PERCEPTIONS OF SCHOOL PSYCHOLOGIST FUNCTION

AMONG NEWLY ENROLLED SCHOOL PSYCHOLOGY GRADUATE STUDENTS

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Abstract

Scarce research exists on school psychology graduate students' perceptions of school psychologist functions. Understanding training school psychologists' perceptions of school psychologist functions is important because inaccurate perceptions may lead to unmet professional expectations, leaving trainees at risk for reduced job satisfaction, burnout, and other negative outcomes. This study used a survey research design to examine newly enrolled school psychology graduate students' perceptions of how school psychologists spend their time in comparison to self-reports from school psychologists as recorded in the 2010 NASP survey of school psychologists. The study also assessed regret after participants were presented with data on the proportion of time school psychologists actually spend providing special education evaluations and direct services such as individual and group counseling. Finally, demographic variables such as professional experience in public schools prior to entering graduate school, age, gender, highest degree earned, highest degree pursued in graduate school, degrees offered by program, and program theoretical orientation were investigated for their potential relationships with time estimates and regret. Respondents included 182 newly enrolled graduate students in NASP approved and/or APA accredited school psychology specialist, Master's and doctoral programs. Results revealed that participants underestimated the percentage of time school psychologists spend conducting special education evaluations by nearly 20 percentage points when compared to results from the 2010 NASP survey, $t(399.54) = 12.2$, $p<.000$, $d=.76$. Participants overestimated the time school psychologists spend providing individual counseling $t(465.27)=2.94$, $p<.001$, $d=.17$ and group counseling $(444.74) = 5.42$, $p < .001$, $d = .409$, $\eta^2 = .04$, by approximately 2 percentage points, in comparison to results from the 2010 NASP survey. After presenting data about the actual time school psychologists spend engaged in special

education evaluation and direct service, over 25% of participants indicated regret for pursuing

training in school psychology. A positive correlation was found between prior professional

experience in the public school system and time estimates for special education evaluation, *r*

(175) = .14, *p* = .03. Other demographic variables did not correlate with or predict time estimates

or regret. Implications for the field of school psychology may be increased effort to ensure

accurate portrayals of the profession.

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Introduction

Thousands of individuals enroll annually in school psychology graduate training programs. In 2012, over 2,700 students enrolled in school psychology graduate programs (NASP, 2013). Scarce research exists on these students' perceptions of school psychologist functions, and whether those perceptions align with actual practice. It is important that graduate students possess an accurate understanding of school psychologists' professional responsibilities because if inaccurate perceptions are held, these school psychology trainees risk finding themselves in the future tasked with responsibilities that they did not expect or want, which can lead to decreased job satisfaction (Brown, Holcombe, Bolen & Thomson, 2006; Cottrell, & Barrett, 2015; Hughes, 1976; Levinson, 1990; Wright & Gutkin, 1981). Discrepancy between desired and actual facets of one's occupation is a primary source of job dissatisfaction (Locke, 1969; Seashore & Taber, 1975; Wanous & Lawler, 1972) and burnout (Bardhoshi, 2012; Huebner, 1992; Moyer, 2011). It is therefore important that trainees enter graduate school with an accurate understanding of school psychologists' functions as practiced in the field. This study examines newly enrolled graduate students' understanding of school psychologists' key functions.

Motivation to Pursue Graduate Training in School Psychology

Few studies have investigated graduate students' motives for pursuing training in school psychology. In one retrospective study of school psychology graduate students, the desire to work with children was one of the most frequently cited reasons for choosing to enter the field of school psychology (Graves & Wright, 2007). This study employed quantitative and qualitative research methods, surveying 307 school psychology graduate students across the US regarding their reasons for attending graduate school in school psychology. The quantitative part of the

survey consisted of a Likert scale that rated the perceived impact of different features of school psychology on students' decisions to attend graduate school. Ninety two percent of respondents rated "working with children" as either important or very important for choosing school psychology as their profession. The qualitative section of the survey consisted of open-ended questions regarding reasons for applying to graduate school in school psychology. Qualitative analysis converged with quantitative findings and suggested that the desire to work with children was a strong motivator for selecting school psychology as a profession (Graves & Wright, 2007). This desire to work directly with children aligns with the preferences of practicing school psychologists. In a study of school psychologists in Utah, the three most frequently endorsed reasons for continuing to work as school psychologists were the feeling of success and joy in helping students, working one on one with students, and the opportunity to counsel students (Dickison, Prater, Heath & Young, 2009). Several studies have documented that school psychologists would prefer to spend more time providing interventions directly to students than they currently do (Agresta, 2004; Curtis, Hunley, & Grier, 2002; Filter, Ebsen & Dibos, 2013; Hosp & Reschly, 2002).

Actual School Psychologist Functions

The role of school psychologist is multifaceted, and includes a variety of professional functions (i.e., tasks for which school psychologists are responsible). School psychologist functions include conducting psychoeducational assessments, writing reports, consulting with teachers, providing individual and group interventions, and systems-level organization, among many others (Fagan & Wise, 2000; NASP, 2006). However, although school psychologists are trained to perform a wide range of tasks, their time is largely devoted to tasks that comprise the special education evaluation process, such as administration of intelligence (IQ) tests,

achievement tests, report writing, and IEP meetings (Castillo, Curtis & Gelley, 2012; Filter et al., 2013). Newly enrolled graduate students for whom the choice to train as school psychologists was motivated by a desire to work directly with children may be surprised to learn that according to NASP's 2010 survey, school psychologists spend approximately 9% of their time providing individual or group counseling, 47% of their time involved in special education evaluations and reevaluations, and 11% of their time participating in special education teams (Castillo et. al, 2012). Thirty two percent of NASP members reported spending no time providing individual student counseling, in contrast to twenty years earlier when only 16% or respondents reported spending no time engaged in individual student counseling (Castillo, Curtis, & Gelley, 2012). Indeed, nearly one-half century of research on the roles and functions of the school psychologist in the US has yielded one consistent finding: School psychologists spend over 50% of their time engaged in special education determination activities, more than any other type of activity, even as they prefer to spend less time evaluating and more time engaged in other activities, such as counseling and consultation (Agresta, 2004; Curtis et al., 2002; Filter et al., 1993; Hosp & Reschly, 2002; Roberts & Rust, 1994). These studies highlight that a primary function of school psychologists is to assess students for special education eligibility (Fagan & Wise, 2000).

While individual student evaluations do entail some direct contact with children, many of the tasks involved in special education evaluation do not, such as report writing, classroom observations, teacher interviews, parent interviews, and special education meetings. Additionally, the direct child contact involved in assessment may not be the type of "work with children" for which graduate students hoped. Given research that points to school psychologists' desire to engage in individual and group counseling (Agresta, 2004; Curtis et al., 2002; Dickison et al., 2009; Filter et al., 2013; Hosp & Reschly, 2002), it is reasonable to assume that when

graduate students state they entered the field of school psychology to "work with children," they refer to the provision of direct services, i.e., services or interventions provided directly from school psychologist to child (Gutkin & Conoley 1990). Direct services include individual and group counseling and academic interventions, Despite the fact that testing involves direct contact between school psychologist and student, the assessment itself does not service the child but rather provides direction for the development of services and interventions, which may be delivered by someone else entirely. For this reason, Gutkin & Conoley (1990) categorize assessment as an indirect service.

The claim that graduate students' professed desire to "work with children" refers to direct services such as individual and group counseling is supported by Filter, Ebsen and Dibos' (2013) study of school psychologists' actual versus desired functions. In this study, respondents reported that they preferred to spend less time directly administering IQ and achievement tests, even though test administration involves working directly with students. They also reported wanting to spend more time providing individual and group counseling. Other studies have found a similar pattern (Agresta, 2004; Brown et al., 2006; Hosp & Reschly, 2002). Thus, although the administration of IQ tests involves working directly with students and might therefore technically be considered "working with kids," it is likely that when graduate students state their desire to work with kids, they refer to individual and group interventions rather than testing.

School psychologists also tend to spend a significant amount of their time in solitary work, such as administrative duties, report writing, individualized education plan (IEP) construction, and completing paperwork (Agresta, 2004; Filter et al., 2013). Special education evaluations in particular require school psychologists to devote time to writing educational reports and developing recommendations for students' IEPs. School psychologists spend more

time writing reports than they prefer (Filter et al., 2013). In one survey of 100 veteran New York City school psychologists, ninety four percent of respondents reported that they spend more time on paperwork and compliance issues than on services that directly help students and their families, and ninety one percent reported that their case-management responsibilities and associated paperwork obstruct their ability to provide quality evaluations and assessments (Gotbaum, 2008). Thus, solitary work takes up a sizeable proportion of school psychologists' total work time.

Given studies that document that school psychologists spend a small percentage of their time working directly with children in the form of individual and group interventions (Bramlett et al., 2002; Brown et al., 2006; Castillo et al., 2012; Filter et al., 2013; Hosp & Reschly, 2002), one may wonder why individuals with hopes of providing direct services to children (Graves & Wright, 2007) apply to graduate school in school psychology. If school psychology graduate students desire to work directly with children, why do they enter a field in which, according to prior research, less than 10% of their time will be spent engaged in direct service such as individual or group counseling? Perhaps applicants to school psychology training programs lack a full understanding of school psychologist functions.

Newly Enrolled Graduate Students' Understanding of School Psychology

Studies are mixed as to the level of knowledge that pre-graduate students possess about school psychology. Gilman and Hadwerk (2001) found that undergraduate psychology majors reported generally equal knowledge of school, clinical, and counseling psychology. On the other hand, there is evidence that undergraduate students lack adequate exposure to the field of school psychology (Stinnett, Bui, & Capaccioli, 2013). One study found that undergraduate psychology majors had less exposure to school psychology than clinical psychology, $\eta p^2 = 0.34$, and

counseling psychology, $\eta p^2 = 0.37$, as well as less knowledge of school psychology than clinical psychology, $\eta p^2 = .1$, and counseling psychology, $\eta p^2 = .19$ (Bocanegra, Gubi, Fan, & Hansmann, 2015).

