ORIGINAL RESEARCH

Genetic Counseling Supervisor Competencies: Results of a Delphi Study

**Sonja Eubanks Higgins · Patricia McCarthy Veach ·
Ian M. MacFarlane · L. DiAnne Borders ·
Bonnie LeRoy · Nancy Callanan**

Abstract Clinical supervision is a critical component of genetic counseling student preparation, yet empirically-determined competencies for genetic counseling supervisors are lacking. In this study a modified, two-round Delphi method was used to gain consensus about important genetic counseling supervisor knowledge, characteristics, and skills. Program directors and assistant directors of American Board of Genetic Counseling accredited genetic counseling programs in North America (N=33) were invited to participate and to recruit three experienced supervisors. Seventy-four individuals completed Round 1 and, of these, 61 completed Round 2. Approximately two-thirds were clinical supervisors from prenatal, pediatrics, cancer, and adult clinics; one-third were program directors. Participants rated the importance for genetic counseling supervisors of 158 items derived from supervision literature in allied health professions. They rated 142 items (89.9 %) as highly important. Content analysis of these items yielded six supervisor competency domains: Personal traits and characteristics; relationship building and maintenance; student evaluation; student centered supervision; guidance and monitoring of patient care; and ethical and legal aspects of supervision. The results provide a basis for training genetic counseling supervisors and for further research to refine and validate supervisor competencies.

Keywords Student supervision · Effective supervision · Supervisor competencies · Clinical supervision · Genetic counseling supervision

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S. Eubanks Higgins (✉)
Genetic Counseling Program,
The University of North Carolina at Greensboro,
119 McIver St,
Greensboro, NC, USA
e-mail: sonjaeubanks@yahoo.com

P. M. Veach · I. M. MacFarlane
Department of Educational Psychology, University of Minnesota,
Minneapolis, MN, USA

L. D. Borders
Department of Counseling and Educational Development,
The University of North Carolina at Greensboro,
Greensboro, NC, USA

B. LeRoy
Department of Genetics, Cell Biology, and Development,
Institute of Human Genetics, University of Minnesota,
Minneapolis, MN, USA

N. Callanan
Genetic Counseling Program,
The University of North Carolina at Greensboro,
Greensboro, NC, USA

Introduction

Clinical supervision is an essential training component of many medical and mental healthcare professions. Bernard and Goodyear (2008) described the supervision relationship as one that is "evaluative, extends over time, and has the simultaneous purposes of enhancing the professional functioning of the more junior person(s), monitoring the quality of professional services offered to the clients that she, he, or they see, and serving as a gatekeeper for those who are to enter the particular profession" (p. 8). According to the National Society of Genetic Counselor (NSGC) (2010) Professional Status Survey, 64 % of genetic counselor respondents reported having teaching, educating, and supervising roles with genetic counseling students.

Students' supervised experiences during clinical rotations are critical to their professional development and successful

practice as genetic counselors (Borders et al. 2006; McCarthy Veach and LeRoy 2009), yet empirically-derived clinical supervisor competencies for genetic counselors are lacking. Delineation of the knowledge, characteristics, and skills of effective genetic counseling clinical supervisors would serve several purposes: advancing the supervisors' professional preparation, enhancing students' learning experiences, and stimulating further research on clinical supervision. Identification of supervisor competencies also would establish a standard of supervision for promoting student skill development, resulting in enhanced genetic counseling service provision. Accordingly, the purpose of this study was to seek consensus regarding genetic counseling supervisor competencies from a sample of genetic counselor educators and clinical supervisors.

Genetic Counseling Supervision

In the first published study of clinical supervision in genetic counseling, Hendrickson and colleagues (Hendrickson et al. 2002) conducted separate focus group interviews with students and clinical supervisors. Focus group participants offered their perspectives about the strengths and limitations of live supervision. A prevalent theme, mentioned by both students and supervisors, concerned the need for additional training for clinical supervisors, including the establishment of guidelines. Most of the supervisors in the sample also reported that since no training curriculum for supervision exists, they taught themselves to supervise through a trial and error process. Acknowledging the limitations of trial and error, they expressed interest in having access to training resources such as written materials and workshops.

