual Review, Counseling, Giving Workshops to Staff, Attending Workshops,

Conferences, and Appointment Cancelled.   Finally, since there were some time periods

in which the researcher could not directly observe the psychologists, 4.3% of the total

time use across all four psychologists was unknown, as reflected in the Missing Data row

of Table 1. To calculate percentages, check marks were summed for each activity across

all observations and each sum was divided by the total number of check marks.

     Self-recorded data as displayed in Table 2 offers both similar and dissimilar

results: daily time was devoted primarily to activities falling within the Other category,

followed by Consultation with Staff Regarding Student, Testing Child, and Lunch.

However, the percentage of self-recorded (14.7%) consultation activities was higher than

observed (6%). The percentage of meetings (MDT, Conference to Develop IEP,

Eligibility Meeting) was also higher in the self-recorded data (14.7%), while the

percentages of assessment activities (Review Records, Observe Child, Testing Child,

Test Interpretation/Data Integration, and Writing/Typing Report) were comparable

between self-recorded (27.4%) and observed data (30.6%). No time was spent on

intervention activities (Counseling, Giving Workshops to Staff, and Meeting with

Student). All percentages were computed by totaling the check marks for each activity across all observations and dividing each sum by the total number of check marks.

Percentage of Time Spent Per Domain

In line with the results presented above, urban school psychologists' observed time was consumed by the domain of Logistical and Other, as seen in Table 3. The Assessment domain also comprised a substantial percentage of their time, while the IEP and Consultation, Counseling and Meetings domains occupied much lower percentages. These results were calculated by totaling the number of check marks for each domain across all observations and dividing by the total number of check marks.

The domain of Logistical and Other also absorbed a high percentage of self-recorded time followed by the percentage of time spent in the Assessment domain, as apparent in Table 4. In addition, the percentage of time spent in the Logistical and Other domain was lower than the corresponding observed time (54.9%). A lower percentage of time was spent in the other two domains of IEP and Consultation, Counseling and Meetings. The percentage of time occupied by Consultation, Counseling and Meetings domain was self-recorded to be higher than observed (6.2%). To obtain these results, the total number of check marks for each domain across all observations was divided by the total number of check marks.

Activities Described as "Other"

Apart from marking the appropriate activity during a specified time period, the time use data instrument requested that the school psychologists supply a brief description of any activity they marked as "Other." While these descriptions of activities varied, most of the activities appear to be related to meetings, administrative duties, or

lag time, which was time spent waiting for others to show up to meetings. Activities

associated with meetings referred to those meetings not listed among the 26 activities, as

well as meeting preparation and documentation. Administrative activities were described

as making copies, emailing, making phone calls, delivering reports, and picking up a

child for testing. Urban school psychologists also encountered much lag time, especially

Table 5
Activities Described as "Other"

Category	Brief Description of Activity
Administrative/Logistical	• made copies
	• emailed
	• called compliance officer for DCPS and supervisor to notify them about report by unauthorized contractor
	• called parents to bring in nonattending child for testing
	• called school to cancel appointment
	• made phone calls
	• dropped off report
	• picked up child for testing
Interactions	• talked to administrative personnel about conducting an observation
	• talked with researcher
	• talked with staff about various issues
	• visited ED program
Lag Time	• waited and talked to principal about no-shows
	• waited for parents and team members to show
	• waited for parents to show for eligibility meeting
	• waited for parents to show up for meeting
	• waited for parents/advocate to show for MDT meetings
	• waited for special ed coordinator/advocate to show for IEP meeting
	• searched for special ed teacher
Meetings	• meeting to pick up assignments and submit reports
	• prepared for IEP meeting
	• prepared for luncheon/meeting
	• psychologist end-of-year luncheon/meeting
	• sat in on LSRT meeting
	• documented parents' no-show at eligibility meeting
	• looked through notes
Personal	• read newspaper

when waiting for parents, advocates, and team members to show up for prescheduled meetings. In most of the cases, meeting participants did not notify the school that they would not be attending the meeting and only one cancellation was noted. As presented in Table 5, the activities described as Other were compiled and grouped into the five categories of administrative/logistical, interactions, lag time, meetings, and personal.

Summary of Field Notes

This section summarizes a few of the field notes that were written after the observation days. Thus, these descriptions are not the actual field notes, but summaries of the researcher's observations from her field notes.

Most of the participants described their days as atypical. The school psychologist's day started with waiting for parents and the special education coordinator to show up for a meeting at a school. After the parent arrived in half an hour, the special education coordinator had not yet appeared, so the meeting was delayed for another half hour until she arrived. The psychologist seemed concerned about the delay, for she had a meeting shortly at another school. After the first meeting ended, the psychologist called her other school to notify them she would be unable to attend a meeting there due to the tardiness of her first meeting. The psychologist then traveled to a private school for an observation of a student. There, she was questioned about the reasons for her presence there, and when she indicated that she was there to observe a student, a staff member brought her to the appropriate classroom and informed the student that he was under observation. The psychologist was incredulous that the private school staff person handled the situation in this manner. After the observation of the student, the

psychologist expressed fatigue before she traveled to the third school to sign paper work for the meeting that she missed, marking the end of her day.

