

Training Confident School-Based Consultants: The Role of Course Content, Process, and Supervision

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Consultation competency is a critical component of health services psychology training, as consultation permeates all aspects of service delivery. Despite the increasing importance of consultation as a form of service delivery, school-based preservice-level consultation training has historically lacked rigor. Many components of training may contribute to psychology graduates' confidence to consult in schools. The purpose of this study was to investigate the contribution of specific consultation training components (i.e., coursework, competencies included in training, field experiences, supervision, and models) to the development of confidence to consult in early career school psychology practice. Data were collected as part of a larger study on early career school psychologists' consultation training and practices ($n = 262$). Bivariate correlations, repeated-measures analysis of variance, and a multiple regression model were estimated to fulfill the purpose of the study. Results indicated (a) exposure to given consultation models were positively correlated with confidence consulting with different types of consultees, (b) respondents had varying levels of confidence consulting with different types of consultees, and (c) quantity of coursework, supervision strategies, and exposure to formal consultation models emerged as significant predictors of confidence to consult at graduation. Recommendations for consultation training include (a) coverage of systems-level consultation and team-based consultative problem solving, increasingly common contexts for consultation in contemporary schools; (b) implementation of applied experiences and supervision in tandem for the development of consulting confidence; and (c) inclusion of formal models of consultation in consultation training. Limitations of the study and suggestions for future research are discussed.

Keywords: school-based consultation, school-based consultation training, consultation confidence, supervision

Consultation is a core competency area in health service psychology. Competency is the ability to complete tasks in an effective manner as expected for a person qualified by education and training in a particular field (Kaslow, 2004). The newly adopted American Psychological Association (APA) Standards of Accreditation includes consultation as a competency that all doctoral programs must provide opportunities for students to demonstrate and achieve (American Psychological Association [APA], 2006). Over the past 2 decades, school-based consultation has become increasingly critical for preventative practice (Rosenfield, 2013).

Consultation provides a means for psychologists to indirectly support the learning and mental health needs of students in schools (Erchul & Sheridan, 2014).

Despite the increasing importance of consultation as a form of service delivery in schools, school-based consultation training at the preservice level has historically lacked rigor (Hazel, Laviolette, & Lineman, 2010; Rosenfield, 2013). School-based consultation training primarily occurs in school psychology programs, even though many clinical and counseling psychologists may work in or with schools during their careers. Most school psychology pro-

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grams, both doctoral and nondoctoral¹, offer only a single course in consultation, and provide limited supervision of consultation skills (Anton-LaHart & Rosenfield, 2004; Hazel et al., 2010). Professional competence is achieved through structured educational activities and supervised experiences, not the passage of time, in and of itself (McCutcheon, 2009), and no research yet exists to suggest differences in practice competence between doctoral and nondoctoral school psychologists (Miller, DeOrnellas, & Maricle, 2010). In short, nondoctoral- and doctoral-level school psychology training in consultation is likely comparable.

Consultation training tends to be less rigorous than training of other competency areas because there is lack of consensus across specialties regarding what it means to be a competent consultant, and there is limited research regarding approaches to understand and evaluate competence in consultation (Newell, Newell, & Looser, 2013). Further, research regarding the outcomes of consultation training remains limited, making it difficult to assess the value of one particular training approach over another (Newell & Newman, 2014).

Confidence to consult at the point of entry into psychology practice may be a useful outcome measure of consultation training. As an outcome measure, confidence to consult would allow graduate programs to monitor training without having to wait for graduates to begin practice and demonstrate consultation competence. Confidence to consult and competence are two separate constructs: The former is an individual's *feelings* that s/he is prepared and ready to successfully engage in consultation; the latter is an individual's *ability* to complete school-based consultation tasks commensurate with his or her training as a psychologist. Consultation confidence has long been theorized to result from a systematic, developmentally oriented training process (Rosenfield, Levinsohn-Klyap, & Cramer, 2010). Research has not explicitly linked consultation confidence and consultation competency. Consultation training has, however, been linked to consultation self-efficacy and likelihood to engage in consultation (Guiney, Harris, Zusho, & Cancelli, 2014). Many components of preservice training may contribute to school psychology graduates' confidence to consult as they enter the workforce, reviewed below.

Quantity of Coursework

Over the past 30 years, the quantity of consultation coursework in school psychology graduate programs has gradually increased. In a 1981 survey of school psychology training programs, Meyers, Wurtz, and Flanagan (1981) found 60% of respondents did not require even one course on consultation ($n = 121$). However, more recently, research has suggested the vast majority of school psychology training programs include at least one full course on consultation (Anton-LaHart & Rosenfield, 2004; Hazel et al., 2010) and most practicing school psychologists have taken at least one graduate course in consultation (Newman, Barrett, & Hazel, 2015). Although the amount of required coursework in consultation has increased over the years, the precise links between consultation training and consultation practice remain elusive (Newell & Newman, 2014). For example, there is an imprecise understanding of how classroom-based training links with field-based experiences such as practicum and internships, and the eventual application of skills at the in-service level (Daly, 2007).

