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Professional Development Experiences: Are Psychology Interns Getting Enough?

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Understanding the professional development needs of psychology interns is essential to maximize the utility of predoctoral internship training; yet, little research has explored the professional development training experiences interns receive. In Study 1, 275 psychology interns from APPIC-listed programs completed a 20-question web-based anonymous survey, assessing experiences of and satisfaction with professional development training obtained on internship. Using a mixed method research design, a series of descriptive and correlational analyses were conducted. Results indicated almost 90% of interns reported receiving professional development training on internship, and 60% of interns were satisfied with their professional development training experiences. More comprehensive coverage of relevant professional development topics was associated with greater overall satisfaction and any coverage of a particular topic tended to be associated with greater satisfaction. Multiple linear regression results suggested that perceptions of preparedness for various post-internship positions were associated with satisfaction with professional development internship training experiences. In Study 2, 194 internship training directors completed a modified version of the same survey. Training directors reported more hours of coverage than did interns and tended to perceive interns as more satisfied with professional development training experiences on internship than did interns themselves. Implications for those involved in the training of interns are provided.

Keywords: Professional Development, Psychology, Internship, Training, Satisfaction

Introduction

"Professional development" is training and guidance in the transition to the profession and practice of psychology. Jarvis (1989) described internship as the time when trainees are socialized in real world practice, making professional development appropriate for inclusion in predoctoral internship training for psychologists. Kaslow and Rice (1985) described this time as the "professional adolescence," referring to the developmental period where trainees struggle to establish their professional identity while transitioning from students to independent psychologists. According to the American Psychology Postdoctoral and Internship Centers (APPIC, 2006, 1) internships are "designed to provide the intern with a planned, programmed sequence of training experiences." Thus, psychology internships are obligated to ensure that trainees receive guidance in professional development to make the transition into professional practice (e.g., Drabman, 1985; Sternlicht, 1966).

We define professional development as a set of experiences provided to interns that focus upon assisting them with their transition to future professional positions and preparing them for real world experience. For example, topics such as licensure and finding postdoctoral fellowships or jobs in desired fields represent the next step for many psychology interns with interests in applied practice. A focus on topics such as the development of a private practice, ethics, advocacy, board certification, administration issues, and research may also relate to long-term functions within the careers of professional psychologists. Thus, learning experiences that focus on the advancement of interns into future professional positions are appropriate for professional development training experiences. Familiarizing interns with the real world experiences that psychologists face when working with clients in service oriented settings and collaborating with others to improve/ensure client welfare are also appropriate.

We believe that professional development is one of many important components of the internship training experience. That is, professional development training complements training psychology interns receive for clinical skill development (e.g., assessment, therapy, case conceptualization, content knowledge), making professional development distinct yet integral to the primary focus of enhancing skills in the provision of psychological services. As the final formal step in professional psychology (clinical, counseling, school) predoctoral training, internships have the responsibility to ensure that trainees receive education or guidance in professional development. Yet, research exploring professional development experiences obtained while on internship is sparse.

Available research regarding professional development and psychology internships supports the notion that professional development is a critical component of this capstone predoctoral training experience. Sternlicht (1966) identified professional development as eighth among the ten learning areas for clinical psychology internships, suggesting that professional development should be considered a learning objective for the predoctoral internship. Years later, Drabman (1985) identified pro-

fessional development of psychologists-in-training as one of the four main areas most in need of improvement in the graduate training of scientist-practitioner-oriented clinical psychologists.

In more recent years, researchers have sought to understand the role professional development plays in creating a successful psychology internship training program. Research with trainees indicates that interns consider professional development experiences (i.e., the process of professional development over the year, the reciprocal influence of personal and professional development during internship) to be among the most influential on their development during the predoctoral internship year (Scott, 2004). In addition, interns consider both personal (psychotherapy, personal relationships, and mentors) and professional experiences (research design and methodology, practicum, ethics, and coursework) to be important aspects of internship for their professional development.

Some researchers have focused upon the inclusion of specific content deemed to be an important part of the knowledge base for professional psychologists. For example, researchers have suggested that brief psycho-pharmacology curriculum (Dunivin & Southwell, 2000), business concepts (Spruill & Pruitt, 2000), and research (LeJuez, Read, Gollan, & Zvolensky, 2001) be included in internship training since such knowledge would assist interns in future practice, aiding in differential diagnoses, selection of appropriate assessment and intervention methods, and working within the constraints of managed care. The remaining studies found in this literature search involved professional development on internship that was highly specific to a particular patient population, setting, or practice area such as working in counseling centers (Ross & Altmaier, 1990), family psychology (Kaslow, Celano, & Stanton, 2003), and providing services to individuals with severe mental illness (Hoge, Stayner, & Davidson, 2000).

Although these studies address important issues for future psychologists, little is known about what assistance psychology interns currently receive in the process of transitioning into their postdoctorate roles. Understanding the professional development needs of psychology interns is essential to maximize the utility of predoctoral internship training. The present set of studies examined psychology interns' experiences of professional development training obtained while on internship.