Though also transpiring on an atypical day, the following description is an example of an activity described as Other. The researcher observed one psychologist who had three MDT meetings scheduled for the day; however, none of the parents or advocates showed up for any of the meetings. Moreover, none of these parents or advocates notified the school they would not be in attendance. In his office space, the school psychologist waited to be contacted about the inception of each meeting; instead, he was contacted about the failure of parents and advocates to show up to the meetings. The psychologist seemed to believe that a lack of attendance to meetings was typical, but he did not seem to expect that this lack of attendance would occur for all three of his scheduled meetings. Thus, after the lack of attendance at the first meeting, the psychologist did not seem concerned, but after the lack of attendance at the second meeting, the psychologist was in disbelief. By the third meeting, the psychologist was extremely upset by the waste of time caused by the lack of attendance, apologizing to the researcher that the observation was so "boring." Since this particular psychologist had already completed the required psychoeducational reports and Medicaid paper work for the week, he had no other work to perform while waiting, resulting in much lag time. In addition, although this psychologist had outstanding assessment cases, he was unable to assess any children during this lag time, for the children to whom he was assigned were at a different school. As a consequence, he was unable to make use of his lag time and sat in his office space, reading the newspaper, checking email, and talking with the researcher and co-workers.

Even during a typical activity such as testing, the circumstances were atypical, or the testing conditions were deviant from those of standard test administration. In one observation of a test administration, the psychologist tested the student in an empty classroom, because she had no access to office space for test administration. Unfortunately, this empty classroom was adjacent to a classroom where class was in session. The children in this class were exceedingly boisterous—the researcher heard them laughing and yelling. In the classroom where the psychologist was testing the student, noise was also inevitable. The classroom had a dysfunctional clock that was constantly producing odd ticking noises. Even more distracting, a workman was transporting computer parts in and out of the room. When the psychologist informed him that she was testing a student and requested that he return another time, the workman insisted that there was no other time at which he could transport the computer parts. The psychologist and student seemed oblivious to the noise generated by the clock and the children next door, which persisted for the duration of the testing session, but their attention was diverted by the workman. In spite of this frequent interruption, the psychologist completed the testing, for she was unable to reschedule it for another time.

Other atypical circumstances during test administration included non-standard test administration due to the deficiency of material resources. In a separate observation of a test administration, the researcher observed as the psychologist administered the Woodcock-Johnson Tests of Cognitive Abilities to a student without the required tape. Although the psychologist was fortunate enough to administer the Woodcock-Johnson in the quiet and privacy of the guidance counselor's office, the psychologist had no access to a tape recorder, which was necessary to play the required tape. Hence, the

psychologist simply read the portions of the tests that required tape administration. This

test administration was not the first in which the psychologist was unable to use the

required tape, so she seemed nonchalant about her non-standard administration. After the

test administration, she stated that she was going to purchase a tape recorder out of her

own pocket if the school system was still unable to supply her with one. She seemed

aggravated that there always seemed to be a lack of material resources.

It was clear to the researcher that the psychologists had plenty to share about their

experiences in working in an urban school system. At the beginning of one observation,

the psychologist conversed with the researcher for two hours about her views of the

school psychology field and her role within it. In the privacy of her office, she expressed

her dissatisfaction with spending so much time testing and the lack of resources for

school staff and students. She also expressed frustration in the over-referral of minority

children and declared her interest in consultation and intervention. Becoming more

energized as she spoke, it seemed as though she finally had an audience to hear her out.

Finally, the psychologist stated that her experiences had impacted her so deeply that once

she had time, she would write about her experiences of working as a school psychologist

at an urban public school and her ideas about the field of school psychology.

Chapter 5: Discussion

Introduction

This chapter will commence with a discussion of the results of the current study, in relation to Eitel et al's (1984) study and the existing time use literature. Then, conclusions and implications of the findings for school psychologists in this specific urban school district will be discussed, followed by limitations of the study. Finally, the chapter will propose recommendations for future research.

Discussion

Before discussion of the results, the structure of the placement process in this urban school district will briefly be explained to provide some background for understanding interpretation of the results. In the initial stages of the process, a screening meeting, called the MDT meeting, is held to determine whether or not a student qualifies for a psychoeducational evaluation. If the student is found to qualify, then this meeting is proceeded by a psychoeducational evaluation conducted by the school psychologist. Following this evaluation, an eligibility meeting occurs to discuss whether a student is eligible for a special education placement. If the student is found to be eligible, based on the psychoeducational evaluation, another conference is held to develop the IEP for the student, followed by a meeting regarding final placement decisions. A different conference is held with parents of a student not found eligible for special education. During this placement process, school psychologists in this urban school district are accountable for completing psychoeducational evaluations and reports and presenting their results and recommendations at the meetings. Unlike school psychologists in most school systems, school psychologists in this urban school district do not perform

assessments for emotional disturbance. In addition, they are required to attend meetings to develop the IEP but are not involved in writing IEP goals.