Competency Areas Included in Consultation Training

One clear aim of consultation training is to produce consultants who successfully integrate competencies into their consultation work (Newell et al., 2013). A taskforce from Division 13 of the APA developed guidelines for education and training at doctoral- and postdoctoral-levels in consulting psychology, with 10 general consultation competencies considered relevant to all psychologists (see APA, 2007, for more detail on the competency areas). A recent study by Larkin and Morris (2015) found that consultation competencies established by the authors to evaluate trainees in their clinical psychology training program (e.g., articulating consultant role; addressing referral questions; communicating findings; applying consultative methods) developed at a slower rate than assessment and intervention competencies, and were not fully developed at the end of graduate training. The authors suggested that consultation skills are advanced in that they are built upon other domains; consultation knowledge development occurs pre-internship and skill development occurs primarily during internship training and professional practice. To date, no studies have examined the extent to which consultation competency areas are covered during school psychology training, or how competency coverage links to confidence to consult at the end of training.

Instructional Methods

Effective consultation requires a diverse set of skills that may lend themselves to diverse instructional methods, such as lectures; reading and discussing textbooks, casebooks, and journal articles; exams or papers; instructor or video modeling of consultation skills; and engaging in field experiences in schools and nonschool settings (Burkhouse, 2012). These methods can be mapped onto a developmental model of skill development, which includes four stages: (a) awareness, (b) conceptual understanding, (c) skill acquisition, and (d) application of skills (Rosenfield et al., 2010). However, no studies have empirically investigated the extent to which various instructional methods increase school psychologists' confidence to consult at graduation. Nor is it clear the extent to which the four stages are equivalent in their impact on consultation competence or confidence.

Quantity of Field Experiences Prior to and During Internship

Preservice field experiences allow trainees to apply and practice consultation skills while receiving ongoing supervision feedback, with implications for rate of consultation competency development (Larkin & Morris, 2015). Preservice field experiences may also relate to how school psychologists spend their time as practitioners, with more time in consultation during field experiences resulting in more time spent in consultation during practice (Daly, 2007). Research indicates the majority of training programs require completion of at least one applied consultation case preinternship (Hazel et al., 2010; Newman et al., 2015). Because field

¹ Unique to health service psychology specialties, the entry-point of practice for school psychologists is the specialist level, although approximately one third of trainees complete doctoral-level training (Merrell, Ervin, & Peacock, 2012).

experiences have been linked with consultation practice outcomes, it is likely that field experiences will also be linked with confidence to consult at graduation, although this has not yet been empirically investigated.

Supervision

Supervision is considered a key component of consultation training (Newman, 2012; Stoltenberg, 1993). However, research has documented large gaps in the supervision of consultation-focused field experiences (Anton-LaHart & Rosenfield, 2004; Hazel et al., 2010). Newman et al. (2015) found supervision provided to trainees during consultation training was limited in both quantity and quality. Case conceptualization was the most predominant form of supervision, despite its potential shortcomings such as supervisee omission or distortion of information, or issues of metacompetence (i.e., trainees not knowing what they do not know; Bernard & Goodyear, 2014). Supervision techniques (e.g., live observation, audio/video recording, transcribing) employed to address these shortcomings were limited. However, it remains unknown if greater breadth and depth of consultation supervision increases consultants' confidence to consult by the end of their training.

Exposure to Various Models of Consultation

The question of which model(s) of consultation school psychologists should be trained to apply has existed since the early 1980s (Alpert & Taufique, 2002). The consultation models commonly included in consultation training include (a) behavioral/problem solving consultation (BC; Bergan & Kratochwill, 1990), (b) joint behavioral consultation (CBC; Sheridan & Kratochwill, 2007), (c) cross-cultural/multicultural school consultation (Ingraham, 2000), (d) instructional consultation (IC; Rosenfield, 1987), (e) mental health/consultee-centered consultation (Caplan, 1970), and (f) organizational/systems consultation (Illback, 2014; Schmuck & Miles, 1971). Readers are referred to the in-text citations of classic and contemporary readings for further information on each model. Historically, consultation training tended to include a single model focus (e.g., Meyers et al., 1981), though more recent trends suggest multiple consultation models are frequently included in preservice training with BC being one of the most common models covered (Newman et al., 2015). Of note, the most empirical research linking consultation training with consultee and client outcomes is centered on BC and CBC training (Newell & Newman, 2014). However, for all consultation training approaches, empirical limitations such as few studies with small sample sizes, nonexperimental research designs, and datedness make it difficult to understand the link between training and subsequent practice (Newell & Newman, 2014).

In sum, although consultation is a valued practice skill, data suggest consultation training is lacking for school psychologist trainees. Further, little is known about the outcomes of consultation training, including how it links into perceptions and realities of practice. The purpose of this study was to investigate the contribution of specific consultation training components (i.e., coursework, competency development, field experiences, supervision, and models) to the development of confidence to consult in early career school psychology practice.