Study 1

Method

Participants

Participants included 275 professional psychology predoctoral interns (58 men and 217 women) at the 630 sites listed in the APPIC online internship directory for the 2005-2006 training year. Though the gender split was far from equal, APPIC (2005) reported a similar ratio in their survey of the same cohort. Most participants were in their 30s (n = 121, 44.0%) or younger (n = 124, 45.1%). Consistent with the APPIC sample, nearly all participants were pursuing Ph.D. (n = 167, 60.9%) or Psy.D. degrees (n = 106, 38.7%). Our sample contained 230 (83.9%) individuals from clinical psychology programs (compared to 77% of respondents in the APPIC sample) and 34 (12.4%) respondents from counseling psychology doctoral programs.

Nearly all of the participants (n = 264, 96.0%) were from doctoral programs accredited by the American Psychological Association (AP) and/or Canadian Psychological Association (CPA) and most study participants were completing APA- or CPA-accredited (n = 234; 85.1%) internships. The remaining respondents were at unaccredited internship sites (n = 40, 14.5%; many of these individuals listed "APPIC member" as their accreditation organization; however, APPIC is not an accrediting agency; APPIC, 2002). Canada and all regions of the United States (US) were represented by respondents with the majority at internships in the Northeast (26.2%; n = 72), Midwest (22.5%; n = 62), and Southeast (20.4%; n = 56) regions of the US. Despite a wide range in the number of interns per site (from 2 or fewer to more than 15), 80% (n = 155) of respondents were from sites with 3 - 10 interns at the time of their training. Nearly all respondents were at internship sites (or major rotations) in community medical settings (n = 103, 37.3%), counseling centers (n = 60, 21.7%), or VAs (n = 59, 21.4%), with few completing internships in outpatient mental health centers (n = 18, 6.5%), correctional facilities (n = 11, 4.0%), or schools (n = 8, 2.9%).

Most respondents intended to complete a postdoctoral fellowship (n = 130; 47.3%) or some type of clinical/non-private practice job (n = 77; 28.0%) immediately following internship. Few participants planned to immediately enter academic (n = 12; 4.4%), research (n = 4; 1.5%), or private practice (n = 11; 4.0%) positions. Over two thirds of respondents (n = 198; 72.0%) desired a clinical career (e.g., private practice, non-private practice) as their long-term position post-internship, with few planning careers in academia (n = 45; 16.4%) or research (n = 8; 2.9%).

Procedures

Training Directors (TDs) with published email addresses in the APPIC online directory (a total of 613 TDs) for the internship year were contacted via email and asked to forward an invitation to participate in the study to their current intern class in early June 2006, which fell near the termination (final 4 months) of the training year for most APPIC member internship sites. Two weeks later, TDs received a reminder email to forward to their current interns. TDs and interns were informed that the study explored professional development experiences during internship. The email invitation directed interested interns to a survey hosted on www.surveymonkey.com. The survey introduction contained required information for informed consent, stating that respondents' answers would serve as their consent. Interns who chose to participate completed an anonymous online questionnaire, assessing experiences and satisfaction with professional development obtained on internship.

Measures

Although a measure with established psychometric properties would enhance the soundness of the present study, no such measure exists. In exploratory research in related domains such as student trainee perspectives of practica (Gross, 2005), neuropsychology postdoctoral training experiences (Donders, 2002), postdoctoral training in health psychology (Belar & Siegel, 1983), correctional psychology internship training (Ax & Morgan, 2002), and child and adolescent psychiatry residency training (Stubbe, 2002), researchers have developed questionnaires specifically for the study using face valid items designed to assess the experiences expected to relate to the particular type of training under investigation. Although guidelines regarding internship professional development training would provide a starting point for item development, no such guidelines exist. Due to the lack of available measures and limited existing literature, questions focused upon quickly capturing information about training opportunities available to interns at their sites were developed specifically for this study. The survey contained

20 questions generated by the authors based upon their knowledge and experience of training opportunities, and included face-valid questions related to professional transition (e.g., licensure, board certification). In addition, input from individuals who had previously completed an APA-accredited internship at different training sites than the authors was solicited.

Because one of the primary goals of the study was to explore professional development opportunities offered by internship sites, we felt it necessary to collect background information about internship sites so that we could adequately describe the training sites represented within our sample's responses given potential regional and setting differences. To avoid the potential identification of participants, who could potentially suffer negative consequences if they provided non-favorable information (which some participants explicitly stated as a concern in heir responses), we limited the information solicited about interns. In some cases, personal demographics (e.g., specific age, ethnicity) combined with internship site demographics may be specific enough to make the identification of an intern possible. Thus, collected personal demographics were limited to age group, gender, degree, and program specialization. The demographics collected for internship sites were limited to accreditation, ranges of internship class size, region, and primary training setting. In addition, participants reported availability and estimated hours of training in different types of professional development experiences. They also indicated their level of satisfaction with professional development training using a 5-point scale (from 1 = extremely dissatisfied, to 5 = extremely satisfied) and listed suggestions to improve such training.

The survey items were not intended to be summative, but rather to capture data about the different components and foci of professional development experiences of psychology interns. While internal reliability analyses are not appropriate for the entire measure, we conducted such analyses for item sets for which participants provided multiple responses to assess a particular construct. We obtained acceptable coefficient alphas for presence of coverage of 11 different topics (α = .73), hours devoted to those topics (α = .83), hours of guidance on those topics interns obtained outside of formal professional development training experiences (α = .87), and ratings of how well their professional development experiences on internship prepared them for 5 different post-internship positions/tasks (α = 82).