Results of the current study showed some similarities with Eitel et al's (1984) study. The current study found that the Consultation, Counseling, and Meetings domain accounted for 6.2% of the psychologists' time, which falls in the lower end of the range (5.7% to 19.1% of time) indicated by Eitel et al. for the same domain. On the other hand, the current study found large differences in time use between the self-recording and observation data. In particular, there was a discrepancy between the observed and self-recorded results for one activity in the current study. In their self-recordings, participants reported that they spent more time in Consultation with Staff Regarding a Student (1.03 hours or 14.7% of daily time). Observations revealed that they spent .44 hour or 6% of their time in Consultation; this disparity in time use may be attributed to differences in definition of the category of "Consultation with Staff Regarding Student." During observation, the researcher did not consider talking with co-workers about students as Consultation, while school psychologists may have considered it so. Instead, the researcher marked Consultation on the data instrument when school psychologists worked collaboratively with co-workers to problem-solve their concerns about a student. The discrepancy between observed and self-recorded data for the category "Consultation with Staff Regarding Student" in the current study may be attributed to the modifications made to Eitel et al.'s original category of "Consultation." In addition, the psychologists were not supplied with written or verbal definitions of categories prior to the procedure, so it is likely that the lack of this information contributed to their differing definitions of categories.

On the other hand, there were differences between the current study and Eitel et al.'s (1984) study in time use for the other three domains. While Eitel et al.'s observations revealed that the Assessment domain occupied 39% of the psychologists' time, the current observations discovered that this domain occupied 29.9% of the psychologists' time. Furthermore, the Logistical and Other domain consumed over half of the psychologists' time (54.9%) in the current study, but 25.5% to 34.1% in Eitel et al.'s study. Finally, there was a difference in the amount of time spent in the IEP domain. Eitel et al.'s results indicated that IEP activities accounted for 15.6% to 28.2% of psychologists' time, but the current study found that this domain occupied much less time (8.4% of time) on the days observed. The differences between the current study and Eitel et al.'s (1984) study for the three domains described above reflect the amount of time spent in the Logistical and Other domain. Due to the amount of time spent in this domain, the time the psychologists had available for the other domains were diminished.

The school psychologists observed noted that the days were not typical. Only two psychologists marked an observation day as typical on the data instrument—most remarked that "there are no typical days" and explained that their schedules varied on a daily basis. Since these psychologists' time use changed on a day-to-day basis, it is no wonder that their activities did not fit neatly into Eitel et al.'s (1984) predefined categories.

It is also possible that the category of "Lunch," a category within the Logistical and Other domain, may have inflated the amount of time spent in the Logistical and Other domain. Although this category was preserved on the modified data instrument to facilitate replication with Eitel et al.'s study, Lunch was not part of the psychologists'

work hours and should not have counted against the psychologists' time use. The contracts of the psychologists who participated in the current study included one hour for lunch in their workday, even though the work hours in their contracts varied. Three of the psychologists' workdays spanned seven hours, while one of the psychologist's workday spanned eight hours. Regardless of their work hours, it appears that the psychologists actually took less lunch time (.72 hours) than allotted in their contracts. Although Eitel et al. also had lunch as a category, the amount of time allotted to lunch in the contracts for Eitel et al.'s psychologists was unknown.

Results of the current study were also generally consistent with the time use literature, which shows that the school psychologist predominantly functions under an assessment role, particularly in urban school systems (Hughes & Clark, 1981). With regards to the research question, the total time spent in assessment activities (Review Records for Initial Referrals and Re-evaluations, Observe Child, Testing Child, Test Interpretation/Data Integration, and Writing/Typing Report) was 1.89 hours (30.6% of daily time), which falls within 21%-67% of daily time indicated by the existing time use literature, although at the lower end. Specifically, time spent testing occupied .94 hour or 14.4% of the psychologists' time.

Moreover, the school psychologists spent up to 2.55 hours or 35.6% of their daily time performing activities that fall in the Other category. This amount of time is comparable to findings from the time use literature on urban school systems, which reports about 27% of time spent in the Other category. In response to the research question, activities that fall in the Other category consisted of administrative and logistical duties, interactions between other staff members, lag time, meetings, and

personal activities. The researcher observed a pattern of lag time resulting from the lack of attendance and tardiness of others to meetings across all four psychologists and marked and described this time in the "Other" category. While school psychologists' time was consumed by attending meetings (MDT, Conference to Develop IEP, Eligibility Meeting), which took .78 hour or 10.8% of their daily time, this time did not include waiting for parents, advocates, and team members to show up for IEP, eligibility, and MDT meetings.

In contrast to time spent in assessment and activities described as "Other," psychologists spent less than 1% of their time in intervention activities, such as Counseling, or professional development activities, such as Giving Workshops to Staff, Attending Workshops, and Conferences. The lack of time devoted to these areas was not unexpected in light of the existing time use literature. Even after 30 years and an emphasis on expanding the role of school psychologists, the vast amount of literature on the role and functions of the school psychologist confirms that assessment consumes the bulk of their time, while other essential activities such as counseling, interventions, consultation, research, and administration consume a scintilla of their time. However, it is important to note that the small percentages of time use in some categories may have been impacted by the very small number of observations conducted. With only eight observations in total, it is much more likely that some activities were not performed by any of the psychologists.