In a follow-up survey of 182 genetic counseling clinical supervisors (Lindh et al. 2003), the vast majority reported learning how to provide clinical supervision by trial and error (98 %), student feedback (96 %), consulting with colleagues (94 %), and following their own supervisors' methods (89 %). Almost every respondent indicated the lack of supervision guidelines was problematic for genetic counseling supervision. In addition, most supervisors desired additional training and guidelines specifically related to supervisor/student challenges, working with students in beginning vs. advanced clinical rotation placements, student evaluation and supervision methods, supervisor/student styles, and supervision relationship development. Lindh et al. recommended the profession develop clinical supervision training and identify minimum competencies for genetic counseling supervisors.

Specific topics in genetic counseling supervision have been investigated in a handful of studies. McIntosh and colleagues (McIntosh et al. 2006) explored feedback and evaluation in supervision, specifically "games" students and supervisors may play in supervision. They defined games as

interactions that are harmful or exploitive of students. Interestingly, a majority of the games reported by their respondents were initiated by supervisors. Possible reasons mentioned by the authors for these supervisor behaviors included insecurity, anxiety, and feelings of inadequacy as a supervisor. McIntosh et al. speculated supervisor games may result from a lack of training; thus provision of training might help to reduce these games.

Lee and colleagues (Lee, McCarthy Veach, and LeRoy 2009) assessed genetic counseling supervisors' cultural competence by asking them to respond to a hypothetical vignette involving supervision of a student's multicultural counseling skills. Those participants with higher levels of multicultural awareness and knowledge, more years of supervision experience, and who perceived themselves as more developed as supervisors demonstrated the highest skills. Respondents, however, varied widely in their multicultural awareness and knowledge and in their developmental level as supervisors, indicating these areas comprise target behaviors for supervisor training.

Gu and colleagues (Gu et al. 2011) assessed genetic counseling supervisors, non-supervisors, and students' awareness of ethical behaviors related to establishing and maintaining clear boundaries between supervisors and students. Participants were also asked to provide examples of problematic boundaries they experienced in supervision. Their sample identified a number of academic and social boundary crossings and violations, which suggests boundary issues comprise an important area of genetic counseling supervisor competencies. The researchers recommended supervisor training as one vehicle for appropriately managing boundary issues.

McCarthy Veach and LeRoy (2009) described genetic counseling supervision skills and techniques for providing effective student supervision. They discussed for example, supervisor versatility, awareness of the process and desired outcomes of supervision, and ability to provide appropriate levels of support and guidance to students at varying developmental levels. Similarly, Borders et al. (2006) described the American Board of Genetic Counseling (ABGC 2004) practice-based competencies related to psychosocial skills and various supervision strategies to facilitate student development of these skills. The authors identified student anxiety as a major barrier to the development of these skills, indicating recognition and management of student anxiety along with the use of varied teaching modalities as valued supervisor skills.

Supervisor Competencies in Related Professions

A number of allied health professions recognize supervision as a distinct activity from the professional services themselves, and they typically specify requirements for individuals

who supervise their students. Six allied health professions have well-articulated clinical supervisor competencies: counselor education (clinical counselors), nursing, physical therapy, psychology, social work, and speech language pathology. These allied health professions have identified a comprehensive array of clinical supervisor knowledge, attitudes, characteristics, and skills. A review of their supervision documents revealed considerable overlap among the supervisor competencies specified by each profession. An overview of the supervision competencies specific to each profession is contained in the Appendix A. These documents provide a useful foundation for identifying competencies of genetic counseling supervisors.