Design and Analyses

This study was descriptive and correlational in design. Analyses were predominantly descriptive in nature, and a series of correlations and analyses of variance (ANOVAs) were used to evaluate the relationship between several aspects of internship professional development training and level of satisfaction with such training.

Results

Descriptives

Most interns (89.1%) reported receiving some type of professional development training. Table 1 reveals that a majority of interns reported that their internship professional development training covered topics of private practice issues, ethics, postdoctoral fellowships, licensure, support and adjustment, and administrative issues. In contrast, 50% or more of respondents reported that their formal professional development training included 0 hours on academic job topics, board certification, research, and current events and advocacy.

Most interns were satisfied with their internship professional development training experiences (60%), though a substantial portion (21.8%) reported some level of dissatisfaction. Over 60% of respondents felt that their internship had prepared them "well" or "very well" for postdoctoral fellowships and clinical/non-private practice work and half (49.7%) felt their internship's professional development training had prepared them "well" or "very well" for licensure. In contrast, respondents' views about how well their sites' professional development experiences prepared them for private practice jobs were mixed (over 30% reported that the experiences had "not at all" or "poorly" prepared them and 36.4% described the preparation as "fair"). Respondents tended to view their internship professional development experiences as least adequate in preparing them for academic jobs (53.5% felt "not at all" or "poorly" prepared).

Using 5 ANOVAs, differences in perceptions of preparedness related to primary training site were examined. No group differences were found for perceptions of preparedness for clinical non-private practice, $F(6, 268) = 1.57$, $p = .157$, postdoctoral fellowships, $F(6, 268) = 1.92$, $p = .078$, academia, $F(6, 268) = 2.08$, $p = .056$, or licensure, $F(6, 268) = .49$, $p = .814$. However, counseling center interns believed their professional development training better prepared them for private practice than did those in medical settings and schools, $F(6, 267) = 2.24$, $p = .04$.

Table 2 contains bivariate correlations between internship professional development training satisfaction and hours of professional development training devoted to different topic areas. Broadly, less time spent on topics was associated with greater dissatisfaction. To determine if these relevant topics were covered in some other format (outside the professional development seminar) during internship (e.g., supervision, assigned mentors), respondents indicated the number of hours spent with other individuals associated with the internship (not including other interns) addressing each of the professional development topics (see Table 3).

Satisfaction as a Function of Professional Development Experiences

A series of *t*-tests and ANOVAs were conducted to test if level of satisfaction with professional development differed as a function of internship characteristics and professional development availability. Sixteen *t*-tests were planned so a Bonferroni correction was applied, resulting in an adjusted alpha level of .0031. The Bonferroni correction for three planned ANOVAs resulted in a new alpha level of .0166. Table 4 contains group means for the 16 *t*-tests conducted on availability of different components of professional development. Coverage of any topic (except ethics) in professional development seminars was associated with higher levels of satisfaction with professional development on internship. Satisfaction did not differ depending upon internship accreditation, $F(3, 270) = 2.00$, *ns*, or type of primary training setting, $F(6, 268) = 2.38$, $p = .029$. Satisfaction level did differ depending upon number of interns at the site, $F(4, 270) = 4.75$, $p = .001$. Post hoc analyses using the Tukey method revealed that respondents from sites with 6 - 10 interns ($M = 4.00$, $SD = .98$) had significantly (using a cutoff of $p < .05$ for post hoc analyses) higher levels of satisfaction than did those from sites with 1 - 2 interns ($M = 3.28$, $SD = 1.16$) and 3 - 5 interns ($M = 3.43$, $SD = 1.19$), whereas respondents from sites with 11 - 15 interns ($M = 3.80$, $SD = 1.21$) and 16 or more interns ($M = 4.75$, $SD = .50$) did not differ from any other group.

Perceived Preparedness Predicting Satisfaction

We expected that perceptions of preparedness may predict overall satisfaction with professional development training. Thus, we conducted a multiple linear regression with respondents' ratings of preparedness for academia, private practice,

Table 1.
Hours of professional development devoted to different topics of interest.

Topics	0 hours	1 hour	*N* (%)	2 hours	3 - 5 hours	6 - 10 hours	11+ hours
Academic jobs	148 (53.8%)	46 (16.7%)		44 (16.0%)	22 (8.0%)	10 (3.6%)	5 (1.8%)
Private practice	115 (41.8%)	56 (20.4%)		66 (24.0%)	28 (10.2%)	8 (2.9%)	2 (.7%)
Clinical/Non-private practice	136 (49.5%)	68 (24.7%)		38 (13.8%)	17 (6.2%)	7 (2.5%)	9 (3.3%)
Postdoctoral fellowships	102 (37.1%)	45 (16.4%)		59 (21.5%)	42 (15.3%)	14 (5.1%)	13 (4.7%)
Licensure	67 (24.4%)	65 (23.6%)		81 (29.5%)	38 (13.8%)	14 (5.1%)	10 (3.6%)
Board Certification	195 (70.9%)	43 (15.6%)		22 (8.0%)	9 (3.3%)	4 (1.5%)	2 (.7%)
Research	153 (55.6%)	35 (12.7%)		17 (6.2%)	20 (7.3%)	14 (5.1%)	36 (13.1%)
Ethics	40 (14.5%)	39 (14.2%)		58 (21.1%)	74 (26.9%)	40 (14.5%)	24 (8.7%)
Current events/advocacy	137 (49.8%)	30 (10.9%)		29 (10.5%)	36 (13.1%)	23 (8.4%)	19 (6.9%)
Support and adjustment	71 (25.8%)	35 (12.7%)		20 (7.3%)	35 (12.7%)	31 (11.3%)	83 (30.2%)
Administrative issues for internship	49 (17.8%)	54 (19.6%)		45 (16.4%)	56 (20.4%)	31 (11.3%)	40 (14.5%)