The school psychologists appeared to be aware of, and concerned about, this time use pattern, for in conversations between the researcher and the observed psychologists, most indicated that they desired to spend less time in assessment and meetings and more

time in consultation and direct interventions. These preferences are comparable to those shown in the time use literature. As early as 1971, Farling and Hoedt's national study revealed that school psychologists desired to spend more time in consultation. Similarly, Smith (1984) and Hosp and Reschly (2002) both found that school psychologists reported a preference for spending more time in the areas of intervention, consultation and research and less time in the area of assessment. Evidently, school psychologists in this urban school district are also frustrated by the heavy emphasis on assessment and are eager to expand their roles.

Although the challenges of the urban school district do have an impact on the psychologists, research has suggested that psychologists themselves have the greatest impact on their role definition. Milofsky (1989) affirms that school psychologists, often autonomous and unsupervised, *choose* to assume a testing role. Therefore, within the set of constraints put forth by the administration, school psychologists in this urban school district did have choices in the activities in which they engaged. Despite their role preferences, these psychologists accepted a narrowly defined role of testing, indicating that they perceived their role in the schools as an administrative one in which they provide formal, routine services. According to Milofsky, this is a passive role; passive school psychologists believe that they should wait for others to seek their support. Their passivity encourages other school staff to rely on their stereotypes of school psychologists as testers to request and expect psychoeducational evaluations. Passive school psychologists allow the school system to define their roles by adhering to expectations of the administrators and other school staff. These passive psychologists may achieve more than expected in terms of numbers of evaluations, but the content of

their work and their relationships with other school staff are largely based on the rules and responsibilities proposed by the school. Passive school psychologists expect to test and attempt complete their overwhelming testing loads as rapidly as possible. Brief evaluations are mechanical and can be blemished with measurement errors, not allowing the psychologist to portray the whole picture of each child (Milofsky, 1989). All of these qualities were true of the school psychologists who participated in the study.

Active school psychologists, on the other hand, are independent and creative in their quest to address psychological problems by collecting more data from the school setting, talking with school staff, and committing to making changes. They are willing to work with others and become involved in the dynamics of the school. They detach themselves from the school so that they may define their role based on their perspectives of what they believe they should be doing as a school psychologist, and they are interested in continual professional development. By educating administrators and others with whom they work about the effectiveness of non-traditional services, school psychologists can define a broad role for themselves. Likewise, other school staff will then be more likely to view these psychologists as having a broader role. In addition, active school psychologists "fight to give fewer tests" (Milofsky, 1989, p. 87) so that they may engage in other critical services. Their opposition against expected role responsibilities may persuade administrators to learn about the other services psychologists can provide and alleviate testing demands for the psychologists. Although the school psychologists in this urban district opposed having to assume a testing role, they did not actively attempt to change their role.

In summary, school psychologists in this urban school district, although challenged by constraints that made it difficult for them to complete the work to which they were assigned, nonetheless had professional choices, in terms of assuming active or passive roles. Urban school systems are not conducive to an activist approach, for they typically do not reward school psychologists for activism and psychologists may even face risks for engaging in an activist role (Milofsky, 1989). However, active school psychologists are willing to take risks to serve children. Instead of tolerating the passive school psychologist role of testing children and allowing time to go to waste when they were unable to test or attend IEP meetings, these school psychologists could have actively sought other activities during their lag time and created broad roles for themselves. Also, they could have educated others about the variety of services that school psychologists provide and educated themselves by partaking in professional development activities and research. These school psychologists appeared to regard themselves as diagnosticians— perhaps based on their professional training—conveying this narrowly and traditionally defined role to administrators and others in the school with whom they interact (Milofsky, 1989). As a consequence, their choice was to remain in an assessment role.

Implications

As outlined above, school psychologists were found to spend the majority of their time in activities described as "Other": most of these activities fell into the categories of administrative/logistical and lag time. Frequently, school psychologists spent their time calling parents to bring in their non-attending children for testing; calling to cancel meetings; waiting for parents, advocates, and team members to show up for meetings; searching for team members; and documenting lack of attendance for meetings. Clearly,

the pattern is the substantial amount of time squandered by the lack of attendance and tardiness of others to IEP, eligibility, and MDT meetings. These patterns have implications for these school psychologists, who were central-office based and assigned to multiple schools. Although they may have a heavy assessment caseload, school psychologists cannot necessarily assess children during lag time, for the children to whom they are assigned are usually at a different school than the one they attend for meetings. Since they assume predominantly an assessment role, school psychologists typically have no other job duties in which they can engage to make use of their lag time. It would be beneficial for these school psychologists to be building-based, for this type of arrangement would enable them to complete their assessment duties during instances of lag time.

Apart from building-based assignments, these school psychologists should be afforded with resources that enable them to carry out their current duties. Observations revealed that most psychologists did not have a consistent place to evaluate children; hence, they used classrooms, other staff members' offices, and public spaces like the auditorium, all of which were marked by frequent noise and interruptions. It would benefit the ability of the psychologists to offer services to have an office space or a room conducive to the privacy and noise level needs of psychoeducational evaluations. Additionally, the lack of material resources made assessment difficult for the psychologists. Psychologists indicated that paper and ink were often unavailable for printing reports and tape recorders were not supplied for evaluations. Providing the psychologists with basic materials for assessment would enable them to complete their evaluations in a timely and standardized fashion. Additionally, these resources would

contribute to giving the psychologists the opportunity to provide quality educational and psychological services.