These findings may represent a demographic shift among school psychology trainees. Although rigorous research on school psychology graduate students' age has not been conducted, some researchers have noted that incoming graduate students in school psychology training programs appear to be increasingly younger, have less work experience, and less background in education (Krieg, Meikamp, O'Keefe, & Stroebel, 2006; Merrell, Ervin, & Peacock, 2012). This may be reflected in the reduction of school psychologists' average age between 2010 and 2015 (NASP, 2016). Some researchers have suggest that whereas in the past, school psychologists were often former special education teachers or school counselors with years of experience in the educational system, new graduate students tend to apply to graduate training programs earlier in their careers (Merrell, Ervin, & Peacock, 2012). Graduate school applicants may therefore be more reliant on undergraduate coursework for information about the field of school psychology. Yet, undergraduate education often fails to provide adequate information about school psychology. Introductory psychology textbooks provide minimal coverage of school psychology (Lucas, Blazek, Raley, & Washington, 2005). Additionally, undergraduate courses in school psychology are uncommon. Overstreet (2007) found that whereas 50% of universities with APA accredited graduate programs in school psychology provide undergraduate courses in clinical psychology, only 10% offer an undergraduate course in school psychology. With inconsistent exposure to the field of school psychology, it is not surprising that early graduate students may misperceive school psychologists' actual functions in schools.

The demographic shift from older to younger school psychology trainees may be related to school psychologist professional expectations and preferences. Filter and colleagues (2013) surveyed school psychologists about their actual and preferred practices. In exploring the relationship between demographic characteristics and responses, the researchers found that the further school psychologists were from retirement, the greater the discrepancy between their actual and preferred time spent administering IQ tests (β = -.369). Perhaps newer school psychologists have a greater preference to assess less than veteran school psychologists.

Consequences of Entering School Psychology Graduate Programs with Inaccurate Perceptions of the Field

  Job dissatisfaction and other negative consequences of unmet expectations. Insufficient knowledge of key school psychologist functions when applying to graduate school can have negative consequences for future school psychologists. Misperceptions about the field can lead to a mismatch between expected and actual job responsibilities. A body of literature documents how unmet professional expectations are a significant source of stress on newcomers to a job, and have been linked to an array of negative consequences such as reduced motivation for learning, reduced effort at work, emotional exhaustion, higher turnover, and lower job satisfaction (Maden, Ozcelik & Karacay, 2016; Nelson & Sutton, 1991; Taris, Feij, & Capel, 2006). On the other hand, realistic perceptions of job requirements and job related stressors are associated with better adjustment to the new job (Buckley, Fedor, Veres, Wiese & Carraher, 1998; Nelson & Sutton, 1991). It is therefore important that individuals enter their respective professions with realistic expectations of their professional requirements.

  Although school psychologists generally report high levels of job satisfaction (VanVoorhis & Levinson, 2006), discrepancy between actual and desired functions is related to

decreased job satisfaction, which can in turn contribute to job-related burnout among school psychologists (Huebner, 1992). In a 1979 study of school psychologists, Hughes found that discrepancy between desired and actual responsibilities correlated negatively with job satisfaction, $r = .24$, $p < .05$ (Hughes, 1979). Another study found that in addition to school psychologists' preference to spend less time involved in assessment, multidisciplinary team meetings, and administrative duties, the discrepancy between desired and actual time spent in multidisciplinary meetings negatively correlated with job satisfaction (Brown et al., 2006). Bardhoshi (2012) found that the assignment of clerical and administrative work to school counselors predicted exhaustion, negative work environment, deterioration in personal life, and struggles to develop competence (Lee et al., 2007). Other studies have documented the relationship of discrepancy between actual and desired job functions and job satisfaction for school psychologists (Levinson, 1990; Wright & Gutkin, 1981). Considering that school psychologists tend to spend little time providing direct service to students while spending much time involved in special education evaluation tasks, school psychology graduate students who are unaware of the actual time school psychologists spend conducting evaluations and providing direct services may experience a sense of disillusionment during or after graduate school as they come to realize that their professionals expectations will likely not be met in practice.

Regret. Another possible consequence of entering the field of school psychology with perceptions of school psychologist functions that do not align with the reality as practiced in the field is regret. Regret is the negative emotion that follows the realization that one's present situation would have been better had they taken a different course of action (Zeelenberg, Inman, & Pieters, 2001). In this case, graduate students may experience regret after learning about school psychologists' actual functions as practiced in the field. Regret involves counterfactual

thinking (Roese, Summerville & Fessel, 2007), the act of imagining alternative realities of past actions, events, or states (Landman & Mannis, 1992), as well as a wish to undo one's actions (Zeelenberg et al., 2007). Although common among normal adults, counterfactual thinking occurs more frequently when individuals' decisions prove less than ideal (Landman & Mannis, 1992). Research on regret documents that people's most frequently reported regrets center on choices surrounding education and occupation (Landman & Mannis, 1992; Roese & Summerville, 2005). Occupational regret is associated with several negative outcomes including depression, negative affect, reduced job satisfaction, and absence from work (Wrzesniewski, Tosti, & Landman, 2006). It is therefore important that individuals entering any career do so with passion rather than regret.

Prior Studies

We are unaware of any current research related to the accuracy of newly enrolled graduate students' perceptions of school psychologist functions. Studies on undergraduate students' knowledge of school psychology suffer from methodological limitations. Studies of undergraduate students' level of knowledge of school psychology often rely on self-reported, perceived knowledge (Bocanegra et al., 2015; Gilman & Handwerk, 2001). Stinnett, Bui and Capaciolli's (2013) study differed in that it measured undergraduate students' knowledge of school psychology based on their responses to statements such as "School psychologists are only qualified to work in the schools," and, "School psychologists only work with special education students." However, this study also contains methodological problems. While some of the statements are undoubtedly true or false, such as, "School psychology programs are not accredited by APA like clinical and counseling programs," others less objectively true or false, such as, "School psychology isn't part of mainstream psychology like clinical and counseling."

What one considers "mainstream" is subjective. Another example is, "School psychologists do not do counseling, therapy, or intervention." The authors likely considered this statement false. However, this statement is true for many school psychologists. According to the most recent NASP survey of school psychologists, 32% of school psychologists reported engaging in no counseling, and 80% to 90% reported not running any student groups (Castillo et al., 2012). On top of these limitations, these studies explored perceptions of undergraduate students, who may or may not apply to graduate school, rather than newly enrolled graduate students. The current study fills the gap in the literature by directly assessing newly enrolled graduate students' perceptions of the field in which they are entering.

Current Study

Given both research highlighting that a primary motivation for individuals to pursue graduate training in school psychology is the desire to work with children (Graves & Wright, 2007) in conjunction with the fact that school psychologists typically spend little time providing direct service to children (Castillo et al., 2012), it is possible that discrepancies exist between newly enrolled school psychology graduate students' perceptions of school psychologist functions and school psychologist functions as actually practiced in the field. This study investigated whether discrepancies exist between newly enrolled school psychology trainees' perceptions of school psychologist functions and actual school psychologist functions, as determined by prior research. Regret for having entered the field of school psychology after being presented with data on actual time allotment to direct service and special education evaluation was also examined. Finally, the study investigated whether regret and/or misperceptions are related to prior professional experience in the public school system and other demographic variables.

This area of research is important because misperceptions of school psychologist's professional responsibilities among school psychology trainees can lead individuals to pursue a profession that might not meet their professional goals (Cottrell, & Barrett, 2015). Such misperceptions may leave trainees at risk for decreased job satisfaction (Brown et al., 2006; Hughes, 1976; Levinson, 1990; Wright & Gutkin, 1981) and burnout (Bardhoshi, 2012; Huebner, 1992; Moyer, 2011). A greater understanding of newly enrolled graduate students' perceptions of school psychologist functions may provide graduate schools and professional organizations with useful data for addressing this potential problem.

Research Questions and Predictions

　　Research question/prediction 1. Given previous research that highlights undergraduate students' limited exposure to, and understanding of, the field of school psychology (Bocanegra, Gubi, Fan, & Hansmann, 2015; Lucas, Blazek, Raley, & Washington, 2005; Overstreet, 2007), as well as research that documents school psychologists' preference to spend less time engaged in assessment (Agresta, 2004; Curtis et al., 2002; Filter et al., 1993; Hosp & Reschly, 2002; Roberts & Rust, 1994), newly enrolled graduate students may be unaware of just how much time school psychologists actually spend evaluating students for special educational. Therefore, in the current study, it was predicted that *newly enrolled graduate students will estimate that school psychologists spend a lower percentage of time engaged in special education evaluations than they actually do, as documented by the 2010 NASP survey (Castillo et al., 2012).*

　　Research question/prediction 2. Prior research emphasizes that school psychologists enjoy providing direct services such as individual and group counseling and would prefer to spend more time engaged in these activities (Agresta, 2004; Curtis et al., 2002; Dickison et al., 2009; Filter et al., 2013; Hosp & Reschly, 2002). Indeed, the desire to work with children has

been identified as a strong motivation for graduate students to pursue training in school psychology (Graves & Wright, 2007). Yet school psychologists spend only 5.8% and 3.1% of their time engaged in individual and group student counseling respectively (Castillo et al., 2012). In the 2010 NASP survey, 32% of respondents reported spending no time at all providing individual student counseling, and 80% to 90% reported not conducting any student groups (Castillo et al., 2012). Given the discrepancy between actual and desired time spent providing direct services such as individual and group counseling, as well as undergraduate students' limited exposure to school psychology (Bocanegra, Gubi, Fan, & Hansmann, 2015; Lucas, Blazek, Raley, & Washington, 2005; Overstreet, 2007), school psychology trainees may enter graduate school unaware of the actual proportion of time school psychologists spend engaged in individual and group counseling. *It was therefore predicted that newly enrolled graduate students would estimate that school psychologists spend a higher percentage of their time engage in individual and group counseling, than they actually do, as documented by the 2010 NASP (Castillo et al., 2012).*

Research question/prediction 3. Students who enter graduate school without full awareness of the extent to which school psychologists function to evaluate students for special education eligibility may find their professional expectations unmet, which may in turn lead graduate students to regret their decisions to pursue training in school psychology. *It was therefore predicted that among participants who underestimate the percentage of time school psychologists spend engaged in special education evaluation, time estimates for special education evaluation would have a medium to large negative correlation (r = -.30 - -.50; Cohen, 1992) with regret after participants are presented with data on the actual proportion of time school psychologists spend conducting special education assessments.* In other words, for

graduate students who underestimate the percentage of time school psychologists spend engaged in special education evaluation, the lower the time estimate for special education evaluation, the higher the score on an item designed to measure regret for pursuing training in school psychology.