Table 2.
Bivariate correlations (*r*) *between self-reported level of satisfaction with professional development training on internship and hours of professional development devoted to different topics.*

Hours of Professional Development Devoted To:	Satisfaction
Academic Job Issues	.323**
Private Practice Jobs	.345**
Non-Private Practice Jobs	.456**
Postdoctoral Fellowships	.394**
Licensure	.451**
Board Certification	.319**
Research	.317**
Ethics	.356**
Current Events and Advocacy	.314**
Support and Adjustment	.464**
Administrative Issues	.297**

Note: All correlations are between level of satisfaction and specific focus of professional development training using an ordinal scale rather than a ratio scale, where individuals indicated which of the following best described number of hours of professional development training focused on the topic: 0, 1, 2, 3 - 5, 6 - 10, and 11 or more. **$p < .001$

non-private practice, licensure, and postdoctoral training predicting satisfaction with professional development training experiences. Perceptions of preparedness across domains accounted for 60% of the variance in satisfaction, $F(5, 268) = 79.33$, $p < .001$. Perceived level of preparedness for academia ($\beta = .10$, $sr = .09$, $p = .026$), clinical/non-private practice ($\beta = .31$, $sr = .22$, $p < .001$), postdoctoral fellowship ($\beta = .21$, $sr = .16$, $p < .001$), and licensure ($\beta = .28$, $sr = .21$, $p < .001$) emerged as unique predictors that remained significant after controlling for the effects of perceptions in the other domains. The semipartial coefficients suggest that perceived effectiveness of professional development training in preparation for practice related activities (postdoctoral fellowships, clinical/non-private, and licensure) commonly faced by individuals shortly after internship were most related to satisfaction.

Qualitative Analyses

Sixty-five interns responded to an open-ended request to "list any suggestions… for the provision of more effective professional development experiences on internship." The responses were filtered into a single table and reviewed by the researchers. Data reduction and content analysis were performed by hand, which involved immersion of the investigator in the data with several readings to identify concepts. Next, each response was coded based on content. Coding was initially done with respondents' words or short phrases. As patterns were identified, phrases were collapsed into subcategories, then broader categories, common themes were derived, and coded frequencies of responses for each theme were summed.

Of the responses, nine did not suggest changes to internship professional development experiences (e.g., "N/A", "adequately prepared"). Eight key themes emerged for the remaining responses with the predominant ($n = 51$) message reflecting a desire for more professional development on transitioning to the next career phase (see Table 5 for sample responses).

The first theme was a desire for more preparation for the licensure process (8), such as "We have no clue how to proceed as far as licensure." The second theme reflected a need for more guidance in acquiring postdoctoral positions (16), both for continued training ("… regular meetings about acquiring postdocs") and employment ("Schedule seminars related to job finding"). The third theme requested more information about post-internship clinical work (5), including "how to start a private practice."

The inclusion of more intern support emerged as the fourth theme (6), with requests including a "more supportive environment regarding adjusting to clinical work," or support group (3), "just for interns, where these matters could be discussed." The fifth theme was the request for more talks from practicing psychologists regarding job experiences or options (5), "from psychologists in various professions… to learn how they got started, etc." The desire for a mentoring program comprised the sixth theme (3), "More… 1:1 mentorship."

The seventh theme emerged from several comments reflecting the desire to begin these processes much earlier in the internship training year (4), "By the time we were encouraged to look into positions, many of the deadlines had passed!" Finally, the eighth theme suggested regulation, oversight, or input by APA, CPA, or APPIC (4), "I think that in order to be APPIC or APA/CPA accredited that each site MUST have certain hours put aside for professional development." In addition, there were individual requests for more information regarding selected topics (e.g., board certification, securing grants).

Table 3.
Hours of guidance outside of professional development devoted to different topics of interest during internship training.