Method

Data for this study were collected as part of a larger study on early career school psychologists' consultation training and practices (see Newman et al., 2015; Hazel, Newman, & Barrett, in press). Participants were 262 school psychologists who had practiced within the past year, had practiced in the United States between 1 and 5 years as of the fall of 2014 and were members of their state school psychology organizations at the time of the survey. On average, respondents had practiced 3.76 years ($SD = 1.37$), were between 26 and 30 years old (58%), were predominately White (89%), female (87%), had nondoctoral degrees (83%), and worked full time in the public school setting (81%; see Table 1 for additional characteristics). It was a sample of convenience because we only accessed participants from state school psychology organizations that allowed for survey dissemination and had more than 20 early career members belonging to the National Association of School Psychologists ($N = 37$). Response rate could not be calculated because each state organization disseminated the survey in a different way.

Table 1
Characteristics of Respondents and Employment Location

Variable	<i>N</i>	% ^a	NASP % ^c
Gender			
Female	222	87.7%	78.1%
Male	31	12.3%	21.9%
Missing	9	—	—
Race			
White	221	89.1%	90.7%
Black/African American	11	4.4%	3%
American Indian/Alaska Native	2	.8%	.6%
Asian	6	2.4%	1.3%
Other	8	3.2%	1%
Missing	14	—	—
Ethnicity			
Hispanic/Latino	16	6.8%	3.4%
Non-Hispanic/Latino	186	78.5%	—
Other	35	14.8%	—
Missing	25	—	—
Region			
West	77	30.0%	25.0%
Midwest	44	17.1%	22.6%
South	106	41.2%	20.0%
Northeast	30	11.7%	31.5%
Work setting			
Urban	62	24.6%	26.5%
Suburban	123	48.8%	43.4%
Rural	67	26.6%	24.0%
Combination	—	—	6.1%
Missing	10	—	—
School type			
Public	213	81.3%	83.7%
Private or parochial	17	6.5%	6.2%
Preschool/Early childhood	66	25.2%	—
Elementary	171	65.3%	—
Middle	117	44.7%	—
High	93	35.5%	—
Other ^b	28	10.69%	—

Note. NASP = National Association of School Psychologists.

^a Percentages are valid percents. ^b Other locations include, but are not limited to charter schools, vocational school, juvenile justice systems, and alternative schools. ^c Data from Curtis, Castillo, and Gelley (2012), reporting on the general population of NASP members from a 2010 survey.

Measures

Confidence to consult at graduation. Confidence to consult at graduation was assessed by asking participants how confident they felt consulting with various consultees *immediately after graduation*. Responses were on a 4-point Likert scale, where 1 = *not at all*, 2 = *to a little extent*, 3 = *to a moderate extent*, and 4 = *to a large extent*. Consultants' confidence was assessed for consulting with the following types of consultees: (a) teachers, (b) administrators, (c) parents, (d) other staff members, (e) a team, and (f) facilitating a team. Composite scores were calculated as the mean of the items ($M = 2.72$, $SD = .545$, range = 1–4, $\alpha = .877$).

Quantity of coursework. Participants were asked how many courses or parts of courses they completed during their graduate coursework. The greatest number of participants completed one full course on consultation (47%).

Competency areas included in graduate coursework. Respondents were asked to endorse nine possible consultation competency areas: the 10 developed by the APA (2007), with the exclusion of "Business Operations, Legal, Industry Regulations" because of its lack of relevance to school psychology. Individual, group, and organizational/systems consultation were included as distinct competency areas. Composite scores were calculated by summing the number of competency areas checked ($M = 7.60$, $SD = 2.43$, range = 1–11 out of 12).

Instructional methods. Respondents were asked to endorse as many as 18 training methods or strategies included in their preservice-level consultation training (see Newman et al., 2015, for details on the training methods). Composite scores were calculated by summing the number of training areas checked ($M = 9.86$, $SD = 3.76$, range = 1–18).

Consultation cases. Participants were asked the number of consultation cases they engaged in (a) preinternship and (b) during internship. Responses were on a scale from 0 = 0 cases to 6 = more than 5 cases for each item ($M = 3.01$, $SD = 2.06$ for preinternship cases; $M = 5.16$, $SD = 1.51$ for internship cases).

Supervision strategies. Supervision strategies measured the supervision techniques used in participants' consultation training, and who provided the supervision (see Newman et al., 2015, for details on the supervision strategies). Strategies used by field or university supervisors were weighted twice that of strategies used by advanced graduate student supervisors or peer supervisors, because professional supervisors were likely to (a) have more content expertise and professional experience than advanced-level trainees (Harvey & Struzziero, 2008), (b) hold advanced degrees, or (d) have received greater training in supervision. Preliminary analyses indicated that the unweighted and weighted composite scores yielded comparable scales in terms of kurtosis and skew. Although both approaches yielded similar results, the weighted approach captured the differences in supervision between graduate student supervisors and professional supervisors; that is, in addition to other variables such as training, competency to supervise develops over time and with professional experience (see research syntheses by Gosselin, Barker, Kogan, Pomerleau, & d'Iorio, 2015, and Watkins, 2012). Specific supervision strategies were first weighted and then summed to create composite scores, with higher scores indicating more supervision experiences ($M = 15.18$, $SD = 6.78$, range = 2–36 out of 48).