Research question/prediction 4. Many individuals enter the field of school psychology with hopes of working directly with students (Graved & Wright, 2007). However, school psychologists typically spend very little time providing individual and group counseling to students (Castillo et al., 2012). The divergence between graduate students' motivations and the reality in practice regarding direct service could lead to regret when professional expectations are unmet. *It was therefore predicted that among participants who overestimated the percentage of time school psychologists spend engaged direct services, i.e., individual and group counseling, time estimates for individual and group counseling would have a medium to large positive correlation (r = .30 - .50) with regret, after participants are presented with data on the actual proportion of time school psychologists spend delivering direct interventions*. That is, for participants that overestimate the percentage of time school psychologists spend providing direct services, i.e., individual and group counseling, the greater the time estimate for direct services, the higher the score on the item designed to measure regret about participants' decision to pursue training in school psychology.

Research question/prediction 5. Researchers have noted that incoming graduate students in school psychology training programs appear to be increasingly younger with less work experience in the public school system (Krieg, Meikamp, O'Keefe, & Stroebel, 2006; Merrell, Ervin, & Peacock, 2012). Students that enter graduate school without professional experience in the public schools may lack the first-hand experience necessary to obtain an

accurate perception of school psychologist functions. Professional experience in the public school system may provide individuals with a model of how school psychologists actually spend their time, particularly with regards to the provision of special education evaluations. In Gilman and Handwerk's 2001 study, undergraduate students reported that personal experience, such as meeting a school psychologist, was an important source of information about the field of school psychology. *Therefore, it was predicted that prior professional experience in the public school system will have a medium to large positive correlation (r = .30 - .50) with time percentage estimates for special education evaluations.* That is, newly enrolled school psychology graduate students who entered graduate school with prior professional experience in the public school system will provide higher estimates of the percentage of time school psychologists spend providing special education evaluations than students entering graduate school without prior professional public school experience.

Research question/prediction 6. Despite graduate students' desires to work directly with students (Graves & Wright, 2007), school psychologists spend only 5.8% of their time engaged in individual counseling and 3.1% of their time running student groups (Castillo et al., 2012). This gap between graduate students' professional expectations and the reality of school psychologists' work may be attributable to a lack of knowledge regarding school psychologists' actual responsibilities. Professional experience in the public school system may allow people to witness first-hand how school psychologists actually spend their time, particularly with regard to time spent providing direct services, such as individual and group counseling (Gilman & Handwerk, 2001). *It was therefore predicted that prior professional experience in the public school system will have a medium to large negative correlation (r = -.30 - -.50) with estimates of time spent engaged in individual and group counseling*. That is, newly enrolled school

psychology graduate students who entered graduate school with prior professional experience in the public school system will provide lower estimates for the percentage of time school psychologists spend providing individual and group counseling than trainees entering graduate school without prior professional public school experience.

Research question 7. To explore the relationship between individual and program variables to newly enrolled graduate students' perceptions of school psychologist functions and regret, the final exploratory research question examined whether *perceptions of the percentage of time school psychologists spend engaged in special education evaluations, perceptions of time spent providing direct services, and regret relate to any of the following variables: age, gender, highest degree earned, highest degree pursued, degrees offered by the program, and program theoretical approach.*

Method

Participants

One hundred and eighty two completed surveys were obtained. All surveys were completed by graduate students who were within their first two months of training in a NASP approved or APA accredited school psychology graduate program. Inclusion criteria for participants were the following: 1) graduate students within their first two months of training, 2) in a NASP approved master's or specialist level school psychology program, or 3) NASP approved or APA accredited doctoral level school psychology training program. Programs included in the study were those listed as active on the NASP webpage as of February 1, 2015 (http://www.nasponline.org/standards-and-certification/graduate-program-approval/nasp-approved-programs), and/or those listed on the APA online directory (http://apps.apa.org/accredsearch/). With the exception of two APA accredited school

psychology programs, all APA accredited school psychology graduate programs were also approved by NASP.

Descriptive data of demographic and program variables such as age, gender, race, prior professional public school experience, highest degree earned, highest degree pursued, and program theoretical approach are displayed in Table 1. Mean age of the sample was 25 years old with a standard deviation of 4.58 years. The sample was 83% female and 78% white. Thirty two percent of respondents were pursuing doctoral degrees while 66% were pursuing Master's or specialist degrees. Thirty two percent of respondents endorsed having prior professional experience in the public school system. Though not noted in Table 1, two of the participants' prior professional experiences in the public school system were as school psychologists. With regard to educational history, 11% entered graduate school with a master's degree or higher. Forty six percent of respondents attended programs that offered both Master's/specialist level training as well as doctorate level, while 39% attended programs that only offered Master's/specialist degrees, and 14% attended programs that only offered doctoral level degrees. Fifty-one percent of students described their program as adopting a behavioral or cognitive behavioral theoretical orientation, while 20% described their program as maintaining an ecological or systems orientation. Fifteen percent described their programs as eclectic, 6% described their program as humanistic or interpersonal, and two percent (four participants) described their program as psychodynamic.

Procedures

Prior to data collection, approval for the study was obtained from The Institutional Review Board at Rutgers, The State University of New Jersey. A Qualtrics (Smith, Smith, Smith, & Orgill, 2002) survey was emailed to directors and coordinators of NASP approved or APA

accredited school psychology training programs across the US at the beginning of the 2016-2017

academic year (September-October, 2016). Although the NASP website listed 203 active NASP

approved programs, contact information was obtained for 193 programs. Training directors

and/or coordinators were contacted via publicly available email addresses obtained from either

the NASP website (http://apps.nasponline.org/standards-and-certification/graduate-

education/index.aspx) or the training program's website.

An initial email was sent to school psychology program directors and coordinators on

September 19, 2016 that included the survey link and a request that the program director or

coordinator forward the email to their newly enrolled first-year graduate students, as well as a

request to reply to the investigator after they had done so (Appendix A). Two follow up emails

were sent at one week intervals, both of which contained a link to the survey and a request that

the director or coordinator forward the email to first-year students, as well as a request to

encourage anyone who had not yet completed the survey to please do so (Appendix B).

Participants were anonymous, so it is not known who had completed the survey the first time it

was sent out. Thus, reminder emails were sent to all training programs.

The response rate ranges from 6.74% to 40.5% depending on one's preferred calculation.

The most conservative estimate of 6.74% is based on having received 182 completed surveys

from an approximate 2,700 first year graduate students (NASP, 2013). However, this number

may be overly conservative for several reasons. Firstly, this survey targeted only graduate

students within their first two months of study. Not all the estimated 2,700 students were within

their first two months of study at the time the survey was sent out. Additionally, it is nearly

certain that not all of the estimated 2,700 first year students received the survey. Furthermore, the

estimate of 2.700 students included students in programs not approved by NASP. Finally, of the

193 programs that were sent the survey, only 40 responded that they had forwarded the survey to their first year students, despite the request in the email to reply to the researcher once they forwarded the survey to their first year students. The most liberal response rate of 40.5% is based on the total approximate number of graduate students who received the survey. It is estimated that 450 first year graduate students received the survey. This estimate is derived from following procedures. NASP (2013) survey data suggests that on average, 2,700 students enroll in school psychology programs each year. There are approximately 240 school psychology programs in the United States (NASP, 2017). Therefore, there are approximately 11.25 newly enrolled students in each program. Forty of the 193 programs contacted by the researcher responded confirming that they had forwarded the survey to their first-year students. Thus, of the estimated 2,700 first-year school psychology trainees in the United States, approximately 450 students received the survey. Given that 182 completed surveys were received, the response rate was estimated at 40.5%.

Instrument

The 3-page survey (see Appendix C) contained an item that measured perceptions of school psychologist functions, a question that measured regret, and a series of demographic questions.