Purpose of the Present Study

Genetic counseling supervision is central to student professional development (Borders et al. 2006; McCarthy Veach and LeRoy 2009) and it is a prevalent activity among genetic counselors (NSGC Professional Status Survey, 2010). Despite its importance to student professional development, researchers have consistently demonstrated supervisors lack systematic training in supervision (e.g., Hendrickson et al. 2002; Lindh et al. 2003; McIntosh et al. 2006). Relatedly, empirically defined genetic counseling supervision competencies have yet to be developed. Having a well defined description of effective supervision that leads to training in effective supervision strategies could help maximize the effectiveness of supervision for student professional development and genetic counseling service provision. The literature cited herein supports formal training for supervisors to increase their confidence and maximize their skill development. The first step towards developing training modalities is to identify the target of that training, namely supervisor competencies. Identification of genetic counseling supervisor competencies (knowledge, characteristics, and skills) was the goal of the present study.

Methods

Design

The methods used in this study were informed by a consensus development method used to establish the ABGC Practice Based Competencies in genetic counseling. In 1996, the ABGC sponsored a consensus development conference attended by members of its Board of Directors, program directors, and several key informants. These individuals participated in a case-based narrative process that resulted in 26 practice-based competencies used by the ABGC for program accreditation purposes. The participants of the working group began by reviewing accreditation practices and literature in other professions. Next they drew upon the expertise of their participants to obtain a consensus regarding a set of competencies expected of entry level genetic counselors (Fiddler et al. 1996; Fine et al. 1996). Similar methods were used in the present study to obtain consensus regarding competencies of genetic counseling clinical supervisors. A modified online Delphi study was conducted. Delphi methods have demonstrated effectiveness for data generation based on group communication and consensus building (e.g., Adler and Ziglio 1996; Pickard 2007). Competencies articulated in various allied health professions informed survey development.

Participants

Upon receipt of approval by institutional review boards at both The University of North Carolina at Greensboro (UNCG) and the University of Minnesota, we began participant recruitment. Selection of appropriate participants is essential in a Delphi process given their effects on the quality of the results obtained. The definition of "appropriate" varies depending on the context of the study, but participants should have good knowledge of the subject matter under investigation (Hsu and Sandford 2007). Due to their professional responsibilities which involve oversight of student supervision, we reasoned genetic counseling program directors are knowledgeable about qualities of effective clinical supervisors. In a Delphi study, it also is recommended that a nominations process be used whereby those widely accepted as experts nominate other experts to participate (Linstone and Turoff 1975; Sprenkle and Moon 1996). To ensure a representative sample, we invited one program director or assistant program director per ABGC accredited genetic counseling program in the USA and Canada ($N=33$) to participate and also to nominate three experienced supervisors, one from each of the most prevalent genetic counseling specialties (prenatal, pediatrics, and cancer).

A letter of invitation was sent to the program directors through The Association of Genetic Counseling Program Directors' listserv. Program directors were asked to nominate supervisors who had extensive experience supervising genetic counseling students, had shown particular interest in supervision, had attended educational activities related to supervision, and/or were perceived as particularly adept at supervision based on their interactions with and feedback from students. Program directors asked their nominees if they would be willing to participate in this study. Once permission was obtained, program directors sent contact information for all four participants from their program to the investigators. This process yielded contact information for 97 individuals from 26 programs (some program directors did not have recommendations for a genetic counselor supervisor for all three specialty areas).

Instrumentation

The first step in the development of the survey was a systematic review of supervision literature concerning established documents and standards in other allied health professions (see Appendix A) to identify common topic areas and specific items until saturation (redundancy) was reached. Determinations were made by the investigators about how to split multi-faceted competencies into separate items for inclusion in the survey. A comprehensive master list of 160 possible survey items was created, with modified wording of some items to make them appropriate for genetic counseling. Items were randomly arranged on the online survey. In Delphi studies participants often are asked to rate items in order to determine preliminary priorities among them (Hsu and Sandford 2007). An eight point semantic differential scale was used (*1=Not essential, 8=Essential*). Participants rated each item from 1 to 8 in importance (importance is a synonym for essential). A semantic differential scale measures directionality of a reaction and also intensity (slight through extreme) via a numbering system within the scale; respondents are instructed to select the number on the scale where they fall between the two anchors at the ends of the scale.