Moreover, the school psychologists spend a substantial amount of time in only two domains. Over half of the school psychologists' time was consumed by the Logistical and Other domain, while about 30% of their time was consumed by the Assessment domain. They spent less than 10% of their time in the IEP and Consultation, Counseling and Meetings domains. Although it was initially stated in the chapter that the latter domain fell satisfactorily within the range found in Eitel et al.'s (1984) study, this view changes with a role change of the psychologists. It is imperative that school psychologists spend less time in the Logistical and Other and Assessment domains and more time in the critical domain of Consultation, Counseling and Meetings. Recent school psychology literature has reflected a shift of psychologists' roles away from a traditional assessment role to one in which psychologists engage in intervention and problem-solving, activities that are included in the latter domain (Reschly & Ysseldyke, 2002). The Consultation, Counseling and Meetings domain encompasses direct and indirect interventions, which should comprise a considerable portion of school psychologists' roles (Ysseldyke et al., 1997). Building-based assignments would allow for work on assessment cases during lag time, freeing up time to devote to this essential domain. Since these psychologists have heavy caseloads, building-based assignments would enable them to assess students during lag time, when meetings are cancelled, or when students to be tested are not present, facilitating the completion of psychoeducational evaluations. Once these evaluations are complete, psychologists can

then devote time to vital psychological and educational services within the Consultation, Counseling and Meetings domain.

Nevertheless, the problem of the disproportionate amount of time spent in assessment remains. To tackle this problem, a system that provides early intervention to decrease referrals to special education must be implemented to reduce the amount of time required in the traditional Assessment domain. Consultation has been found to substantially decrease referrals to special education (Rosenfield & Gravois, 1996), so school psychologists in urban school districts should receive additional professional development training and opportunities to engage in consultation. Even though the current study found that less time was spent in the Assessment domain than in Eitel et al.'s (1984) study, recent school psychology literature as mentioned above emphasizes the need to shift the school psychologist's role toward a problem-solving orientation, which is a key aspect of consultation. Although these school psychologists self-reported more time spent in Consultation than was observed, they appeared to possess a different conceptualization of Consultation than the researcher. School psychologists regarded talking with co-workers about students as Consultation, while the researcher referred to the vast literature about models of consultation that define it as a preventative, collaborative, and systematic problem-solving model with the ultimate goal of enhancing the well-being of the client (Caplan, 1995; Curtis & Stollar, 2002; Ingraham, 2000; Kratochwill, Elliot, & Callan-Stoiber, 2002; Lambert, 2004; Rosenfield, 2002; Tilly, III, 2002). Additional training in consultation, along with espousal of a consultation model by the school system, would allow school psychologists to work from a service delivery framework that will in due course lead to decreased referrals to special education.

Finally, since school psychology as a field has encountered a shift towards a broader role definition (Reschly & Ysseldyke, 2002), these findings have implications for the role expansion of school psychologists in urban school districts. The extensive amount of time occupied by assessment activities, meetings, and lag time impede these school psychologists from performing critical services such as direct and indirect interventions. Moreover, when school psychologists did have lag time, they chose not to seek other job duties, confining themselves to a passive assessment role. The urban school district can encourage activism from the school psychologists by offering career advancement opportunities or incentives for taking on active roles, which are two factors that heavily influence the type of role that school psychologists assume (Milofsky, 1989). Also, to address the disproportionality in time use, it is necessary to restructure the current central-office based assignments of these school psychologists and establish a consultation model in the urban school system. This reorganization will decrease referrals to special education and enable school psychologists to complete their assessments efficiently. It is hoped that as an outcome, school psychologists in this urban school district may devote more time to other vital psychological services, ultimately augmenting psychological services for urban youth.

Limitations

In exploring the conclusions made above, it is important to note that the current study has several limitations, particularly in the number of participants and the design and implementation of the procedure. Due to the implementation of the study during the last three weeks of the school year, only four psychologists had time available to participate in the study. Since the number of participants was so small, conclusions cannot be drawn

about the entire population of urban school psychologists even in this school district. The small number of participants may have also had an effect on the small percentages of time use in some categories, for it was unlikely that these four school psychologists could engage in all the activities on the data instrument in such few observations.

Aside from the small number of participants, there were limitations regarding codes used. Some categories were similar and may have been defined differently by the psychologists. For example, the distinction between Interview Teachers (category 4) and Consultation with Staff Regarding Student (category 18) was not apparent. Interview Teachers referred to conferences or meetings school psychologists had with teachers to obtain information for the psychoeducational report, while Consultation with Staff Regarding Student referred to consultation with teachers and administrators to develop interventions prior to referral for a psychoeducational evaluation. Appointment Cancelled (category 23) and Other (category 26) could also have been confused, since meetings that were cancelled without notification were categorized as "Other." Appointment Cancelled referred to instances in which someone notified the school psychologist prior to the meeting that the meeting would not occur, while the "Other" category included instances in which a meeting was cancelled when the participants never showed up. Finally, MDT meeting (category 2), Conference to Develop IEP (category 9), Eligibility Meeting (category 10), Assisting in Writing IEP Goals (category 11), and Meeting Regarding Placement Decisions (category 12) were categories that may have seemed comparable to the psychologists. MDT meeting referred to the "screening" of students to see if they qualified for a psychoeduational assessment. Conference to Develop IEP was a meeting held to construct an IEP for a student. Similarly, Assisting in

Writing IEP Goals transpired during the Conference to Develop IEP and included

instances in which school psychologists were responsible for formulating IEP goals. At

the Eligibility Meeting, results of a psychoeducational evaluation were discussed to

determine whether the student was eligible for a special education placement, and the

Meeting Regarding Placement Decisions took place after the Eligibility Meeting to

discuss the student's final placement and services he or she would receive. Since the

psychologists were not provided with the data instrument or the definitions of categories

before the observations, they had no opportunity to learn and familiarize themselves with

the definitions of the categories.