Perceptions of key functions. To understand newly enrolled graduate students' perceptions of what school psychologists actually do, item 1 asked respondents to estimate the percentage of time the average school psychologist working full time in a K-12 school allocates to various activities, including special education evaluations, individual counseling, and running student groups. This item was nearly identical to question 35 of the 2010 NASP survey, which was sent out to school psychologists (Castillo et al., 2012). In the NASP survey, question 35

asked participants to estimate their percentage of work time devoted to various activities, and

read, "% of TOTAL WORK TIME (total across activities cannot exceed 100%) in activities

devoted to," followed by a list of ten activities: 504 Plan development, initial special education

evaluations and reevaluations, student-focused individual or group consultation,

organizational/system-focused consultation, participation on team with focus on special

education, participation on team with focus on intervention development for general education,

individual student counseling, student groups, in-service programs for school staff, and

presentations for parents. For each activity, participants in the NASP study recorded the

percentage of time they spend engaged in that activity. Participants in the current study were

asked nearly the same question, but were prompted to estimate the percentage of time the

average school psychologist working full time in a school (K-12) spends in the activities listed in

question 35 of the 2010 NASP survey. Definitions for activities that may have been unfamiliar to

newly enrolled graduate students such as "504 plan development" and "student groups," were

listed under the item. Responses to item 1 provide an indication of newly enrolled school

psychology trainees' perceptions of school psychologist functions, based on the percentage of

time participants estimated that school psychologists spend engaged in various activities,

including special education evaluation, individual counseling, and group counseling. A direct

service variable was created by combining percentage estimates for individual counseling and

student groups. These two categories were chosen and combined because they are the only

activities in the list that Gutkin and Conoley (1990) would consider direct services, i.e.,

interventions delivered by the school psychologist to the student.

   Regret. Item 2 first presented participants with data on school psychologists' actual time

spent in assessment (approximately 50%) and time delivering direct services (less than 10%),

based on the NASP survey of school psychologists (Castillo et al., 2012). Time spent in

assessment was rounded up from 47% documented in the survey. Time delivering interventions

was calculated by adding together the mean time percentages in the 2010 NASP survey for

individual counseling (5.75%) and student groups (3.06%), the only activities listed in item 1

that can be characterized as direct services (Gutkin & Conoley, 1990). Respondents were then

asked to indicate whether, had they been aware of the information just presented, they would

have pursued training in a different field such as clinical psychology with a child focus, special

education, or mental health counseling. Response options ranged from 1-5: 1=*definitely*,

2=*probably*, 3=*yes and no are equally likely*, 4=*probably not*, 5=*definitely not*. Lower scores

indicate a wish to undo participants' decision to pursue training in school psychology, implying

regret. Higher scores indicate higher levels of regret. This inference is made because regret

involves a wish to undo one's actions (Roese, Summerville & Fessel, 2007; Zeelenberg, &

Pieters, 1999; Zeelenberg, Van Dijk, SR Manstead, & der Pligt, 1998). Therefore, regret in this

study was measured based on participants' indication of a wish to have pursued training in a field

other than school psychology.

   Demographics. Demographic items included age, gender, ethnicity (i.e., American

Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native

Hawaiian or Other Pacific Islander, and White), highest degree earned (i.e., associate, master's,

doctorate), highest degree they are pursuing in their current program, (i.e., master's/specialist,

doctorate), degrees offered by their training program (i.e., master's/specialist, doctorate),

program accreditation (i.e., NASP, APA, NASP and APA, None), theoretical approach that best

describes their program (i.e., behavioral/cognitive behavioral, ecological, psychodynamic), and

whether they have worked in the public school system in a professional role prior to entering

graduate school (i.e., no, yes as a school psychologist, yes not as a school psychologist, other).

Finally, respondents indicated whether they want to receive results from the study once they

become available.

Data Preparation and Analysis

The initial number of survey entries collected in Qualtrics was 252. However, there were

68 incomplete entries. An incomplete entry is defined as an entry for which no response was

provided for question 1 and on. Incomplete entries occurred because every click on the survey

link produced a Qualtrics entry, regardless of progress on the survey. Thus the 252 entries

included individuals excluded from the survey by the initial two questions that were designed to

end the survey for individuals that failed to meet inclusion criteria (see Appendix A), as well as

random clicks on the link. Thirty-six entries were excluded before taking the survey because the

respondent did not meet inclusion criteria (i.e., not within the first two months of a NASP

approved or APA accredited school psychology training program). Thirty-four entries were

excluded due to incomplete data (i.e., clicked on survey link but did not complete the survey).

Therefore, the final sample size for the current study was 182.

Missing variable analysis revealed a missing data rate for demographic variables that

ranged from 1.1% to 2.7%, depending on the variable. With the exception of program theoretical

orientation, which had a missing data rate of 2.7%, missing data rates for all variables were

below 2%. Most demographic items included an "other" option. Although item 12, which asked

about prior professional experience in the public schools, provided four responses – no, yes not

as a school psychologist, yes as a school psychologist, and other – this variable was treated as

dichotomous: yes and no. Participants who selected "other" were provided with a text box to

explain their selection. Based on what was written in the text box, a determination was made via

consensus between the researcher and the first dissertation chair as to whether the position was best characterized as a professional experience in the public school system (e.g., internship, substitute teacher) or not. Five "other" entries were classified as "yes," and no entries were classified as "no." Three entries were excluded from the analyses. One entry was excluded due to incomplete information about the position, and two were excluded because "yes" and "no" were both selected.

Analyses

  Analysis for research question/prediction 1. An independent samples, one-tailed Welch's t-test was conducted to determine whether participants' time percentage estimates for "initial special education evaluations and reevaluations" in item 1 were significantly higher than responses to "initial special education evaluations and reevaluations" in the 2010 NASP survey (Castillo et al., 2012). Means, standard deviations, and sample sizes for responses to question 35 of the NASP survey were provided by the primary author of the NASP survey study (Castillo et al., 2012). Because the NASP dataset was unavailable, equal variances could not be determined. Welch's t-test was therefore used, as this test does not does not assume equal variances. Additionally, because equality of variances is not assumed, Welch's t-test is a more conservative test, reducing the likelihood of Type 1 errors (Delacre, Lakens & Leys, 2017). Alpha was set to .05. According to Cohen (1992), the ability to detect a medium effect size at .80 power with alpha .05 requires sample size of 64 participants per group.

  Analysis for research question/prediction 2. Two one-tailed independent samples Welch's t-tests were conducted, to determine whether participants' time percentage estimates for "individual counseling" and "student groups" in survey item 1 were significantly higher than responses to "individual counseling" and "student groups" in the NASP survey (Castillo et al.,

2012). Separate t-tests were conducted for individual counseling and student groups. Alpha was set to .05, requiring a sample size of 64 participants per group to detect a medium effect size (Cohen, 1992).

Analysis for research question/prediction 3. Research question 3 explored whether individuals who underestimate the amount of time school psychologists spend engaged in special education evaluation would experience regret when they learn that school psychology entails more time engaged in assessment than they had previously thought. Because item 2 presents 50% as the percentage of time school psychologists spend engaged in special education assessment, analysis for question 3 only included participants whose estimate for special education evaluation was lower than 50% (n=155). For these participants, a one-tailed bivariate correlation was conducted between regret and special education evaluation time estimates, to determine whether a relationship exists between regret and perceptions regarding the percentage of time school psychologists spend engaged in assessment.

Analysis for research question/prediction 4. Research question 4 explored whether individuals who overestimate the amount of time school psychologists spend delivering interventions will experience regret after learning that school psychologists spend less than 10% of their time delivering interventions such as individual and group counseling. Because item 2 indicates that school psychologists spend less than 10% of their time delivering interventions, analysis for question 4 only included participants whose combined estimates for individual and group counseling was equal to or greater than 10% (n=128). For participants whose direct service estimates, i.e., combined individual and group counseling estimates, were equal or greater to 10%, a one-tailed bivariate correlation was conducted between regret and direct service time estimates, in order to to determine whether a relationship exists between regret and

perceptions regarding the percentage of time school psychologists spend providing direct services.

Analysis for research question/prediction 5. A one-tailed bivariate correlation was conducted with prior professional experience and special education evaluation time estimates in order in order to understand whether professional experience in the public school system is positively correlated to perceptions of the percentage of time school psychologists spend engaged in special education evaluation. The two variables entered into the correlation were prior professional experience in the public schools and time estimates for special education evaluation. The correlation was one-tailed because a directional prediction was made.

Analysis for research question/prediction 6. A one-tailed bivariate correlation was conducted between prior experience in the public school system and direct service estimates, in order to examine whether professional experience in the public school system is negatively correlated to perceptions of the percentage of time school psychologists spend providing direct services. The two variables entered into the correlation were prior experience in the public school system and direct service, i.e., combined individual and group counseling time estimates. The correlation was one-tailed because a directional prediction was made.

Analysis for research question 7. Bivariate correlations were run for all variables that were either dichotomous or continuous, whereas multiple regression analyses were conducted for categorical variables that had more than two levels, i.e., not dichotomous. Bivariate correlations were therefore conducted for the following variables: special education evaluation time estimates, direct service time estimates, regret, age, gender, and highest degree currently pursued. Correlations were two-tailed, as this research question was exploratory, with no a-priori hypotheses.

Multiple regression analyses were conducted for predictor variables that were categorical and not dichotomous. The three predictor variables that met these criteria were highest degree earned, degrees offered by the program, and program theoretical approach. Because research question 7 was exploratory, separate regression analyses were conducted for each predictor variable - highest degree earned, degrees offered by the program, and program theoretical approach - and for each criterion variable - special education evaluation time estimate, direct service estimate, and regret. Thus, a total of nine multiple regression analyses were conducted. Because these predictor variables were categorical, responses were dummy coded. Given that separate multiple regressions were conducted for each predictor variable, the multiple regression analyses conducted for research question 7 were functionally and mathematically identical to ANOVAs. Alpha was set at .05 for all multiple regressions.