Consultation models. Participants were asked how much exposure to the six specific consultation models, described in the literature review, they received during their graduate training. Participants were also provided with a seventh option of "other" and were allowed to write in to which other model they were referring. Only one participant wrote in a response (i.e., "collaborative"). Participants responded on a 4-point Likert scale where 1 = *no exposure*, 2 = *minimal exposure*, 3 = *moderate exposure*, 4 = *in-depth exposure*, or could elect "don't know." Total exposure to consultation models was calculated as the sum of all seven items ($M = 15.67$, $SD = 3.91$, range = 3–28, $\alpha = .876$). Missing data prevented the minimum score from being 7. Missing data ranged from 52 missing responses for Problem Solving/Behavioral Consultation (PS/BC) to 57 missing responses for Multicultural Consultation (MC). PS/BC had the fewest number of respondents endorsing "don't know" ($n = 5$) and Conjoint Behavioral Consultation (CBC) had the greatest number of respondents endorsing "don't know" ($n = 35$).

Data Analysis

Preliminary analyses were conducted to examine the possibility of recall bias, where participants who graduated in different years may have recalled their confidence to consult at graduation differently. Specifically, one-way analysis of variance (ANOVA) was used to determine if there were significant differences in confidence to consult at graduation between participants who had practiced for varying numbers of years. Bivariate correlations were estimated to understand how confidence to consult was related to each training component and how various consultation models related to confidence consulting with different types of consultees and clients. Repeated-measures ANOVA was used to determine if there were significant differences in participants' confidence for different types of consultees. Finally, a multiple regression model was estimated to investigate how several components of preservice consultation training related to confidence to consult at the point of entry into practice. Predictors were entered into the model using a backward elimination procedure with a .10 criterion.

Results

On average, respondents indicated feeling confident consulting with each type of individual consultee or group (i.e., teachers, administrators, parents, as part of team, or facilitating teams) *to a little or moderate extent*. Specifically, consultants' confidence consulting with the following types of consultees was as follows: (a) teachers ($M = 2.87$, $SD = .683$), (b) administrators ($M = 2.48$, $SD = .686$), (c) parents ($M = 2.71$, $SD = .675$), (d) other staff members ($M = 2.87$, $SD = .627$), (e) a team ($M = 2.95$, $SD = .654$), and (f) facilitating a team ($M = 2.43$, $SD = .781$). Results from the one-way ANOVA indicated there were no significant differences between participants who had practiced for varying numbers of years, $F = .386$, $df = 5$, $p = .86$. This suggests there was no systematic variation between groups and little, if any, recall bias regarding confidence to consult at graduation.

The bivariate correlations between confidence to consult at graduation and each training component are shown in Table 2. These data illustrate that all training components were significantly correlated with confidence to consult, except for the number

Table 2
Correlations Among Training Components and Confidence to Consult at Graduation

Training component	1	2	3	4	5	6	7
1. Coursework quantity	—						
2. Competencies	.256**	—					
3. Instructional methods	.257**	.619**	—				
4. Supervision strategies	.161*	.370**	.461**	—			
5. Preinternship cases	.276**	.365**	.395**	.364**	—		
6. Internship cases	.167*	.220**	.193**	.259**	.438**	—	
7. Confidence	.266**	.299**	.285**	.282**	.237**	.136	—

* $p < .05$. ** $p < .01$.

of cases on internship. Table 3 displays the correlations between confidence to consult with different types of consultees and exposure to different models of consultation. Exposure to every consultation model was positively correlated with confidence to consult with teachers and staff. However, only CBC and IC were positively correlated with confidence to consult with parents. Only BC, CBC, and IC were positively correlated with confidence as a team facilitator. Both CBC and IC were significantly, positively correlated with confidence to consult with all types of consultees.

Results from the repeated-measures ANOVA indicated participants had varying levels of confidence when consulting with different types of consultees ($p < .001$). Post hoc analyses using least significant difference found that consultees were more confident consulting with a team ($p < .05$) compared to all other types of consultees, except staff ($p = .149$). Participants were also more confident consulting with staff and teachers compared to most other types of consultees ($p < .05$). Participants were least confident facilitating a team ($p < .05$) compared to all other types of consultees. Participants were also significantly less confident consulting with administrators and parents than all other types of consultees ($p < .05$).