Topics	0 hours	1 hour	*N* (%)	2 hours	3 - 5 hours	6 - 10 hours	11+ hours
Academic jobs	144 (52.4%)	51 (18.5%)		36 (13.1%)	29 (10.5%)	10 (3.6%)	5 (1.8%)
Private practice	173 (62.9%)	42 (15.3%)		29 (10.5%)	21 (7.6%)	8 (2.9%)	2 (.7%)
Clinical/Non-private practice	151 (54.9%)	48 (17.5%)		34 (12.4%)	24 (8.7%)	11 (4.0%)	7 (2.5%)
Postdoctoral fellowships	95 (34.5%)	54 (19.6%)		42 (15.3%)	43 (15.6%)	25 (9.1%)	16 (5.8%)
Licensure	104 (37.8%)	56 (20.4%)		70 (25.5%)	28 (10.2%)	11 (4.0%)	6 (2.2%)
Board Certification	196 (71.3%)	42 (15.3%)		20 (7.3%)	9 (3.3%)	4 (1.5%)	4 (1.5%)
Research	149 (54.2%)	31 (11.3%)		25 (9.1%)	21 (7.6%)	17 (6.2%)	32 (11.6%)
Ethics	103 (37.5%)	48 (17.5%)		61 (22.2%)	35 (12.7%)	16 (5.8%)	12 (4.4%)
Current events/advocacy	137 (49.8%)	35 (12.7%)		54 (19.6%)	30 (10.9%)	8 (2.9%)	11 (4.0%)
Support and adjustment	75 (27.3%)	36 (13.1%)		48 (17.5%)	43 (15.6%)	23 (8.4%)	50 (18.2%)
Administrative issues for internship	95 (34.58%)	64 (23.3%)		54 (19.6%)	32 (11.6%)	14 (6.1%)	16 (5.8%)

Note: Respondents were asked to exclude hours of guidance received from other interns or from individuals affiliated with their graduate program.

Table 4.
Mean (*and standard deviations*) *satisfaction with professional development experiences on internship as a function of availability of various experiences* (*N* = 274).

Does your internship:	Yes	No	t value
Have PD Component?	3.70 (1.12)	2.63 (1.16)	4.88**
Use Guest Speakers?	3.80 (1.13)	3.20 (1.14)	2.45**
Have Regularly Scheduled Seminars?	3.90 (1.08)	2.99 (1.11)	6.59**
Have a Support Group?	3.92 (1.13)	3.41 (1.16)	3.45*
Have Q & A with Faculty?	4.07 (.95)	3.34 (1.20)	5.01**
Have Intern Presentations?	4.00 (1.08)	3.35 (1.16)	4.51**
Cover Academic Issues?	3.95 (1.07)	3.32 (1.18)	4.49**
Cover Private Practice Issues?	3.91 (1.07)	3.23 (1.18)	4.97**
Cover Non-Private Practice Issues?	4.02 (1.08)	3.30 (1.15)	5.15**
Cover Postdoctoral Fellowships?	3.92 (1.01)	3.10 (1.22)	6.08**
Cover Licensure?	3.87 (1.03)	3.01 (1.24)	6.09**
Cover Board Certification?	4.14 (.94)	3.46 (1.18)	3.80**
Cover Research?	4.06 (.96)	3.33 (1.19)	5.13**
Cover Ethics?	3.69 (1.17)	3.24 (1.12)	2.84^
Cover Current Events/Advocacy? Advocacy?	4.10 (1.03)	3.33 (1.16)	5.39**
Cover Support/Adjustment to Internship?	3.94 (1.08)	2.98 (1.07)	7.09**

^$p < .01$; *$p < .0031$ (the cut off for significance using a Bonferroni correction); **$p < .001$.

Discussion

Most respondents reported receiving some professional development-related training on internship, though the focus and extent of that training varied widely and a subset (about one fifth) of respondents were dissatisfied. Inclusion of relevant topics (e.g., fellowships, licensure, academia, board certification) and more time devoted to those topics were associated with greater satisfaction with professional development, as was perceived effectiveness of the internship professional development training for preparing respondents for post-degree activities. Thus, providing professional development experiences focused on enhancing perceptions of preparedness for the post-internship activities of interest to any particular cohort may help to increase satisfaction with this area of internship training. Similarly, internship sites may be best equipped to accommodate trainees' preferences by explicitly inquiring about post-internship plans and formulating professional development training specific to their interns' career goals.

The eight common themes derived from the qualitative open-ended feedback provided by respondents clearly highlighted interns' desire for more guidance in the transition to the next phase. As was implied with quantitative findings regarding satisfaction, respondents tended to suggest more coverage of topics that received fewer hours of coverage during internship. In particular, interns requested more preparation for obtaining postdoctoral positions and licensure, which are often the next "hurdles" for interns.

The lack of differences in satisfaction as a function of ethics training (when using the modified alpha level to control for multiple analyses) may reflect how interns view professional development. It may be that at the internship stage of training, soon-to-be professional psychologists do not connect ethics with preparation for post-degree activities as readily as they do activities such as licensure. Obviously, the value of inclusion of ethics in professional development extends beyond interns' perceptions of how ethics relates to their preparation for the next phase of their careers (e.g., training in ethics has immediate application while on internship, ethics is a topic included on the examination for licensure in psychology).

Study 1 contains some important limitations including the use of a descriptive design and reliance upon intern self-report. As Belar and Siegel (1983) suggested regarding their own research in a similar domain, it is not possible to ensure the accuracy of participants' ratings regarding hours of coverage of a particular topic. Similarly, as is common in this type of research (e.g., Belar & Siegel, 1983; Mullins, Hartman, Chaney, Balderson, & Hoff, 2003; Stubbe, 2002), self-selection bias was inherently present.

Study 2

Past research on professional development for psychology

Table 5.
Selected intern suggestions for the provision of more effective professional development experiences on internship.