Results

Descriptive Statistics

Perceptions of key functions. Mean percentages, standard deviations, and sample sizes for perceptions of key functions for both the current and original NASP sample are provided in Table 2. Most relevant to this study, participants in this study had a mean estimate of 27.62% for the amount of time the average school psychologist spends engaged in special education evaluation, a mean estimate of 7.37% for individual counseling, and a mean estimate of 5.09% for student groups. In contrast, NASP survey respondents reported a mean estimate of 47.01% for the percentage of time they spend conducting special education evaluations, 5.75% for the percentage of time they spend providing individual counseling, and 3.06% for the percentage of time spent running student groups.

Regret. Responses to the regret item are provided in Table 3. Over 25% of participants whose special education evaluation estimates were below 50% or whose direct service estimates were equal to or greater than 10% indicated that they would have probably or definitely pursued training in a different field had they known the actual percentage of time the average school psychologist spends engaged in assessment and direct service. Approximately 55% of participants indicated they probably or definitely would not have pursued training in a different field. Eighteen percent of participants reported that yes and no were equally likely.

Inferential Statistics

Results for research question/prediction 1. Hypothesis 1 predicted that newly enrolled graduate students would underestimate the percentage of time that school psychologists spend engaged in special education evaluation when compared to data from the 2010 NASP survey of school psychologists (Castillo et al., 2012), which were provided by the study's primary investigator. Hypothesis 1 was substantiated. Newly enrolled graduate students' estimates of the time school psychologists working in public schools spend engaged in special education evaluations was significantly lower than school psychologists' self-reports, t (399.54) = 12.2, $p <$ .0001, $d = .76$, $\eta^2 = .13$ (see Table 3).

Results for research question/prediction 2. Hypothesis 2 predicted that newly enrolled graduate students would estimate that school psychologists spend a greater percentage of time engaged in individual counseling and group counseling than they actually do, as documented by the NASP survey of school psychologists (Castillo et al., 2012). A significant difference was found for individual counseling, t (465.27) = 2.94, $p < .001$, $d = .172$, $\eta^2 = .0073$, and group counseling t (444.74) = 5.42, $p < .001$, $d = .409$, $\eta^2 = .04$, with newly enrolled graduate students'

estimates for both individual and group counseling being higher than estimates provided in the 2010 NASP survey (see Table 2).

Results for research question/prediction 3. Hypothesis 3 predicted that for graduate students who underestimate the time school psychologists spend engaged in special education evaluation, i.e., whose special education evaluation time estimates were below 50% ($n = 155$), time estimates for special education evaluation would be moderately to highly negatively correlated ($r = -.30 - -.50$) with regret about pursuing training in school psychology after reading that school psychologists typically spend approximately 50% of their time conducting special education assessments. This prediction was not supported as no significant correlation was found between regret and evaluation time estimates, r (152) = -.01, $p = .45$.

Results for research question/prediction 4. Research Question 4 predicted that among participants who overestimate the time school psychologists spend providing direct service, i.e., whose combined individual and group counseling time estimates were equal to or greater than 10% ($n = 127$), direct service time estimates would be moderately to highly correlated ($r = .30 - .50$) with regret about pursuing training in school psychology after reading that school psychologists typically spend less than 10% of their time delivering interventions. This prediction was not supported as no significant correlation was found between regret and direct service time estimates r (125) = -.14, p = .06.

Results for research question/prediction 5. Research Question 5 stated that prior professional experience in the public school system would be moderately to highly positively correlated ($r = .30 - .50$) with estimates of the percentage of time school psychologists spend engaged in special education evaluations. That is, newly enrolled school psychology graduate students entering graduate school with prior professional experience in the public school system

would provide higher estimates for the percentage of time school psychologists spend engaged in special education evaluation than those entering graduate school without prior professional public school experience. A positive correlation was found between prior professional experience and special education evaluation time estimates, r (175) = .14, p = .03. Students who entered graduate school with prior professional public school experience had a mean time percentage estimate of 31.48% for time spent engaged in special education evaluation (n = 58, SD = 21.73%), while students entering graduate school without such experience had a mean percentage estimate of 26.29% (n=119, SD=14.59%).

Results for research question/prediction 6. Research Question 6 stated that prior professional experience in the public school system would be moderately to highly negatively correlated (r = -.30 - -.50) with estimates of time spent engaged in direct service delivery. In other words, it was predicted that newly enrolled students who entered graduate school with prior professional experience in the public school system would provide lower estimates for the percentage of time school psychologists spend providing direct interventions than those entering graduate school without prior professional public school experience. Students who entered graduate school with prior professional public school experience had a mean percentage estimate of 11.93% for time spent engaged in direct service delivery (n = 58, SD = 8.24%), while students entering graduate school without such experience had a mean percentage estimate of 12.42% (n = 119, SD = 7.24%). No correlation was found between prior professional experience and direct service time estimates, r (175) = .03, p = .34.

Results for research question 7. Research question 7 was exploratory, asking whether special education evaluation time estimates, direct service time estimates, or regret were associated with individual and program characteristics such as age, gender, highest degree

earned, highest degree pursued, degrees offered by the program, and program theoretical approach.

Correlations between special education evaluation time estimates, direct service time estimates, regret, age, gender, and highest degree currently pursued (master's/specialist or doctorate) are provided in Table 4. None of these variables correlated with special education evaluation time estimates, direct service time estimates, or regret (see Table 4).

Regression analysis did not reveal any relationship between highest degree earned, degrees offered by the program, and program theoretical approach with special education evaluation time estimates (Table 5), direct service time estimates (Table 6) or regret (Table 7).

Discussion

The purpose of this study was to assess the accuracy of newly enrolled graduate students' perceptions of school psychologist functions, particularly with regards to special education evaluation and direct service such as individual counseling and group counseling. Accuracy was established by statistically comparing newly enrolled graduate students' estimates of the time school psychologists spend engaged in special education evaluation, individual counseling, and group counseling to self-reported time estimates provided by NASP members in the 2010 NASP survey of school psychologists (Castillo et al., 2012). The study also investigated whether graduate students would express regret for having entered the field of school psychology after presenting them with data on the percentage of time school psychologists actually spend engaged in special education evaluation and direct service. Finally, the study explored whether misperceptions and/or regret were related to prior professional experience in the public school system, among other demographic variables.

PERCEPTIONS OF SCHOOL PSYCHOLOGIST FUNCTION

Perceptions of Key Functions

      Special education evaluation. Ever since the 1975 passage of Public Law (PL) 94-142, or the Education for All Handicapped Children Act (EAHCA), school psychologists' primary function has been to assess students for disabilities in order to determine eligibility for special education services (Hosp & Reschly, 2002; Reschly, 1983; Ysseldyke, 1978). Despite the fact that the role of the school psychologist has expanded well beyond special education evaluation (NASP, 2006; NASP, 2010), school psychologists continue to spend nearly one half of their working hours performing tasks focused on special education evaluation (Castillo et al., 2012, Filter et al., 2013). Although participants in this survey did indicate a level of recognition that school psychologists spend a considerable amount of time conducting special education evaluations, as evidenced by their mean estimate of 28% which was substantially greater than the mean estimate for every other activity listed in survey question 1, participants still underestimated the time spent in special education evaluation by nearly twenty percentage points, $t(399.54) = 12.2$, $p<.0001$, $d=.76$, $\eta^2 =.13$. Whereas participants in the 2010 NASP survey reported spending approximately 47% of their time providing special education evaluations, newly enrolled graduate students estimated that the average school psychologist spends roughly 28% of their time serving this function. This finding suggests an inaccurate perception of school psychologists' function as special education evaluators. Newly enrolled graduate students appear to enter school psychology training programs unaware of the extent to which school psychologists function to evaluate students for special education eligibility. One explanation for this inaccurate perception may relate to limited exposure to the discipline of school psychology during undergraduate training (Bocanegra et al., 2015). School psychology is given minimal

coverage in introductory psychology textbooks (Lucas et al., 2005) and undergraduate courses devoted to school psychology are rare (Overstreet, 2007).

Although limited formal exposure to school psychology may partially explain graduate students' misperceptions regarding school psychologists' function as special education evaluators, it cannot fully explain the phenomenon. The current sample was composed of individuals who applied to, and were admitted to, graduate programs in school psychology. This sample presumably had a better understanding of school psychologist functions than the average undergraduate student. Even undergraduate students who intend to train as school psychologists have been found to possess a better understanding of the field than undergraduate students who do not intend to pursue training is school psychology (Crislip, 2011). Indeed, participants in the current study had a mean time percentage estimate of 28% for special education evaluation, which indicates recognition, albeit incomplete, that school psychologists spend a significant proportion of their time engaged in special education evaluation.

Graduate students' underestimate of time spent engaged in special education evaluation might also be explained by professional organizations' presentation of professional school psychology. In a section on the NASP website entitled 'Who Are School Psychologists?" under the subtitle "What Do School Psychologists Do?" the website makes no reference to assessment in the opening paragraph while mentioning the delivery of interventions to students, consulting with teachers, families and other school employees, crafting school policy with administrators, and coordinating services with community service providers (NASP, 2017). Following the opening paragraph, the page lists over thirty school psychologist functions, only a few of which pertain to special education evaluation. An uninformed person attempting to learn about professional school psychology from the NASP website is unlikely to conclude that school

psychologists spend nearly 50% of their time conducting special education evaluations and reevaluations. Perhaps this lack of emphasis on assessment is a reflection of NASP's efforts to expand the role of the school psychologist (NASP, 2006). Regardless of the reason for this presentation of the field, it is no wonder that graduate students enter training with less than a full appreciation for the amount of time school psychologists actually spend evaluating students.