The survey also included 11 items eliciting participant demographics: professional role (program director, supervisor, or both), geographic area (by NSGC region, with Canada listed separately), sex, age, race/ethnicity, years of experience as a genetic counselor, years of experience as a supervisor or program director, number of students supervised or trained, and practice area for those supervising.

Survey instructions included the following definition of clinical supervision adapted from Bernard and Goodyear (2008): *Supervision is a means of transmitting the skills, knowledge, and attitudes of a particular profession to the next generation in that profession. It also is an essential means of ensuring that clients receive a certain minimum quality of care while trainees work with them to gain their skills.* Participants were asked to rate each item with respect to its overall importance for an entry level supervisor working with a student at any developmental level. This instruction was provided so that supervisors would consider each item regardless of the type of practice area, opportunities available at a particular rotation setting or level of experience of the student. They were asked to disregard the frequency of each item when determining their rating of its importance. Participants were further instructed to be as discriminating as possible in rating each item. Participants were invited to add new items and to comment on the wording of any item or their rating of any item.

The survey was piloted with three genetic counselor supervisors associated with the UNCG genetic counseling program. These genetic counselors were deemed by the program directors to be knowledgeable about supervision and were not the same three individuals nominated for participation in the study. Based on pilot testing, minor clarifications were made to wording of items, the consent form, and the survey instructions.

Procedure & Data Analysis

An online Delphi method was chosen because it is a communication process that allows experts in various locations to collaborate in an anonymous fashion (Hsu and Sandford 2007; Pickard 2007). This method also avoids the expense associated with other modalities such as a face-to-face consensus conference. An online approach additionally avoids dominant personalities and pressure for conformity. The usual Delphi process requires three rounds to reach consensus. In the first round, open ended questions are sent to participants to generate items for consensus. An acceptable and common modification of the Delphi process, however, is to eliminate the first round when sufficient literature exists from which to develop items for consensus (Pickard 2007). Given the breadth of literature in other health professions, we were able to generate 160 items for consensus, and thus eliminated the first round.

Round 1 of the online study, therefore, consisted of a list of items to rate and options to provide written comments. This round was intended to establish priorities among items and identify areas of agreement and disagreement. Participants were given 3 weeks to respond in May and June of 2010. In order to maintain anonymity, participants were asked to send an email to the study investigators after completion of Round 1, indicating they had completed the survey. A list of those who completed the survey was retained so Round 2 invitations could be sent only to those individuals who had completed Round 1. Participants received weekly reminders during both rounds, including one reminder specifically to those individuals who had not yet responded. Descriptive statistics for the Round 1 responses were then calculated.

Using the *Standards for Counseling Supervisors* (Dye and Borders 1990) in counselor education as a model, items in Round 2 were organized on the survey within nine topic headings: (a) personal traits and characteristics of effective supervisors, (b) ethical and legal aspects of the profession, (c) nature of the supervisory relationship, (d) supervision methods and techniques, (e) student developmental process, (f) case conceptualization and management, (g) oral and written reporting, (h) evaluation of student performance, and (i) research in genetic counseling and supervision. Consistent with the *Standards for Counseling Supervisors*, a single sentence description was provided to introduce each topic area. This re-organization allowed conceptually similar items to occur together on the survey so participants could

make comparisons for rating purposes. Within these topic areas, items were listed from highest to lowest mean ratings, with mean ratings from Round 1 included for participants to see. The wordings of 24 items were changed based on participant comments from Round 1. For each of these, the original item was listed, followed by the re-worded item, and participants were asked to rate the re-worded item. Based on Round 1 comments, three new items were created, two duplicate items were removed and two items from Round 1 that were very similar to two other items were merged.