1	"Wow! I didn't realize that these areas should have been covered in our internship. It would have been really helpful to have gotten past the 'how do I handle this case?' to more of the real in's and out' s of practicing. Because my internship ran like a job, it never felt appropriate to take time out to ask some of these questions."
2	"I wish my program had started to talk about applications for postdoctoral positions sooner. By the time we were encouraged to look into positions, many of the deadlines had already passed!"
3	"Starting at the beginning of the training year preparing for postdocs applications and information about state licensure requirements with continued review and preview regularly throughout the year."
4	"Better didactics regarding administrative responsibilities: billing, negotiating pay/job, inter-department workings (red tape/politics)."
5	"Internships should be clued in to helping interns develop what happens next, especially since we graduate without a license..."
6	"I believe it would be helpful for internship sites to receive advice on the topics interns need information about from APPIC and … accreditation sites."
7	"Guest speakers sharing their experience."
8	"A support group for interns led by someone OUTSIDE of the internship agency."
9	"This is generally not a component of clinical/research supervision but should be."
11	"Requiring APA accredited internship programs to have seminars … devoted to this area."
11	"Some discussion regarding board certification."
12	"Set up a mentoring program to connect interns with experienced clinicians with similar interests/goals."
13	"Walking the intern through the process of licensure from start to finish."
14	"I do think it would be helpful to receive information about how to start a private practice."
15	"I feel the last quarter of internship should be geared towards students functioning in a more autonomous role to prepare for post-internship positions. My internship site has provided consistent professional development topics, but no real emphasis on transitioning to the next phase has occurred."
16	"More opportunity to attend seminars and trainings would be beneficial."

interns generally results in the conclusion that professional development is an important component during the predoctoral internship training sequence (e.g., Lochner, 1997; Scott, 2004; Sternlict, 1966). Despite the importance of this training, little research has explored the specific experiences psychology interns receive in professional development during internship. In Study 1, we attempted to address this deficit in the research by surveying individuals completing their internship training. We found that most psychology interns receive some professional development training, but some respondents were at least somewhat dissatisfied. Although the findings of the first study expand our existing knowledge of professional development opportunities trainees receive during their predoctoral internship, the self-reported experiences of psychology interns provides an incomplete picture of this training. In particular, potential respondents may have been more or less likely to participate depending upon their level of satisfaction with their professional development training experiences. As such, additional data from individuals other than interns themselves would provide a clearer picture of the offerings of professional development training for psychology interns.

The present study expands the findings of Study 1 by exploring TDs' perceptions of the quality and types of professional development training experiences available to their interns. We compared TDs' responses to the experiences reported by psychology interns in Study 1 to determine if TDs' perceptions of training offered by programs differed from perceptions of trainees, thus enhancing our understanding of the extent to which results of the first study might be representative of the general experiences available for psychology interns. We expected that, like the interns in Study 1, TDs would report that professional development predominantly covered domains of postdoctoral fellowships, private practice, ethics, and support, addressing current issues (e.g., ethics) and issues likely faced in the short-term future by interns (e.g., postdoctoral fellowships). It was also expected that in comparison to psychology interns, TDs would report more time spent on professional development and evaluate the professional development opportunities as more satisfactory than did the psychology interns in Study 1 because we assumed most TDs seek to offer quality training experiences.

Method

Participants

A total of 194 internship TDs responded to an email invitation to participate in an on-line survey hosted through www.surveymonkey.com. Similar to our Study 1 sample, respondents in this study predominantly represented training sites in the Midwest (n = 51, 25.6%), Northeast (n = 41, 20.6%) and Southeast (n = 27, 18.6%), with the fewest from Canada (n = 10, 5.0%). The majority of TDs were from sites accredited by the APA and/or CPA (n = 153, 76.9%). Another 37 (18.6%) of the TDs that participated represented non-accredited training sites with the remaining either pursuing accreditation or having some other accreditation status. The difference in percentage of TDs who represented accredited training sites compared to the psychology interns from Study 1 was about 9% with a lower percentage of the TDs representing APA- or CPA-accredited sites compared to the psychology interns. As was true for the respondents in Study 1, the participants most frequently represented internships based (or primarily based in the case of consortiums) in medical school/hospital settings (n = 67, 33.7%), counseling centers (n = 36, 18.1%), community mental health centers (n = 29, 14.6%), and Veteran's Affairs settings (n = 23, 11.6%). Consistent with Study 1, most TDs were from sites that trained between 3 to 10 interns per year. In order to obtain relevant information about the internship sites, maintain anonymity, and keep the time required for participation to a minimum to increase response rates, no information regarding the background of the TDs was collected.

Measures

As was true in Study 1, there is a lack of valid measures to assess professional development experiences offered at different training sites. Thus, the survey used in Study 1 was modified for use in this study to create a 10-item survey. The survey was again face valid in nature and items were reflective of different types of professional development experiences offered at various sites familiar to the authors. Items regarding personal demographic details were removed, but items on the demographics of the internship site were retained. The survey also required respondents to provide information about opportunities related to professional development offered at their site and their

beliefs about the satisfaction of their trainees regarding the available opportunities by modifying the wording of survey questions from Study 1 to be appropriate for TDs. When providing responses regarding the number of hours devoted to various topics during professional development training, TDs were instructed to estimate the total number of hours of professional development his or her site devoted to the various topics. No assessment of informal professional development that may occur in supervision or mentoring was attempted. As was true in Study 1, the final survey question was open-ended, asking TDs to offer suggestions for the improvement of professional development training experiences on psychology internships. In all cases, the retained questions in the survey closely matched those used in Study 1 to allow for comparisons of the perceptions of TDs and interns. In addition, TDs were instructed to provide information regarding the training experiences offered at their site during the 2005-2006 training year in order to obtain data from TDs that corresponded to the cohort of participants used in Study 1.