   Direct service. In contrast to the prediction of research question 2, newly enrolled graduate students held fairly accurate perceptions of school psychologists' function as direct service providers. Although there was a statistically significant difference between participants in this survey and the NASP survey in the predicted direction for both individual counseling, $t(465.27)=2.94$, $p<.001$, and group counseling, $t(444.74) = 5.42$, $p < .001$, the differences were small. For individual counseling, newly enrolled graduate students' mean time percentage estimate was 7.37%, while in the NASP survey, school psychologists reported spending 5.75% of their time in individual counseling. For student groups, newly enrolled graduate students' mean time percentage estimate was 5.09%, while in the NASP survey, school psychologists reported spending 3.06% of their time running student groups. Thus, while statistically significant differences were detected, meaningful difference were not. This sample's perception of school psychologists' functions as individual and group counselor may therefore be considered generally accurate.

   This finding was unexpected given the primacy that the graduate students in Graves and Wright's (2007) study placed on the opportunity to work with children as motivation to pursue a career in school psychology. If working with children is a key motivator for graduate students to pursue training in school psychology, it is curious that they would enter a profession in which they expect to spend only about 10% of their time providing direct services. Perhaps graduate

students maintain an unrealistically optimistic view about the amount of time that they

personally will spend providing direct services. The survey item asked participants to estimate

the amount of time the average school psychologist spends in various activities, rather than the

amount of time they personally will spend in those activities. Given that school psychologists

generally prefer to spend less time involved in assessment (Brown et al., 2006; Filter et al, 2013;

Hosp & Reschly, 2002; Roberts, 1970; Wright & Gutkin, 1981), graduate students may believe

that they will spend more time counseling than the average school psychologist, as people tend to

overestimate desirable outcomes and underestimate undesirable outcomes (Gold, 2013; Sharot,

Korn, & Dolan, 2011; Weinstein, 1980).

Regret

Research questions 3 and 4 focused on regret in relation to perceptions of school

psychologists' functions as special education evaluators and direct service providers. Results

from this study did not confirm either prediction. Regret did not correlate with special education

evaluation time estimates for those who underestimated evaluation time, nor to direct service

time estimates for those who overestimated direct service time. Item 2 first presented participants

with data regarding the time school psychologists actually spend providing special education

evaluations and interventions, and then asked participants whether they would have pursued

training in a different field had they been aware of the information just provided. Although

nearly 25% of participants responded "probably" or "definitely", regret scores were not

correlated with time estimates for special education evaluation or direct service time estimates.

These findings were unexpected. Based on the content of the item, one might have assumed that

the regret expressed by 25% of participants was related to a misperception about the amount of

time school psychologists spend engaged in special education evaluation and direct service. Yet

this was not found to be the case. Regret and perceptions of school psychologist function were not related for special education evaluation time estimates or direct service time estimates.

Perhaps the item was written in a leading manner that primed respondents to express regret. The item read, "Would you have pursued training in a different field (e.g., clinical psychology, special education, mental health counseling)?" rather than, "Would you have continued pursuing training in the field of school psychology?" Another possible explanation is that graduate students' decisions to pursue training in school psychology was motivated by multiple factors. Unmet expectations for time spent engaged in specific tasks might not override participants' other reasons for having pursued training in school psychology. Indeed, even though the desire to work with children was the highest rated motivation for pursuing training in school psychology in the Graves and Wright (2007) study, several motivations for choosing a career in school psychology were found in the study, such as the desire to work in the school system, job stability, and income potential. The presence of these other motivations might reduce regret for having pursued training in school psychology, even if graduate participants were disappointed to learn how much time school psychologists actually spend in special education evaluation and direct service delivery. Future research could include qualitative methods similar to those used in Graves and Wright's (2007) study, which may shed light on graduate students' various motivations for entering the field of school psychology, as well as expectations of their future professional responsibilities.

Prior Experience

Hypotheses 5 predicted that predicted that newly enrolled school psychology graduate students entering graduate school with prior experience in the public schools would provide higher estimates of time school psychologists spend providing special education evaluations than

students entering graduate school without prior professional public school experience. Results supported this prediction, *r* (175) = .14, *p* = .03. These results align with studies on school staff's perceptions of school psychologist function, which have revealed that school staff regard assessment as a primary function of school psychologists (Watkins, Crosby & Pearson, 2001), and tend to value this particular school psychologist function (Abel & Burke, 1985; Beauchamp, 1994).

Research question 6 predicted that newly enrolled school psychology graduate students entering graduate school with prior experience in the public schools would provide lower estimates of time school psychologists spend providing direct services than students entering graduate school without prior professional public school experience. This prediction was unsupported, as no statistically significant difference was found between graduate students entering with prior professional experience in the public school system and those entering without such experience for direct services time estimates. However, it should again be noted that sample's overall direct service mean estimate was largely in line with results from the NASP survey.

Subject and Program Variables

Research question 7 explored whether special education evaluation time estimates, direct service time estimates, or regret scores were associated with individual and program characteristics. None of the individual or program characteristics taken into account related to time estimates or regret. There was no evidence that perceptions of school psychologist function or regret is related to age, gender, highest degree earned, degrees offered by program, program theoretical orientation, or highest degree currently pursued in graduate school.

Results can be seen as generally aligning with prior research. In a study that investigated the relationship between gender and knowledge of school psychology among undergraduate students, men and women did not differ (Crislip, 2011). Graves and Wright (2007) compared students in doctoral and specialist programs with regard to motivation for entering the field of school psychology. Of the twelve motivational factors investigated in the study, graduate students seeking a doctoral degree differed on only two factors from graduate students seeking a master's or specialist degree—job stability and public school work schedule (Graves & Wright, 2007). Similarly, participants in the present study pursuing doctoral degrees did not differ from students pursuing Master's/specialist degrees in perceptions of school psychologist function or regret.

Implications for the Field

Research on the practice of school psychology over the past fifty years has consistently documented discrepancies between actual and desired functions among school psychologists. As a group, school psychologists prefer to assess less and counsel more (Agresta, 2004; Curtis, Hunley, & Grier, 2002; Filter, Ebsen & Dibos, 2013; Hosp & Reschly, 2002; Roberts, 1970, Roberts & Rust, 1994). Perhaps this long-lasting discrepancy between desired and actual school psychologist functions has its roots in the earliest stages of training. Indeed, this study found that newly enrolled graduate students considerably underestimate the amount of time school psychologists spend assessing students for special education eligibility, suggesting that school psychology trainees enter graduate school unaware of the extent to which they will be required to conduct special education evaluations in the future. This lack of awareness might manifest later as the discrepancy between desired and actual time spent providing psychoeducational assessments.

Considering the various negative consequences of unmet professional expectations (Buckley et al., 1998; Maden Ozcelik & Karacay, 2016; Nelson & Sutton, 1991; Seashore & Taber, 1975; Taris, Feij, & Capel, 2006; Wanous & Lawler, 1972), it is important that potential school psychology graduate students enter training with an accurate view of their probably future professional responsibilities. People and organizations with knowledge of the field of school psychology that come in contact with individuals considering a career in school psychology can play a role in ensuring that applicants are aware of school psychologists' professional responsibilities. NASP could make results from the NASP surveys of school psychologists readily available on the pages of their website that are dedicated to disseminating information about school psychology to the public. Providing easy access to realistic information about the profession may reduce unrealistic expectations and thereby avoid the occupational stressors that result from unmet professional expectations (Buckley et al., 1998).

Graduate programs also play a role in disseminating information about the field of school psychology. School psychology graduate programs often present information about school psychology on their websites. Additionally, graduate programs occasionally deliver presentations about the field of school psychology as part of their recruitment efforts (Crislip, 2011). For example, the Graduate School of Applied and Professional Psychology at Rutgers University holds an annual presentation aimed at recruiting a diverse student body, at which professors and students from the graduate school provide information to the attendees about the field of school psychology. This same graduate program worked with the undergraduate school at Rutgers University to establish an undergraduate course in school psychology, with professors and advanced students from the graduate school serving as professors and teacher's assistants. No matter the method, it is important that anyone disseminating information about school

psychology to potential trainees are forthcoming in their provision of accurate and relevant information.

In addition to disseminating information, graduate schools ultimately play a role in deciding who is given the opportunity to train as school psychologists. Admissions committees admit students based on their evaluation of which of their applicants they believe will ultimately be the most successful future school psychologists. Given this study's findings that graduate students entering with prior professional experience in the public schools hold a more accurate understanding of school psychologists' function as assessor for special education, graduate schools may consider prioritizing students who have worked in the public school system, and explicitly encouraging potential applicants to obtain such experience before applying to school psychology graduate school.

Limitations

It is possible that the current sample was not truly representative of newly enrolled school psychology graduate students. Survey data were collected anonymously, so responses could not be identified by program or geographical location. It should be noted that demographics such as gender, race, and degree pursued generally aligned with national norms. This sample was 83% female, which is similar to the sample in Graves and Wright's (2007) survey of school psychology graduate students, which was 88% female, and identical to the sample in the most recent NASP survey, which was 83% female (NASP, 2016). The sample's racial makeup was also comparable to industry norms. This sample was 78% white, which is similar to the sample in Graves and Wright's (2007) study, which was 85% white, and to the sample in the most recent NASP survey, which was 87% white (NASP, 2016). In this survey, 66% of respondents were pursuing a master's degree and 34% were pursuing a doctoral degree, which is identical to the

sample in Graves and Wright's (2007) study. Similarly, in the most recent NASP survey, 25% held a doctoral degree (NASP, 2106). Finally, 88% of the current sample held a bachelor's degree, in comparison with 75% in Graves and Wright's (2007) study. Notwithstanding the demographic similarities between this sample and samples in related studies, data collected from this study was anonymous, so it is unknown if students from certain programs or geographical locations were overrepresented or underrepresented. This is important because school psychologists' time allocations vary by geographical location (Hosp & Reschly, 2002). Such variation should be expected given that school psychologists' functions are greatly affected by law (Hosp & Reschly, 2002; Reschly, 1983; Ysseldyke, 1978), which, in the educational domain, varies significantly by state. Therefore, when assessing the accuracy of graduate students' perceptions of school psychologist functions, comparisons to national norms may be less useful than to state norms. Future research on perceptions of school psychologist functions could use state-level data rather than national-level data, while future research on school psychology graduate students could inquire into participants' geographical locations.