Also, the process of recording activities and the accuracy of self-report data are

limitations of the current study. During the procedure, psychologists were often unable

to record at every 15-minute interval, especially during activities that required full

concentration, such as test administration. Thus, the psychologist self-recorded his or her

activity subsequently, but this later recording required the psychologist to recall a specific

time frame for an activity performed in the past, leading to possible inaccuracy of self-

recording. Inaccuracy of self-recording may also have occurred due to reactivity, since

the participants may have altered their behavior while under observation. Moreover, as

seen by the discrepancies between observation and self-recording findings, the

psychologists may have conceptualized the activities (on the data instrument) differently

than the researcher, an example of which was consultation activities. Additional training

on the time use recording would have been beneficial.

Finally, the researcher was unable to record at times when the psychologists

required privacy, so the researcher could not be certain what the psychologist was doing

during those times. In addition, to protect confidentiality, the researcher could not observe when psychologists attended meetings with other psychologists or the Coordinator of Psychological Services. Although the researcher had an idea of what the psychologists were doing at these times, she could not directly observe, so there is some missing data in the observations.

<div align="center">*Recommendations for Future Research*</div>

Despite its limitations, this study offers some limited insight on the daily time use of school psychologists in a particular urban school system, but it is clear that further research in this area is warranted to compare time use of a larger number of school psychologists in other urban school systems and suburban and rural systems. It would be interesting to explore possible impact of assignments to test students rather than assignments to schools on the time use of school psychologists in urban school districts. Hence, research that involves urban school districts that utilize building-based assignments should be conducted as a means of comparison. Time use of school psychologists in urban school systems can also be compared to those working in suburban and rural systems, since the literature comparing time use across diverse locales is sparse. In reviewing the literature, Eitel et al.'s time use study is the only one that employs observation methodology to investigate the daily activities of a group of school psychologists in an urban setting. Thus, further research should consider the daily activities of a larger number of school psychologists to help detect patterns across school psychologists' time use in different urban school districts to learn about time use of urban school psychologists.

Additionally, to gain a more comprehensive view of time use, a longitudinal study or studies conducted at different points in the school year might be conducted, and these studies might include more qualitative methodology. A longitudinal study could reveal patterns in time use across various time periods in a year; thus, this type of study would provide a better representation of time use. Since a larger number of days would be observed, a longitudinal study would also decrease the likelihood that atypical days would skew time use data. Since the current study took place in the summer at the end of the school year, it is probable that more atypical days occurred as psychologists were frantically attempting to complete their evaluations. Hence, more psychologists would be apt to participate in a study performed during a less demanding time period. Finally, qualitative interviews could be conducted to supplement field notes taken during observations by incorporating data on school psychologists' attitudes and preferences regarding their time use.

Appendix A

Letter of Invitation

Dear School Psychologist,

We would like you to invite you to participate in a research study on time utilization of urban school psychologists conducted by Sharon Huang, a graduate student in the School Psychology Program at the University of Maryland, under the supervision of Dr. Sylvia Rosenfield. As a school psychologist in an urban setting, your participation would be extremely valuable. It is hoped that the knowledge gained from this research will enable administrators to provide you with improved working conditions, such as support and professional development.

The following is the data collection method used in the study:
Observation and Self-recording—You will be asked to carry out your usual daily activities as a school psychologist, while a researcher observes and records your activities over two full school days. If you require privacy at any time, you can request that the researcher exit the room or area and ask what you were doing after the activity. In addition, you will be asked to self-record your activities for the same two full school days using the data instrument provided. You will be called the morning of the observation to confirm your schedule.

Participation in the study is voluntary. Your name will not be used and you are free to ask questions or withdraw from participation at any time.

Aggregate data from this study will be shared with system administrators, but your name will remain confidential. Although your supervisor will not know whether or not you are being observed or self-recording, there is a risk of loss of privacy because of the small number of potential participants and specified information such as type of school placement (elementary, middle, high). You may benefit from self-knowledge gained from the observation process and feedback from the researcher. In addition, knowledge of time use of psychologists in urban settings will allow administrators to provide support and professional development. Personal evaluations will not be impacted from the data in this study.

Please indicate whether or not you wish to participate by completing the tear-off slip at the bottom of this letter and respective Informed Consent Form. Place these items in a sealed envelope (provided) and return it to the researcher. Your participation is sincerely appreciated. Thank you for taking the time to read this letter. If you have any questions, feel free to contact us at the phone numbers or e-mail addresses below. I look forward to hearing from you, and I will contact you to set up observation or self-recording dates if you are participating.