A few modifications were made to the instructions for Round 2 based on comments from Round 1. Specifically, the scope of supervision was clarified to include any activity associated with the clinical supervisor role and the skills used in providing supervision of clinical cases or other activities with students that occur during a clinical place-ment. Because some participants in Round 1 noted that they rated an item lower because it was not possible to complete the item at their location, Round 2 participants were also asked to indicate their agreement with the importance of an item, regardless of constraints of their particular site.

Round 2 occurred 6 weeks after Round 1. In the second round, participants received the survey items along with the corresponding mean ratings for each item from Round 1 (with the exception of the three newly created items, for which no prior mean existed). Participants were then asked to re-rate each item. They also were asked to comment on their reasons for rating any items significantly differently than the mean rating. Participants again had the opportunity to add new items and comment on the wording of items and/ or their ratings.

After Round 2, descriptive statistics for each item were again calculated and comparisons between rounds were made. In order to create the summary of the survey items, the investigators used participants' ratings and comments and independently determined which items could be deleted or combined and then used discussion to reach consensus. Next, the investigators independently used an interpretive content analysis method (described in Giarelli and Tulman 2003) to group items retained from Round 2 according to their conceptual similarity. Then they reviewed each group-ing and assigned it a name that reflected the concept therein. Throughout this process they made ongoing revisions in order to best classify items and to name the concept reflected in each grouping. Next they compared their inde-pendent data analyses, using discussion to reach consensus for any disagreements.

According to Delphi methods, additional rounds may be necessary in order to reach consensus when items cannot be agreed upon by participants. In the present study, additional rounds were not necessary, as participants' ratings showed strong agreement.

Results

Participant Characteristics

Round 1 invitations were sent to 97 potential participants, of which 26 were program directors (including those who reported being a program director who also supervises) and 71 were supervisors. Seventy-five individuals completed Round 1 (77.3 % usable response rate), and were therefore eligible for Round 2. Sixty-one individuals completed Round 2 for a usable response rate of 82.4 % of eligible participants. Participant demographics are presented in Table 1. In both rounds, most participants were female (92.6 % and 95.7 %, respectively) and primarily of European American ethnicity (93.7 %, 88.6 %), reflective of the demographics of the profession.

All regions of the United States as defined by the NSGC were represented (regions with genetic counseling programs were over-represented due to the sampling methods) as well as 8 participants from Canada and one from Australia. Program Directors were recruited through the listserv of the Association of Genetic Counseling Program Directors, which consists primarily of programs in the USA and Canada. Some international genetic counseling program directors, however, do subscribe to that listserv.

As expected in a Delphi study, participants had a signif-icant amount of experience as genetic counselors, with 61.3 % having been in practice for ≥ 11 years, and 81.4 % having been a supervisor for ≥ 6 years. Among supervisors, the targeted practice settings were represented fairly equally, with pediatrics and prenatal being slightly over-represented. About half of program directors had 0.1–5 years of experi-ence as a program director, while half had more than 5 years of experience. For Round 1, the mean number of super-visees reported by supervisors was 35.59 ($SD=28.42$, $Mdn=25.5$, range: 3–130) and the mean number of students reported by program directors was 56.83 ($SD=65.22$, $Mdn=35.5$, range: 15–250). For Round 2, the mean number of supervisees reported by supervisors was 35.88 ($SD=30.35$, $Mdn=25$, range: 5–150) and the mean number of students reported by program directors was 72.0 ($SD=56.73$, $Mdn=50$, range: 20–200).

Item Removal

A total of 5 items (see Table 2) were excluded from the final summary (see Appendix B) of supervisor competencies. In 4 cases, comments suggested responsibility for the items rested with the genetic counseling program rather than the supervisor [e.g., *Provide students with current infor-mation about professional standards (*e.g., *certification, licensure)*]. The other item was deleted because it was extremely similar to another item.