For research question 7, bivariate correlations and multiple regressions were conducted in order to detect relationships between demographic variables and perceptions of school psychologist function, as well as to regret. Although none of the demographic variables were related to perceptions of function or regret, it should be noted that the sample sizes for these variables were often too small to detect a medium size effect with .8 power and alpha at .05 (Cohen, 1992). For example, there were only 28 male participants, 18 participants that earned a master's degree prior to entering graduate school, 59 participants pursuing a doctoral degree, and 36 participants that would describe their program's theoretical orientation as ecological/systems (see Table 1). As a result of the small sample size, type 2 errors may have occurred.

In addition to the demographic variables explored in this study, there may have been other demographic variables relevant to perceptions of school psychologist function not addressed in the currently study. For example, differences in the perception of school psychologist function may exist between individuals who received special education services as students and those in general education, or between individuals who attended public schools and those who attended private schools. Future research could explore other demographic variables such as these in relation to perceptions of school psychologist function.

Conclusions

Research on graduate students' perceptions of the field they are training to enter is sparse. As far as this researcher is aware, this study is the first of its kind to directly compare perceptions of school psychologist functions with the reality, as reported by NASP members. Results from this study suggest that newly enrolled school psychology graduate students hold some misperceptions about school psychologist functions. While they realize that school psychologists typically spend little time providing direct services, newly enrolled graduate students underestimate the amount of time school psychologists spend evaluating students for special education. Although this study found no link between perceptions of school psychologist functions and regret, it is still concerning that after being presented with data on the time school psychologists actually spend conducting assessments and interventions, nearly 25% percent of participants indicated that had they been aware of this information prior to applying to graduate school, they would have pursued training in a different field. These results indicate a degree of ignorance surrounding school psychologist functions among newly enrolled graduate students. Individuals and organizations in positions to address misperceptions held by potential trainees about school psychology should do so. While it is ultimately the applicant's responsibility to

fully research the field they plan to enter, it is also the responsibility of those who disseminate information about the field of school psychology to do so accurately, in a manner that presents both the variety of functions that school psychologists serve as well as the reality regarding proportion of time school psychologists actually spend conducting assessments. Armed with an accurate vision of professional school psychology, potential applicants can make fully informed professional decisions, which will ultimately benefit them and the communities they serve.

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Appendix A

Electronic Cover Letter

Initial Electronic Cover Letter

Dear School Psychology Program Director:

My name is Yaacov Weiner, and I am a third year School Psychology graduate student at the Graduate School of Applied and Professional Psychology at Rutgers, The State University of New Jersey. I am currently conducting a study for my dissertation that examines newly enrolled school psychology graduate students' perceptions of school psychologists' roles and functions. I am requesting that you please forward this email that contains survey link to all of your incoming first-year students. Would you please 1) forward this email to your first year students and 2) let me know that you have done so?

If you or your students have any questions, please feel free to contact me at yaacov.weiner@rutgers.edu.
Thank you!

Yaacov Weiner
School Psychology Doctoral Candidate
Graduate School of Applied and Professional Psychology
Rutgers, The State University of New Jersey

_____

Dear 1st year graduate student,

I am a third year School Psychology graduate student at the School Psychology program at Rutgers University. I am conducting a study for my dissertation, which examines newly enrolled school psychology graduate students' perceptions of school psychologists' roles and functions.

Would you kindly participate by taking this online survey? (hyperlink for Qualtrics survey) Participation involves completing an online survey that takes approximately 10 minutes.

If you have any questions, please feel free to contact me at yaacov.weiner@rutgers.edu.

Thank you in advance for your consideration,

Yaacov Weiner
School Psychology Doctoral Candidate
Graduate School of Applied and Professional Psychology
Rutgers, The State University of New Jersey

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Appendix B

Follow-up Electronic Cover Letter

Dear School Psychology Program Director:

This is a follow-up to an email you have already received regarding a survey on newly enrolled graduate students' perceptions of school psychologists' roles and functions. Would you please re-forward this email to your 1st year students?

Thank you for your time,

Yaacov Weiner
School Psychology Doctoral Candidate
Graduate School of Applied and Professional Psychology
Rutgers, The State University of New Jersey
_____

Dear 1st year graduate student,

I am a third year School Psychology graduate student at the School Psychology program at Rutgers University. I am conducting a study for my dissertation, which examines newly enrolled school psychology graduate students' perceptions of school psychologists' roles and functions.

Would you kindly participate by taking this online survey? (hyperlink for Qualtrics survey) Participation involves completing an online survey that takes approximately 10 minutes.

If you have already completed this survey, please disregard this message. If you have any questions, please feel free to contact me at yaacov.weiner@rutgers.edu.

Thank you in advance for your consideration,

Yaacov Weiner
School Psychology Doctoral Candidate
Graduate School of Applied and Professional Psychology
Rutgers, The State University of New Jersey

Appendix C

Survey

1. Please estimate of time the average school psychologist who works full time in a school (K-12) allocates to the following roles **(Total across activities cannot exceed 100%)**

Clarification for each role is provided below for anyone who wants clarification

- 504 Plan development _____
- Initial special ed. evaluations and reevaluations _____
- Student-focused individual or group consultation _____
- Organizational/system-focused consultation _____
- Participation on team with focus on special education _____
- Participation on team with focus on intervention development for general education _____
- Individual student counseling _____
- Student groups _____
- In-service programs for school staff _____
- Presentations for parents _____

504 plan development. A 504 Plan is a proposal of educational accommodations created for general education students with a physical or mental health disability who are not eligible for special education services.

Initial special education evaluation and reevaluation: A process used to decide whether a child has a disability, and whether that child is (or continues to be) eligible for special education and related services. Evaluations also include gathering information used to identify all of the child's educational and related needs.

Student-focused individual or group consultation: Conferencing with one or more adults (e.g., teacher, parent administrator) about a student.

Organizational/system-focused consultation: Conferencing about an organizational or systems issues, (e.g., school climate).

Participation on team with focus on special education: Meeting with school team members (e.g., teacher, parent, social worker) regarding a student in special education.

Participation on team with focus on intervention development for general education: Meeting with school team members (e.g., teacher, parent, social worker) to plan interventions for students in general education.

Student groups: Leading a student group (e.g., social skills group, anger management group).

In-service programs for school staff: Leading professional development/trainings for school personnel.

Presentations for Parents: Presenting to parents regarding important student issues (e.g., home school collaboration, student mental health).

2. Imagine that before you applied to graduate school, you were told that school psychologists spend approximately 50% of their time in assessment, and less than 10% of their time delivering interventions. Would you have pursued training in a different field (e.g., clinical psychology, special education, mental health counseling)?

- □ Definitely
- □ Probably
- □ Yes and No are equally likely
- □ Probably not
- □ Definitely not

3. Imagine that before you applied to graduate school, you were told that school psychologists spend approximately 60% of their time working with adults, 20% of their time working alone, and 20% of their time working directly with students. Would you have pursued training in a different field (e.g., clinical psychology with child focus, special education, mental health counseling)?

- □ Definitely
- □ Probably
- □ Yes and No are equally likely
- □ Probably not
- □ Definitely not

4. Age
        _____ years

5. Gender (select one)
        □ Female
        □ Male
        □ Other (please specify) _____

6. Ethnicity (select all that apply):
        □ American Indian or Alaska Native
        □ Asian
        □ Black or African American
        □ Hispanic or Latino
        □ Native Hawaiian or other Pacific Islander
        □ White or European American
        □ Other (please specify) _____

7. Highest degree earned (select one):
        □ Associate
        □ Bachelors
        □ Master's
        □ Doctorate
        □ Other (please specify)_____

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8. Highest degree you are pursuing in your current program (select one)
    □ Doctoral (PsyD, PhD, EdD, etc.)
    □ Master's or Specialist (M.A., etc.)
    □ Other (please specify) _____

9. Degree(s) offered by your training program (select one)
    □ Only Doctoral (PsyD, PhD, EdD, etc.)
    □ Only Master's or Specialist (M.A., etc.)
    □ Doctoral and master's/Specialist

10. Program accreditation (select one)
    □ 1 = NASP
    □ 2 = APA
    □ 3 = NASP and APA
    □ 4 = None
    □ 5 = Other (please specify) _____

11. Theoretical approach that best describes your program (select one)
    □ Behavioral/Cognitive Behavioral
    □ Eclectic
    □ Ecological
    □ Humanistic/Interpersonal
    □ Psychodynamic
    □ Other (please specify): _____

12. Have you worked in the public school system in a professional role? (select one)
    □ No
    □ Yes, but not as a school psychologist
    □ Yes, as a school psychologist
    □ Other (please specify) _____

13. Please indicate whether you would like to receive results from the study when they are available.
    □ Yes, please send them to the following email address _____
    □ No

Thank you for your participation in this survey!

Questions about this survey should be directed to yaacov.weiner@rutgers.edu

Appendix D

Informed Consent

You are invited to participate in a research study being conducted by Yaacov Weiner, who is a student in the Graduate School of Applied and Professional Psychology Department at Rutgers under the supervision of Elisa Shernoff, Ph.D.

The purpose of this research is to examine 1st year graduate students' perceptions of school psychologists' roles and functions. We anticipate recruiting over 2,000 first-year graduate students to participate in this study.