As was true with Study 1, the survey was not meant to be summative in nature so a reliability analysis for the entire survey would be inappropriate. However, it was possible to conduct a reliability analysis for estimation of hours of professional development devoted to the 11 different topic areas. The obtained Cronbach's alpha was .76, suggesting sufficient internal consistency.

Procedures

In October 2006, an email was sent to all of the TDs whose email addresses were listed in the APPIC directory at the time of the study or whose email addresses could be found on the internship site's website. We chose to contact TDs at the end of October to ensure that most internship sites would have recently graduated the cohort used in Study 1. The email served as the invitation to participate in the study and described the purpose of the study. Those TDs who were willing to participate were instructed to click on a link connected to our on-line survey where we provided information required for informed consent including that continued participation in the study would serve as providing informed consent. Individuals who agreed to participate responded to the on-line survey that was developed for the present study.

Results

Nearly all (n = 190, 95.5%) TDs who participated reported offering formal, regularly scheduled didactics that all interns attend and most (n = 186, 93.5%) included professional development in these didactic training experiences during the 2005-2006 training year. Over one fifth of the TDs reported that no time was spent covering topics related to academic jobs (n = 46, 23.1%), private practice (n = 50, 25.1%), clinical/non-private practice jobs (n = 52, 26,1%), research (n = 72, 36.2%), and current events/advocacy (n = 40, 20.1%). Over half (n = 119; 59.8%) of the respondents indicated that they did not cover board certification. In contrast, ethics was nearly universally covered to some extent (n = 193, 97%). Postdoctoral fellowships (n = 161, 80.9%), licensure (n = 180, 90.5%), interns' adjustment/support (n = 186, 93.5%), and administrative issues (n = 184, 92.5%) were also covered in almost all cases.

We used a series of single sample t-tests to explore differences between TDs and psychology interns regarding the time they reported was spent covering various topics. To control for the increased familywise error rate associated with running multiple analyses, we used a Bonferroni correction which set the new alpha level to .004. Compared to psychology interns, TDs reported that significantly more ($p < .001$) time was devoted to all areas of professional development including research ($t(186) = 17.469$), private practice ($t(189) = 15.032$), clinical/non-private practice jobs ($t(186) = 17.150$), postdoctoral fellowships ($t(187) = 14.282$), licensure ($t(191) = 16.297$), board certification ($t(183) = 16.179$), research ($t(186) = 10.314$), ethics ($t(193) = 24.802$), current events/advocacy ($t(183) = 14.092$), interns' adjustment/support ($t(190) = 19.950$), and administrative issues ($t(189) = 18.192$). Also consistent with our hypotheses, an independent samples t-test revealed that TDs (M = 4. 4.20, SD = .72) estimated that psychology interns were more satisfied than were the Study 1 psychology interns ($M = 3.58$, $SD = 1.17$), $t(467) = 6.49$, $p < .001$. Specifically, 93.3% of TDs reported that their interns were somewhat or very satisfied with their professional development training experiences provided on internship.

We invited TDs to respond to an open-ended question by offering suggestions for improving professional development experiences during internship (Table 6). The same coding procedure employed with the data from the psychology interns in Study 1 was used to qualitatively analyze the TDs' responses. The same individual also completed the coding, providing increased likelihood of consistency of coding qualitative responses across the two studies. Thirty-eight of the participants provided suggestions and an additional 2 respondents further elaborated on their answers to the survey. Generally, suggestions varied and TDs offered several ideas regarding how professional development experiences might be organized to provide maximally beneficial training. The most common themes reflected in the responses were 1) meeting the specific needs of a particular cohort depending on interests/goals, 2) using post-doctoral fellows or new professionals as speakers, 3) covering job search/post-doctoral fellowship acquisition early and extensively, 4) use of mentoring/modeling, 5) regularly scheduled seminars, 6) voluntary support groups available or covering self-care, 7) instruction specifically on CVs and interviews, and 7) requests for guidance from APPIC (see Table 6).

Discussion

As expected, TDs reported more time spent covering relevant topics during professional development training and TDs reported most consistently covering ethics, postdoctoral fellowships, and intern support to some extent. As predicted, the TDs overestimated the degree of satisfaction psychology interns have with their professional development training when comparing estimates to self-reported levels of satisfaction among interns. Though the cause of the discrepancy between psychology interns experiences of professional development training and TDs' perceptions of experiences offered is unclear, our findings suggest TDs may want to communicate with psychology interns more frequently about their expectations and needs for professional development. TDs and internship faculty may also want to remember the inherent hierarchy between trainees and faculty which in turn may discourage interns from more readily reporting satisfaction in person to their training faculty or encourage them to avoid the expression of dissatisfaction face to face. This may be especially true for interns in smaller internship sites who fear that their written responses on frequently used anonymous evaluation forms could identify them.

As was true for Study 1, Study 2 is limited by the study methodology. Specifically, self-selection bias may continue to operate for TDs and it is possible that TDs are also not accurate in reporting hours devoted to various topics. It is possible that

Table 6.
Selected training director suggestions for the provision of more effective professional development experiences during predoctoral psychology internships.