Three predictors emerged in the multiple regression model as significant predictors of confidence to consult at graduation: quantity of coursework ($\beta = .146$, $p = .042$), supervision strategies ($\beta = .164$, $p = .033$), and exposure to models ($\beta = .223$, $p = .005$). As stated above, five of the training components were significantly correlated with confidence to consult at graduation. However, when the predictors were entered into the regression model, which estimates the unique contribution of each predictor,

only the quantity of coursework, supervision strategies, and exposure to models emerged as significant predictors. The other predictors were likely not significant due to multicollinearity, or the correlations among themselves (see Table 2). Overall, the model accounted for 15.6% of the variance in the outcome.

Discussion

This study investigated how various features of preservice consultation training, including competencies, models, instructional strategies, and supervision related to confidence to consult upon entering professional practice. In this study, quantity of coursework, quantity of supervision, and exposure to consultation models were found to increase confidence to provide school-based consultation at graduation.

Individual and Team-Based Consultation

Respondents were the most confident consulting with teachers, staff, and a team and were least confident facilitating a team and consulting with administrators and parents. When referencing consultation in school-based settings, the term consultee is often synonymous with “teacher”; working 1:1 with a teacher is likely an initial form of consultation that trainees are exposed to in field-based consultation experiences. In addition to consulting individually with teachers, consultation in contemporary schools frequently takes place on teams (Burns, Kanive, & Karich, 2014). It is possible that trainees had exposure to team-based consultative problem solving either in their coursework or applied experiences. Or, perhaps exposure to working with a variety of teams in schools—some consultation focused, others not—promotes generalized confidence to consult on teams.

On the other hand, participants had less confidence consulting with administrators, parents, and facilitating teams. Consultation with administrators, or systems-level/organizational consultation (Illback, 2014), consulting across school and family systems (Sheridan & Kratochwill, 2007), and facilitating teams (Rosenfield & Gravois, 1996), are all recognized to be complex tasks that take extensive time to realize. Although psychologists may find themselves in positions to consult for systems-level change in school-based practice, they might not feel prepared to do so (Newell & Coffee, 2015). Given that school psychologists are increasingly viewed as systems-change agents (Newell & Coffee, 2015), the

Table 3
Correlations Between Confidence to Consult With Various Types of Consultees and Exposure to Various Consultation Models

Type of consultee	Behavioral/PS	Conjoint behavioral	Cross-cultural/multicultural	Instructional	MH/CCC	Org./Systems
Teachers	.355**	.361**	.212**	.257**	.199**	.237**
Administrators	.104	.310**	.119	.212**	.187**	.149*
Parents	.081	.269**	.110	.210**	.139	.096
Staff	.217**	.327**	.197**	.280**	.156*	.184*
Team	.271**	.269**	.132	.223**	.177*	.150*
Facilitation	.220**	.232**	.029	.253**	.122	.086

Note. PS = problem solving; MH = mental health; CCC = consultee-centered; Team = confidence consulting within a team; Facilitation = confidence facilitating a team.

* $p < .05$. ** $p < .01$.

lack of confidence indicated for consulting with administrators, parents, and facilitating teams is concerning.

Lacking confidence reflects the complexity of these tasks, and also perhaps limited opportunities for applied practice, and supervision. For example, administrators (e.g., building principals) likely lack the time to act as consultees with novice consultants (e.g., practicum students or interns) who are learning consultation skills, and only will be employed at the school for a limited time. Most trainees will also not have opportunities for extensive training to consult conjointly with parents and teachers (Sheridan, Eagle, Cowan, & Mickelson, 2001). The topics of systems-level consultation and team facilitation are advanced consultation topics; with limited coursework in consultation, their coverage may be minimal.

Components Found to Build Confidence to Consult

Quantity of coursework. Scholars have long hypothesized consultation courses to be beneficial to future consultation practice (e.g., Rosenfield et al., 2010); this study provided support for this hypothesis. We did not gather data to investigate the specific content coverage of each course, but a logical assumption is that taking multiple courses in consultation allows one to access increased content knowledge and applied opportunities for practice, which in turn would link to increased confidence to consult. Therefore, a trend of increased consultation coursework for school psychologist trainees from previous descriptive surveys of consultation training is a promising finding.

Quantity of supervision. Accessing supervision in conjunction with one's consultation training was a predictor of confidence to consult at graduation. Again, the contributions of supervision to consultation training have long been hypothesized (e.g., Stoltenberg, 1993), but with little empirical support. Our finding points to diverse forms of supervision in consultation training as beneficial in enhancing trainee confidence to consult. Although it would go beyond our data to identify any particular supervision strategy as more beneficial than another, results suggest that multiple strategies may be useful to incorporate in supervision. In other words, supplementing the most commonly reported technique, self-report/case conceptualization, with additional strategies may be helpful to trainees. Contextual limitations of schools, such as ethical considerations regarding student confidentiality, may prevent some the utilization of some supervision strategies (i.e., audio/video recording). In these instances, coconsulting, modeling, or live observation might be useful. Further, there are numerous potential supervisors, including university- and field-based supervisors, peer supervisors, and advanced graduate students in a vertical supervision model (Alpert & Taufique, 2002). However, finding supervisors with competence (i.e., knowledge, skills, values) in consultation and supervision presents a potential challenge, given limitations in training in each of these areas.