The study procedures include completing a survey that asks participants to estimate the percentage of time that the average school psychologist spends working at a public school (K-12) spends fulfilling certain functions (i.e., providing interventions, conducting special education evaluations), and working with different people (i.e., students, adults, alone). For each function or group of people, you will estimate the amount of time the average school psychologist working at a public school (K-12) spends engaged with them. Afterwards, you will provide some background/demographic information about yourself.

The survey is estimated to take approximately 5-10 minutes to complete.

This research is anonymous. Anonymous means that I will record no information about you that could identify you. There will be no linkage between your identity and your response in the research. This means that I will not record any identifying information, including your name, your institution's name, work phone number, or IP address associated with your responses.

There are no direct benefits or compensation for completing the survey, but it may give you an opportunity to reflect on the training curriculum of your school psychology program. You will also contribute to the scientific research on school psychology graduate training. There are no foreseeable risks to participation in this study.

The research team and the Institutional Review Board at Rutgers University are the only parties that will be allowed to see the data, except as may be required by law. If a report of this study is published, or the results are presented at a professional conference, only group results will be stated. If you would like to know the results of this survey, please contact Yaacov Weiner, and you will be informed of them when results are available.

Participation in this study is voluntary. You may choose not to participate, and you may withdraw at any time during the study procedures without any penalty to you. In addition, you may choose not to answer any questions with which you are not comfortable.

If you have any questions about the study procedures, you may contact Yaacov Weiner at 773-329-3953 or yaacov.weiner@rutgers.edu Alternatively, you may contact the faculty member supervising this study, Dr. Elisa Shernoff, at ess91@rci.rutgers.edu or 848-445-3902.

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If you have any questions about your rights as a research subject, please contact an
IRB Administrator at the Rutgers University, Arts and Sciences IRB:

Institutional Review Board
Rutgers University, the State University of New Jersey
Liberty Plaza / Suite 3200
335 George Street, 3rd Floor
New Brunswick, NJ 08901
Phone: 732-235-9806
Email: humansubjects@orsp.rutgers.edu

By participating in the above stated procedures, then you agree to participation in this study.

If you disagree, or do not want to participate, then please exit this survey now.

By clicking "I agree" and continuing onto the survey, you are stating that you agree to and
understand the nature of your involvement in this study.

- □ I agree
- □ I disagree

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Table 1

Descriptive Statistics for Survey Sample (n =182)*

Variable		*M*	*SD*	*Range*
Age		24.96	4.58	20-48
Variable	*N*			*%*
Ethnicity				
American Indian/Alaska native	1			.5
Asian	9			5.1
Black/African American	12			6.6
Latino/Hispanic	5			2.7
White/European American	142			78
Other/Biracial	10			5.5
Gender				
Female	151			83.0
Male	28			15.4
Other	1			.5
Prior professional public school experience				
No	119			65.4
Yes	58			31.9
Other	2			1.1
Highest Degree Earned				
Bachelors	160			87.9
Master's	18			9.9
Doctoral	2			1.1
Highest degree pursued in graduate school				
Doctoral	59			32.4
Master's/Specialist	120			65.9
Degree(s) offered by your graduate program				
Only Doctoral	26			14.3
Only master's/Specialist	70			38.5
Both Doctoral and master's/Specialist	84			46.2
Program Theoretical Approach				
Behavioral/Cognitive Behavioral	93			51.1
Eclectic	28			15.4
Ecological/Systems	36			19.8
Humanistic/Interpersonal	10			5.5
Psychodynamic	4			2.2
Other	6			3.3

* Totals may not add up to 182 due to missing data. Percentages are based on the total sample of 182. Therefore, percentages may not add up to 100%.

Table 2

*Descriptive statistics of survey responses for both current survey and NASP survey**

	Current Survey Data			NASP Survey Data		
Activity	*M*	*SD*	*n*	*M*	*SD*	*n*
504 Plans	10.31%	6.65	182	2.8%	4.19	814
Special education evaluations	27.62%	17.32	182	47.01%	26.77	818
Student focused consultation	10.08%	5.94	182	10.44%	11.18	817
Systems focused consultation	6.63%	4.25	182	5.84%	9.94	815
Team - special education	13.18%	7.8	182	11.37%	13.01	818
Team - general education	8.86%	6.3	182	8.14%	10.27	814
Individual counseling	7.37%	5.73	182	5.75%	10.05	818
Student Groups	5.09%	3.95	182	3.06%	6.68	818
In-service	5.27%	3.64	182	2.79%	4.88	818
Parent presentation	5.69%	5.01	182	0.76%	2.02	815

* Mean estimates, standard deviations, and sample sizes for the NASP survey sample were provided by Dr. Jose Castillo (Castillo et al., 2012).

Table 3

Regret

Imagine that before you applied to graduate school, you were told that school psychologists spend approximately 50% of their time in assessment, and less than 10% of their time delivering interventions. Would you have pursued training in a different field (e.g., clinical psychology, special education, mental health counseling)

Response – Special Education Evaluation estimate less than 50%*	N	%
Definitely	5	3.2
Probably	35	22.6
Yes and No are Equally Likely	28	18.1
Probably Not	65	41.9
Definitely Not	21	13.5

* *n* = 155, regret response missing for one participant

Response – Direct Service estimate equal to or greater than 10%*	N	%
Definitely	5	3.9
Probably	28	21.9
Yes and No are Equally Likely	23	18.0
Probably Not	52	40.6
Definitely Not	19	14.8

* *n* = 128, regret response missing for one participant

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Table 4

Correlations Among and Descriptive Statistics For Key Study Variables

Variable	1	2	3	4	5	6	7
1. Special education evaluation estimate	–	-.4*	-.05	.1	-.03	.14*	-.03
2. Direct intervention estimate	–	–	-.1	-.04	.04	-.03	-.09
3. Regret	–	–	–	-.02	-.03	-.09	-.07
4. Age	–	–	–	–	-.05	.35*	0
5. Gender	–	–	–	–	–	.14	.17*
6. Prior public school experience	–	–	–	–	–	–	.05
7. Highest degree currently pursuing	–	–	–	–	–	–	–

Notes:

* Correlation is significant at the .05 level

N's range from 176 to 179 due to occasional missing data.

For sex, 0 = male, 1 = female. The gender value for the participant (*n*=1) who checked "other" for gender was considered missing for this correlation, as they may not fall on the male-female spectrum.

Shaded area indicates correlations relevant to the research question.

Correlations are either one-tailed or two-tailed depending on the research question, as detailed in the analyses section.

Table 5

Regression Analysis Summary for Personal and Program Characteristics Predicting Estimates of Time School Psychologists Spend Engaged in Special Education Evaluations

Characteristic	B	SE B	β	t	F	df	p	adj R^2
Highest Degree Earned					1.288	2, 177	.278	.003
Constant (Bachelors)								
Master's	6.72	4.29	.12	1.57			.12	
Doctoral	4.89	12.28	.03	.4			.69	
Degrees Offered by Program					.43	2, 177	.65	-.006
Constant (Master's/Specialist only)								
Master's/Specialist and Doctoral	-1.67	2.8	-.048	-.595			.55	
Doctoral Only	1.7	3.98	.035	.43			.67	
Program Theoretical Orientation					1.43	5, 171	.215	.012
Constant (Behavioral/CBT)								
Eclectic	.896	3.63	.019				.8	
Ecological/Systems	.273	3.31	.007				.93	
Humanistic/Interpersonal	1.468	5.6	.020				.79	
Psychodynamic	-15.78	8.6	-.139				.07	
Other	12.97	7.09	.139				.07	

Table 6

Regression Analysis Summary for Personal and Program Characteristics Predicting Estimates of Time School Psychologists Spend Engaged in Direct Service

Characteristic	B	SE B	β	t	F	df	p	adj R^2
Highest Degree Earned					1.818	2,177	.165	.009
Constant (Bachelors)								
Master's	2.519	1.901	.099	1.325			.187	
Doctoral	-7.203	5.442	-.099	-1.324			.187	
Degrees Offered by Program					1.113	2,177	.331	.001
Constant (Master's/Specialist only)								
Master's/Specialist and Doctoral	.315	1.243	.021	.254			.215	
Doctoral Only	2.566	1.763	.118	1.455			.698	
Program Theoretical Orientation	.363	1.763			1.559	5, 171	.174	.044
Constant (Behavioral/CBT)								
Eclectic	.739	1.652	.035	.447			.655	
Ecological/Systems	1.185	1.504	.062	.788			.432	
Humanistic/Interpersonal	.335	2.55	.01	.132			.895	
Psychodynamic	7.935	3.913	.153	2.028			.044	
Other	-5.231	3.228	-.123	-1.621			.107	

Table 7

Regression Analysis Summary for Personal and Program Characteristics Predicting Regret After Being Presented With Data About Actual Time School Psychologists Spend Engaged In Special Education Evaluation and Direct Service

Characteristic	B	SE B	β	t	F	df	p	adj R^2
Highest Degree Earned					.828	2,177	.44	.009.
Constant (Bachelors)								
Master's	13.412	.086	.086	1.148			.252	
Doctoral	.310	.27	-.04	-.534			.594	
Degrees Offered by Program	-.412	.772			.408	2,177	.666	-.007
Constant (Master's/Specialist only)								
Master's/Specialist and Doctoral	-.182	.250	-.059	-.73			.466	
Doctoral Only	-.136	.176	-.063	-.77			.442	
Program Theoretical Orientation					.493	5, 171	.781	-.015
Constant (Behavioral/CBT)								
Eclectic	-.223	.236	-.075	-.947			.345	
Ecological/Systems	-.029	.215	-.011	-.134			.894	
Humanistic/Interpersonal	-.273	.364	-.058	-.751			.454	
Psychodynamic	.527	.558	.072	.944			.347	
Other	.027	.461	.004	.058			.954	