Table 1 Demographic and Professional Characteristics of Participants

Variable	Round 1 (N=75)		Round 2 (n=61)		Variable	Round 1 (N=75)		Round 2 (n=61)	
	n	%	n	%		n	%	n	%
Gender					Practice Area of Supervisors[a]				
Female	72	96.0	59	96.7	Pediatrics	36	48.0	25	41.0
Male	3	4.0	2	3.3	Prenatal	33	44.0	27	44.2
Age					Cancer	25	33.3	18	29.5
20-29	3	4.0	3	4.9	Adult	20	26.7	15	24.6
30-39	33	44.0	31	50.9	Other	2	2.7	2	3.3
40-49	23	30.7	16	26.2	Experience as a GC (Yrs)				
50-59	14	18.7	10	16.3	0.1-5	7	9.3	5	8.2
60-69	2	2.7	1	1.6	6-10	22	29.3	18	29.5
Race/Ethnicity[a]					11-15	15	20.0	13	21.3
European American	70	93.3	54	88.5	16-20	10	13.3	8	13.1
Asian American	3	4.0	2	3.3	21-25	12	16.0	9	14.8
African American	2	2.7	1	1.6	26-30	7	9.3	5	8.2
Other/Biracial/Multiracial	6	8.0	4	6.6	31-35	2	2.7	3	4.9
Geographic Location[b]					Experience Supervising (Yrs)				
Region 1	2	2.7	2	3.3	0.1-5	14	18.7	11	18.0
Region 2	19	25.3	16	26.2	6-10	29	38.7	24	39.3
Region 3	8	10.7	7	11.5	11-15	16	21.3	13	21.3
Region 4	25	33.3	20	32.7	16-20	6	8.0	8	13.1
Region 5	3	8.0	4	6.6	21-25	8	10.7	3	4.9
Region 6	4	5.3	4	6.6	26-30	2	2.7	2	3.3
Canada	10	13.3	7	11.5	Experience as a PD (Yrs)[c]				
Other (Australia)	1	1.3	1	1.6	0.1-5	8	40.0	11	55.0
Professional Role					6-10	6	30.0	3	15.0
Clinical Supervisor	55	73.3	41	67.2	11-15	4	20.0	4	20.0
Program Director	9	12.0	10	26.2	≥16	2	10.0	2	10.0
Assistant Program Director	4	5.3	6	9.8					
PD/Asst. PD & Supervisor	7	9.3	4	6.6					

GC Genetic Counselor; *PD* Program Director; [a] Participants could select more than one category; [b] U.S. regions defined by the NSGC; [c] Percentages for this variable are based on the total number of PD (n=20 in each round).

Item Ratings

Descriptive statistics for items are presented alongside the results of the content analysis (see Tables 3, 4, 5, 6, 7, and 8). Of the 158 items which were rated in both rounds, 143 (90.5 %) had a mean difference of <0.3, demonstrating considerable consensus. Among the remaining 15 items, 9 (60 %) were reworded items for which the mean increased in the second round. Mean ratings of items demonstrated very strong agreement about the importance of items, with nearly 90 % having a mean ≥6.0 (88.1 % in Round 1 and 89.9 % in Round 2), and over half having a mean ≥7.0 (54.4 % in Round 1 and 56.0 % in Round 2). Only one item in Round 1 and three items in Round 2 had a mean rating ≤5.0.

Content Analysis of Items

Content analysis of the final list of items resulted in six domains and 15 categories of supervisor competencies. The first domain is *Personal Traits and Characteristics* (see Table 3). This domain contains 23 items describing general supervisor qualities and behaviors. The second domain is *Relationship Building and Maintenance* (see Table 4) and includes 29 items across four categories – Facilitative Characteristics, Initiation of the Supervisory Relationship, Supervision Dynamics, and Conflict Resolution. Items in this domain refer to supervisor qualities and behaviors that promote a working alliance and a safe and positive learning environment. The third domain is *Student Evaluation* (see Table 5) with 38 items in four categories – Goal Setting,