Of note, supervision strategies, rather than quantity of field experiences, uniquely contributed to confidence to consult at graduation. In other words, field experiences do not exist in a vacuum, and more field experiences are not simply better. Instead, it appears that it is the supervision of those field experiences, and more specifically, the use of more supervision strategies as part of that supervision, that increases consultants' confidence.

Consultation models. Exposure to consultation models was positively correlated with confidence consulting with at least two different types of consultees (i.e., teachers and staff). Individual consultation, where one consultant works with one consultee, is likely the most common form of consultation students are exposed to during training, irrespective of model. Of the all models, only CBC and IC were positively correlated with confidence to consult with parents and confidence acting as a team facilitator. And, both CBC and IC were positively correlated with confidence to consult with all types of consultees.

It is difficult to pinpoint why certain models were significantly correlated with confidence working with particular types of consultees. For example, IC is not focused on parent consultation yet was significantly correlated with confidence working with parents. It is premature to conclude from these data that training in one model is superior to another. Consistent with a scientist-practitioner approach to psychology practice, consultants should possess "in-depth knowledge of the major theoretical models in psychology and their particular methodologies and intervention strategies as they apply to individual, group, and organizational consulting domains" (APA, 2007, p. 982).

Implications for Consultation Training

We offer three central recommendations from these findings. A first recommendation for consultation training is to teach formal consultation models. Irrespective of which model(s) is/are taught, there must be sufficient exposure to consultation models through depth and/or breadth, including opportunities for applied practice and the support of supervision. Our data suggest depth of exposure to one or more models is linked with increased consulting confidence with various consultees. Meanwhile, the training of consultation models has apparently shifted from a focus on depth to breadth of coverage over the past few decades (Newman et al., 2015). Regardless of model taught, having a clear, systematic process for problem solving framed within a formal consultation model may help enhance the confidence of novice consultants as they enact the consultant role in their early careers.

Our second recommendation is to provide supervised applied experiences. To this end, it may be helpful for trainers to have relationships with schools and agencies to further integrate applied experiences and supervision. Supervision is needed to understand how to resolve problems through consultation, and is critical to successful learning and application of consultation skills (Donovan et al., 2015; Harvey & Pearrow, 2010). Without opportunities for supervised practice enacting a systems-level consultation role, including consulting on teams or with parents and teachers, it would be difficult for trainees to move developmentally beyond awareness or conceptual understanding of these topics toward the acquisition and application of skills in action (Rosenfield et al., 2010). Although there are numerous challenges in coordinating such experiences, it is not impossible; new models in the literature may provide helpful guides for training (e.g., Donovan et al., 2015).

Finally, training in school-based consultation should include coverage of systems-level consultation and team-based consultative problem solving. Prior research with this same participant sample indicated organizational/systems consultation and group consultation were competency areas less likely to be included in

coursework than individual consultation (62%, 66% and 78%, respectively; Newman et al., 2015). We postulate more coverage of these topics may link to increased confidence to consult at these levels upon entering practice—especially if content coverage is combined with opportunities for supervised practice.

Limitations and Suggestions for Future Research

Despite the merits of this study, there were several limitations that must be noted. Although we took several steps to enhance the validity of the methodology (e.g., getting feedback on survey instrumentation via expert feedback and cognitive interviews; Hazel et al., in press), several limitations common to all survey research should be recognized. The sampling plan excluded entry-level school psychologists who were not members of their state professional organization at the time of survey administration or were members of state professional organizations that prohibited dissemination of the survey, limiting generalizability of these findings. The sampling plan also did not allow for calculation of a response rate. The ratings of training components are participants' perceptions or recollections rather than direct measures (e.g., direct observation or syllabi review), and recall and response biases may be reflected in responses. It is possible that consultation competency areas, such as relationship development, may be learned in the context of other skills or coursework (e.g., counseling or therapy), which was not accounted for. Further, pretraining experiences were not accounted for. It is possible that programs that emphasize consultation may be more likely to admit and train students that have prior experience with or training in consultation. However, because the sample was predominately specialist-level school psychologists, it is unlikely that participants had prior graduate level training. Finally, the quality of the instructor was not included in the study. It is possible that the quality of the instructor influenced confidence to consult, independently of the training components.

A number of future research directions logically follow this study. Adding a measure of competence for consideration in conjunction with confidence would be useful. Although consultation competencies are currently defined (APA, 2007), not much is yet known about the application of these competencies to school-based settings, or the best approaches to measurement (Newell et al., 2013). For example, future research may examine how instructor reports of competence relate to confidence or more direct observations of competence. Researchers may also wish to investigate, with more precision, how coursework, field experiences, and supervision fit together to enhance consultation trainee development. We can conclude from this study that each of these contributes to consultation confidence, but what we can conclude is limited. Future research questions might include: How many courses are needed, and with what foci? How should field experiences be connected to coursework? And, how can trainees engage in a range of consultation experiences (e.g., systems-level consultation in addition to individual consultation)?