Sincerely,

Sharon Huang, Graduate Student   Sylvia Rosenfield, Ph.D., Professor
School Psychology Program   School Psychology Program
University of Maryland, College Park   University of Maryland, College Park
301-405-8428 (office) 301-681-5617 (home) 301-405-2861 (office)
huangs@umd.edu   sr47@umail.umd.edu

☐ I wish to participate in the observation and self-recording portion of the study (2 full days).
☐ I do not wish to participate in the study.
Name:_____ Signature:_____
Date:_____
Contact phone number(s) or email (if participating):_____

Appendix B

Informed Consent Form

INFORMED CONSENT FORM

We would like you to participate in a research study entitled "Time Use Study of Urban School Psychologists." The purpose of this research is to determine the time utilization of urban school psychologists. The procedures involve two full school days, during which I will be asked to carry out my usual daily activities as a school psychologist, while a researcher observes and records my activities. The researcher will contact me the morning of the observation and show up at my school that day to conduct the observation. If I require privacy at any time to perform an activity, I can request that the researcher exit the room or area and ask me what I was doing after the activity. In addition, I will be asked to self-record my activities for the same two full school days using the data instrument provided as a means of comparison with the observations. A copy of the researcher's observations will be made available to me after both observations are complete.

All information collected in this study is confidential. I understand that the data I provide will be grouped with data others provide for reporting and presentation and that my name will not be used.

I understand that aggregate data from this study will be shared with system administrators, but my name will remain confidential. Although my supervisor will not know whether or not I am being observed, there is a risk of loss of privacy because of the small number of potential participants and specified information such as type of school placement (elementary, middle, high). The research study is not designed to help me personally, but to help the researcher learn more about the activities of an urban school psychologist. I may benefit from self-knowledge gained from the observation process and feedback from the researcher. In addition, knowledge of time use of psychologists in urban settings will allow administrators to provide support and professional development. Personal evaluations will not be impacted from the data in this study.

Participation in the study is voluntary, and I am free to ask questions or withdraw from participation at any time and without penalty.

If you have any questions, feel free to contact us at the following:

Sharon Huang   Sylvia Rosenfield, Ph.D.
School Psychology Program   School Psychology Program
University of Maryland   University of Maryland
College Park, 20742   College Park, 20742
Phone: 301-405-8428   Phone: 301-405-2861
huangs@umd.edu   sr47@umail.umd.edu

If you have questions about your rights as a research participant or wish to report a research-related injury, please contact: **Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) irb@deans.umd.edu; (telephone) 301-405-4212**

I state that I am over 18 years of age and wish to participate in a program of research being conducted by Sharon Huang in the Department of Counseling and Personnel Services at the University of Maryland, College Park.

Name of Participant_____

Signature of Participant_____ **Date**_____

☐ **I wish to receive information about my own data and aggregate time use data from this study.**

Appendix C

Time Use Recording Sheet

Time Use Recording Sheet

Date:_____

Time	Assessment							IEP							Consultation, Counseling, and Meetings					Logistical and Other						
	1. Review Records for Initial Referrals and Re-evaluations	2. MDT Meeting	3. Observe Child	4. Interview Teachers	5. Testing Child	6. Test interpretation/ Data integration	7. Writing/Typing Report	8. Writing IEP	9. Conference to Develop IEP	10. Eligibility Meeting	11. Assisting in Writing IEP	12. Meeting Regarding Placement Decisions	13. Conference with Parent of child found Noneligible	14. Annual Review	15. Counseling	16. Giving Workshops to Staff	17. Attending Workshops	18. Consultation with Staff Re: Student	19. Meetings with Student	20. Conferences	21. Travel	22. Lunch	23. Appointment Cancelled	24. Paperwork (Medicaid)	25. Attending to Personal	26. Other (describe below)
7:30-7:45																										
7:45-8																										
8-8:15																										
8:15-8:30																										
8:30-8:45																										
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12:15-12:30																										
12:30-12:45																										
12:45-1																										
1-1:15																										

Time	Assessment							IEP							Consultation, Counseling, and Meetings					Logistical and Other						
	1. Review Records for Initial Referrals and Re-evaluations	2. MDT Meeting	3. Observe Child	4. Interview Teachers	5. Testing Child	6. Test interpretation/ Data integration	7. Writing/Typing Report	8. Writing IEP	9. Conference to Develop IEP	10. Eligibility Meeting	11. Assisting in Writing IEP Goals	12. Meeting Regarding Placement Decisions	13. Conference with Parent child found Noneligible	14. Annual Review	15. Counseling	16. Giving Workshops to Staff	17. Attending Workshops	18. Consultation with Staff Re: Student	19. Meetings with Student	20. Conferences	21. Travel	22. Lunch	23. Appointment Cancelled	24. Paperwork (Medicaid)	25. Attending to Personal Needs	26. Other (describe below)
1:15-1:30																										
1:30-1:45																										
1:45-2																										
2-2:15																										
2:15-2:30																										
2:30-2:45																										
2:45-3																										
3-3:15																										
3:15-3:30																										
3:30-3:45																										
3:45-4																										
4-4:15																										
4:15-4:30																										

Appendix D

Executive Summary

Executive Summary

Date: May 6, 2004
To: Ray Bryant
CC: Deborah Nelson
From: Sharon Huang, Graduate Student
      School Psychology Program
      University of Maryland
Subject: Time Use Study of Urban School Psychologists

The purpose of the research is to determine the time utilization of urban school psychologists by observing and recording their daily activities and duration of each activity. I will attempt to do this by replicating Eitel, Lamberth, and Hyman's study (1984). Urban schools often have difficulty providing adequate psychological services for children due to environmental factors and the role of urban school psychologists. Thus, I am attempting to learn about urban school psychologists' time use by observing school psychologists in an urban school district.