1	"Reliance on outside speakers/consultants who are experts in the area presented."
2	"Seminar evaluations by interns to assess efficacy and value of topic/presentation/speaker."
3	"Coordinate professional development training with other internship sites."
4	"Newly licensed speakers from the community have been a hit."
5	"Mentoring program"
6	"We do mock interviews with our interns…"
7	"Try to assess each intern's interests … and gear seminar time to meet intern needs."
8	"Stay up to date on trends in the field."
9	"Shadowing professional psychologists to see what their job entails."
11	"The establishment of a specific 'Professional Issues' Seminar is an efficient way to ensure that the above mentioned topics are covered during the internship year."
11	"Resume development and preparation."
12	"If the site is near the state's licensing board, and the board's meetings are open to the public, I recommend attendance at those meetings."
13	"Exploring cultural competencies."
14	"Encourage APPIC to publish a manual on these issues."

the differences between TDs and interns reflected a tendency for TDs with a strong interest in providing professional development to interns to be more likely to take the time to participate in a study on the topic. In other words, those TDs who participated may be at sites that provide more coverage of professional development issues and, in fact, foster more satisfied interns.

General Discussion

Future Directions

As professional development should be a priority at every level of a psychology student's academic career, future research should systematically examine the experiences of and satisfaction with professional development training obtained during the undergraduate and graduate years, as well as during Postdoctoral Fellowship. In addition, future studies should continue to explore differences between interns' and TDs' perceptions of professional development training. For example, it may be that TDs are less aware of the interns' changing interests for each incoming intern cohort. TDs may differ from interns in their beliefs about the importance of specific training aspects, or may believe that their interns are satisfied with the professional development experiences that are presently offered based to the feedback they are receiving (and that feedback may or may not be accurate). Finally, research that explores the long-term outcome of enhanced professional development experiences is needed. Such research might explore rates of job acquisition, satisfaction with selected job, difficulties transferring to the role of independent professional, time to licensure, and involvement in advocacy.

Strengths and Implications

We also sought to explore the extent to which different relevant topics are components of professional development training experiences for psychology interns. That is, results detailed the professional development experiences currently offered by many internship sites, by defining what is taught and how this information is conveyed, adding to our current knowledge of how the teaching of or guidance in professional development is approached on internship.

The present study makes an important contribution to training considerations of psychology interns. It is among the first research endeavors to systematically examine perceptions of professional development training for psychology trainees during internship. This study demonstrated that while many interns feel they received satisfactory training in areas related to their transition into the profession of psychology, a significant subset does not. The present study also presented descriptive information regarding topics covered and time devoted to such topics during professional development provided on internship. In addition, the anonymous nature of the study allowed individuals to provide confidential feedback that TDs may use to improve the professional development experiences currently offered. Some excellent suggestions are contained in Table 6 as a sampling of the feedback received from respondents, many of which could easily be incorporated by TDs into future professional development internship training experiences at their sites. Moreover, the study results may help faculty at internship sites that offer extensive coverage of professional development topics have confidence that the experience is valued by their interns. Finally, as some of the participants suggested, interns may benefit from requirements imposed or oversight by the APA/CPA or APPIC that regulate the minimum acceptable coverage within the area of professional development. Such regulation may help ensure that professional psychology interns receive adequate information and support as they transition to the next stage of their career.

The results of this study will allow TDs to enhance the professional development experiences offered at their sites. TDs may wish to adjust the number of hours offered in a particular area based upon the frequency with which such training is offered elsewhere. For example, since over 50% of respondents reported that their site provided coverage of topics related to the licensure process as part of their professional development training, TDs at sites not currently covering licensure during professional development seminars may wish to do so. Similarly, a TD might increase time spent providing support to interns after identifying that satisfaction with professional development during internship training was most strongly correlated with time devoted to support and adjustment. In addition, as we found that more time spent on professional development was correlated with overall increased satisfaction, TDs may want to enhance the professional development aspect of their interns' training by increasing time spent on topics of interest to their current intern class. Although topics of interest can easily be obtained in an initial training needs assessments of the incoming interns, set training schedules, the need for teaching faculty qualified to address topics, and other needs identified in the needs assessment may make accommodation of all the incoming interns' interests for professional development difficult.

Results from this study may also assist individuals seeking an internship placement, by helping them to better evaluate how well a site prepares interns for the transition into the professional role. After reviewing the present study, applicants can identify which professional development experiences are most important to them. Applicants can then compare how much time a particular site of interest spends addressing professional develop-

ment experiences to that of other sites to which the applicant applied. This information would allow applicants to submit more informed rankings during the matching process.

In conclusion, this study makes a valuable contribution to the literature on the training of psychology interns and provides essential information for those involved in student training. It is one of the first research endeavors to explore perceptions of interns' professional development training experiences and to compare interns' self-reported satisfaction with the TDs' perceptions of their interns' satisfaction. This represents an important first step in enhancing the process by which professional psychology interns transition from student to independent professional. Using the findings of the present study, professional psychology internship applicants can become better informed about seeking a placement that more adequately meets their professional development needs, be aware of topics they might request be considered for inclusion, and TDs can become more intentional in designing and implementing the professional development components of future internship training experiences.

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