Conclusion

This study contributed to the school-based consultation literature by examining the link between training components and

confidence to consult upon graduation. Quantity of coursework, quantity of supervision, and exposure to formal models of consultation emerged as significant predictors of confidence to consult. These findings have implications for the content and process of consultation training at the preservice level. Scholars have long acknowledged gaps in consultation training at the preservice level and the implications for the enactment of limited, ineffectual practice roles. It is time to strengthen the consultation training provided to school psychologist trainees, forging a clear bridge toward competent, confident, and contemporary practice.

References

- Alpert, J. L., & Taufique, S. R. (2002). Consultation training: 26 years and three questions. *Journal of Educational & Psychological Consultation, 13*, 13–33. <http://dx.doi.org/10.1080/10474412.2002.9669451>
- American Psychological Association. (2006). *Guidelines and principles for accreditation of programs in professional psychology (G&P)*. Retrieved from <http://www.apa.org/ed/accreditation/about/policies/guiding-principles.pdf>
- American Psychological Association. (2007). Guidelines for education and training at the doctoral and postdoctoral levels in consulting psychology/organizational consulting psychology. *American Psychologist, 62*, 980–992. <http://dx.doi.org/10.1037/0003-066X.62.9.980>
- Anton-LaHart, J., & Rosenfield, S. (2004). A survey of preservice consultation training in school psychology programs. *Journal of Educational & Psychological Consultation, 15*, 41–62. http://dx.doi.org/10.1207/s1532768xjepc1501_2
- Bergan, J. R., & Kratochwill, T. R. (1990). *Behavioral consultation and therapy*. New York, NY: Plenum Press.
- Bernard, J. M., & Goodyear, R. K. (2014). *Fundamentals of clinical supervision* (5th ed.). New York, NY: Pearson.
- Burkhouse, K. S. (2012). Educating a reflective school consultant: Multifaceted techniques. In S. A. Rosenfield (Ed.), *Becoming a school consultant: Lessons learned*. New York, NY: Routledge.
- Burns, M. K., Kanive, R., & Karich, A. C. (2014). Best practices in implementing school-based teams within a multitiered system of support. In P. Harrison & A. Thomas (Eds.), *Best practice in school psychology: Data-based and collaborative decision making* (pp. 569–581). Bethesda, MD: NASP.
- Caplan, G. (1970). *The theory and practice of mental health consultation*. New York, NY: Basic Books.
- Curtis, M. J., Castillo, J. M., & Gelley, C. (2012). School psychology 2010: Demographics, employment, and the context for professional practices—Part 1. *National Association of School Psychologists Communique, 40*, 28–30.
- Daly, B. D. (2007). *Training programs in school psychology and their relation to professional practice* (Unpublished doctoral dissertation). University at Buffalo, The State University of New York, NY.
- Donovan, L., McCoy, D., Denune, H., Barnett, D. W., Graden, J. L., & Carr, V. (2015). Preparing doctoral-level consultants for systems change: Implementing and supervising multitiered practices in early childhood education. *Journal of Educational & Psychological Consultation, 25*, 252–275. <http://dx.doi.org/10.1080/10474412.2014.929957>
- Erchul, W. P., & Sheridan, S. M. (2014). Overview: The state of scientific research in school consultation. In W. P. Erchul & S. M. Sheridan (Eds.), *Handbook of research in school consultation* (2nd ed., pp. 3–17). New York, NY: Routledge.
- Gosselin, J., Barker, K. K., Kogan, C. S., Pomerleau, M., & d'Iorio, M. P. (2015). Setting the stage for an evidence-based model of psychotherapy supervisor development in clinical psychology. *Canadian Psychology, 56*, 379–393. <http://dx.doi.org/10.1037/a0039344>