Subject selection
Participants will be six or seven urban school psychologists and will be recruited by a letter of invitation (see attached) from the student investigator. The Coordinator of Psychological Services will identify twenty potential participants from the school district and distribute this letter to them. Based on the number of responses, the student investigator will randomly select six or seven school psychologists to participate in the study.

Procedures
For psychologists who agree to be observed by the researcher and who are randomly chosen to be so observed, the observer will arrive to conduct observations on a predetermined date. The psychologist will simply be asked to carry out his or her usual activities for the day. The observer will observe the activities of the school psychologist for the full school day and record the activities by using a checklist of predefined categories. At 15-minute intervals, she or he will check off the activity in which the school psychologist is engaged on a data sheet (see attached). If activities change within the 15-minute time period, the observer will record the change on the data sheet with the appropriate code. The observer will not interfere with the school psychologists' activities in any manner. If the school psychologist needs privacy at any time to perform an activity, the observer will exit the room or area and ask him or him what she or he was doing after the activity. The observer will also take field notes on the school psychologists' activities. The school psychologist will be asked to self-record his or her activities using the same data instrument. Identical procedures will be followed for the second observation of each school psychologist. A copy of the researcher's observations will be made available to each observed psychologist after both observations are complete.

Aggregate data about time use from this study will be shared with system administrators.

Appendix E

Instructions for Conducting Self-Recording Using the Time Use Recording Sheet

Preliminary Information
1. Check the type of school in which you are working (elementary, middle, or high).
2. Please read over the activities on the top of the recording sheet so that you are familiar with them.
3. Circle the intervals that mark the start and end of your day.

Recording Process
1. Start with the time interval that marks the beginning of your day.
2. At the end of every 15 minutes, place a check mark in the box of the appropriate time interval and activity. For example, if you were observing a child at 9:15am, you would check the box under the row "9-9:15" and in the column "3. Observe Child." See example.

Time	Assessment						
	1. Review Records for Initial Referrals and Re-evaluations	2. MDT Meeting	3. Observe child	4. Interview Teachers	5. Testing Child	6. Test interpretation/ Data integration	7. Writing/Typing Report
7:30-7:45							
7:45-8							
8-8:15							
8:15-8:30							
8:30-9:15			X				
9:15-9:30							
9:30-9:45							X6

3. If you switched activities at any point during a time interval, please indicate this by writing down the number of the original activity in the time interval, using the numbers that correspond to activities on the top of the sheet. For example, at 9:45am, if you were initially interpreting a test at 9:30am, but started writing a report at 9:40am, you would check the box indicated to the left and write in the number 6, which signifies test interpretation.
4. Continue to record your activities every 15 minutes until the end of your day.
5. At the upper right of the recording sheet, check yes or no for whether "this was a typical day."

Returning Data
6. Please return the completed recording sheet to the researcher at the end of the day.

*If you have any questions about the time use recording sheet, please contact the researcher at the email or phone numbers below:

Sharon Huang
email: huangs@umd.edu
phone: (301) 405-8428 (office) or (301) 681-5617 (home)

Appendix F

Categories for Observation (Original and Modified)

Categories for Observation (Original and Modified)

Original	*Modified*
Assessment	**Assessment**
1. Review Referral and Records	1. Review Records for Initial Referrals and Re-evaluations
2. Intake Conferences	2. MDT Meeting
3. Observe Child	3. Observe Child
4. Interview Ancillary Personnel	4. Interview Teachers
5. Testing Child	5. Testing Child
6. Test Interpretation/Data Integration	6. Test Interpretation/Data Integration
7. Writing/Dictating Report	7. Writing/Typing Report
IEP	**IEP**
8. Writing IEP	8. Writing IEP
9. Conference to Develop IEP	9. Conference to Develop IEP
10. Classification Conference	10. Eligibility Meeting
11. Develop and Write Instructional Guidelines	11. Assisting in Writing IEP Goals
12. Placement Procedures	12. Meeting Regarding Placement Decisions
13. Conference with parent of nonclassified child	13. Conference with Parent of Child Found Noneligible
14. Annual Review	14. Annual Review
Consultation, Counseling, and Meetings	**Consultation, Counseling, and Meetings**
15. Therapy	15. Counseling
16. Giving In-service Training	16. Giving Workshops to Staff
17. Attending In-service Training	17. Attending Workshops
18. Consultation	18. Consultation with Staff Re: Student
19. Meetings	19. Meetings with Student
Logistical and Other	**Logistical and Other**
20. Professional Development	20. Conferences
21. Travel	21. Travel
22. Lunch	22. Lunch
23. Appointment Cancelled	23. Appointment Cancelled
24. Paperwork	24. Paperwork (Medicaid)
25. Attending to Personal Needs	25. Attending to Personal Needs
26. Other	26. Other

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