- Guiney, M. C., Harris, A., Zusho, A., & Cancelli, A. (2014). School psychologists' sense of self-efficacy for consultation. *Journal of Educational & Psychological Consultation, 24*, 28–54. <http://dx.doi.org/10.1080/10474412.2014.870486>
- Harvey, V. S., & Pearrow, M. (2010). Identifying challenges in supervising school psychologists. *Psychology in the Schools, 47*, 567–581. <http://dx.doi.org/10.1002/pits.20491>
- Harvey, V. S., & Struzziero, J. A. (2008). *Professional development and supervision of school psychologists: From novice to expert* (2nd ed.). Thousand Oaks, CA: Corwin Press.
- Hazel, C. E., Lavolette, G. T., & Lineman, J. M. (2010). Training professional psychologists in school-based consultation: What the syllabi suggest. *Training and Education in Professional Psychology, 4*, 235–243. <http://dx.doi.org/10.1037/a0020072>
- Hazel, C., Newman, D. S., & Barrett, C. A. (in press). Conducting rigorous survey research in the study of school-based consultation. *Journal of Educational & Psychological Consultation*.
- Illback, R. J. (2014). Organization development and change facilitation in school settings: Theoretical and empirical foundations. In W. P. Erchul & S. M. Sheridan (Eds.), *Handbook of research in school consultation* (2nd ed., pp. 276–303). New York, NY: Routledge.
- Ingraham, C. L. (2000). Consultation through a multicultural lens: Multicultural and cross-cultural consultation in schools. *School Psychology Review, 29*, 320–343.
- Kaslow, N. J. (2004). Competencies in professional psychology. *American Psychologist, 59*, 774–781. <http://dx.doi.org/10.1037/0003-066X.59.8.774>
- Larkin, K. T., & Morris, T. L. (2015). The process of competency acquisition during doctoral training. *Training and Education in Professional Psychology, 9*, 300–308. <http://dx.doi.org/10.1037/tep0000091>
- McCutcheon, S. R. (2009). Competency benchmarks: Implications for internship training. *Training and Education in Professional Psychology, 3*, S50–S53.
- Merrell, K. W., Ervin, R. A., & Peacock, G. G. (2012). *School psychology for the 21st century: Foundations and practices*. New York, NY: Guilford Press.
- Meyers, J., Wurtz, R., & Flanagan, D. (1981). A national survey investigating consultation training occurring in school psychology programs. *Psychology in the Schools, 18*, 297–302. [http://dx.doi.org/10.1002/1520-6807\(198107\)18:3<297::AID-PITS2310180309>3.0.CO;2-P](http://dx.doi.org/10.1002/1520-6807(198107)18:3<297::AID-PITS2310180309>3.0.CO;2-P)
- Miller, D. C., DeOrnellas, K., & Maricle, D. (2010). What is so special about the specialist degree? In E. Garcia-Vazquez, T. Crespi, & C. Riccio (Eds.), *Handbook of education, training and supervision of school psychologists in school and community* (Vol. 1, pp. 49–61). New York, NY: Routledge.
- Newell, M. L., & Coffee, G. (2015). School psychologists as systems-level consultants: Interdisciplinary perspectives. *Journal of Educational and Psychological Consultation, 25*, 67–71. <http://dx.doi.org/10.1080/10474412.2015.1016227>
- Newell, M. L., Newell, T. S., & Looser, J. (2013). A competency-based assessment of school-based consultants' implementation of consultation. *Training and Education in Professional Psychology, 7*, 235–245. <http://dx.doi.org/10.1037/a0033067>
- Newell, M., & Newman, D. S. (2014). Assessing the state of evidence in consultation training: A review and call to the field. In W. P. Erchul & S. M. Sheridan (Eds.), *Handbook of research in school consultation* (2nd ed., pp. 421–449). New York, NY: Routledge.
- Newman, D. S. (2012). A grounded theory study of supervision of pre-service consultation training. *Journal of Educational and Psychological Consultation, 22*, 247–279.
- Newman, D. S., Barrett, C. A., & Hazel, C. (2015). School consultation practices in the early career: Does training matter? *Consulting Psychology Journal: Practice and Research, 67*, 326–347. <http://dx.doi.org/10.1037/cpb0000048>
- Rosenfield, S. (1987). *Instructional consultation*. New York, NY: Erlbaum.
- Rosenfield, S. (2013). Consultation in schools—Are we there yet? *Consulting Psychology Journal: Practice and Research, 65*, 303–308. <http://dx.doi.org/10.1037/a0035652>
- Rosenfield, S. A., & Gravois, T. A. (1996). *Instructional consultation teams: Collaborating for change*. New York, NY: Guilford.
- Rosenfield, S., Levinsohn-Klyap, M., & Cramer, K. (2010). Educating consultants for practice in the schools. In E. Vazquez, T. D. Crespi, & C. Riccio (Eds.), *Handbook of education, training and supervision of school psychologists in school and community* (Vol. 1, pp. 259–278). New York, NY: Routledge.
- Schmuck, R. A., & Miles, M. B. (1971). *Organization development in schools*. Palo Alto, CA: National Press Books.
- Sheridan, S. M., Eagle, J. W., Cowan, R. J., & Mickelson, W. (2001). The effects of conjoint behavioral consultation: Results of a 4-year investigation. *Journal of School Psychology, 39*, 361–385. [http://dx.doi.org/10.1016/S0022-4405\(01\)00079-6](http://dx.doi.org/10.1016/S0022-4405(01)00079-6)
- Sheridan, S. M., & Kratochwill, T. R. (2007). *Conjoint behavioral consultation: Promoting family-school connections and interventions*. New York, NY: Springer.
- Stoltenberg, C. D. (1993). Supervising consultants in training: An application of a model of supervision. *Journal of Counseling and Development, 72*, 131–138. <http://dx.doi.org/10.1002/j.1556-6676.1993.tb00911.x>
- Watkins, C. E., Jr. (2012). Development of the psychotherapy supervisor: Review of and reflections on 30 years of theory and research. *American Journal of Psychotherapy, 66*, 45–83.

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