Table 2 Items Removed From Final List of Supervisor Competencies

Item	Round 1 (n=75) M (SD)	Round 2 (n=61) M (SD)	Reason
Are humble	6.80 (1.28)	6.66 (0.85)	Repetitive
Discuss with the student how to receive constructive feedback	5.85 (1.83)	5.61 (1.39)	Responsibility of training program
Provide students with current information about professional standards (e.g., certification, licensure)	5.07 (2.09)	5.05 (1.45)	Responsibility of training program
Assist students in maintaining documentation regarding supervisory interactions as required by ABGC and/or the genetic counseling program	5.34 (2.09)	4.98 (1.32)	Responsibility of training program
Formulate research questions regarding the practice of genetic counseling	3.83 (1.93)	3.48 (1.60)	Responsibility of training program

Table 3 Competency Domain I: Personal Traits and Characteristics

Genetic counselor supervisors:	Rd 1 (n=75) M (SD)	Rd 2 (n=61) M (SD)
Demonstrate knowledge and skills commensurate with the ABGC practice based competencies	7.61 (0.70)	7.85 (0.36)
Recognize that care of the patient is their primary responsibility	7.13 (1.51)	7.62 (0.61)
Possess high competency	7.41 (1.00)	7.56 (0.65)
Are aware of their own strengths and weaknesses as a genetic counselor and supervisor	7.47 (0.74)	7.54 (0.67)
Maintain a commitment to lifelong learning and professional development	7.48 (0.98)	7.44 (0.79)
Demonstrate a commitment and desire to supervise	7.35 (1.08)	7.41 (0.64)
Model appropriate professional behavior through appropriate dress and demeanor	7.49 (0.72)	7.38 (0.71)
Are accessible to students	7.43 (0.76)	7.36 (0.66)
Possess comfort in the authority inherent in the supervisory role	7.34 (0.78)	7.25 (0.67)
Keep up to date with changes in practice	7.13 (1.04)	7.28 (0.73)
Keep up to date with new genetic technologies	6.93 (1.06)	7.00 (0.80)
Possess flexibility	7.25 (1.08)	7.00 (0.89)
Advocate for students in the clinical setting	6.95 (1.23)	6.98 (0.67)
Possess patience[a]	–	6.89 (1.11)
Keep up to date with current trends in the profession (in clinical practice, training, professional issues, etc.)	6.72 (1.12)	6.79 (0.80)
Have knowledge about the particular genetic counseling program for which they are supervising students, including the overall objectives, evaluation process and the supervisor's role[a]	–	6.77 (0.99)
Understand the importance of individual differences with respect to gender, race, ethnicity, culture, sexual orientation, spirituality or religion, and age in supervisory relationships	6.77 (1.46)	6.77 (0.82)
Demonstrate knowledge of individual differences with respect to gender, race, ethnicity, culture, sexual orientation, spirituality or religion, and age.	6.81 (1.24)	6.72 (0.86)
Possess transparency	6.81 (1.32)	6.69 (0.94)
Seek opportunities for training in supervision techniques and methods	6.60 (1.26)	6.56 (1.10)
Demonstrate effective time management in practice and supervision	6.13 (1.47)	6.43 (0.87)
Explore their own cultural identity and how this identity affects their values and beliefs about counseling and supervision.	6.08 (1.67)	6.18 (1.09)
Possess a sense of humor	5.97 (1.77)	5.66 (1.20)

[a] This item was added after Round 1.

Table 4 Competency Domain II: Relationship Building and Maintenance

Genetic counselor supervisors:	Rd 1 (n=75) M (SD)	Rd 2 (n=61) M (SD)
Category 1: Facilitative Interpersonal Characteristics		
Show respect when interacting with students	7.79 (0.44)	7.79 (0.41)
Create a positive learning environment through being encouraging, motivating, and respectful	7.53 (0.79)	7.66 (0.57)
Show genuineness when interacting with students	7.56 (0.58)	7.57 (0.59)
Show empathy when interacting with students	7.36 (0.85)	7.46 (0.62)
Act with concreteness (specific and detailed feedback and information about the rotation)	6.92 (1.36)	7.34 (0.63)
Act with immediacy (swift attention to feedback and other student issues; also a counseling skill of commenting on the supervision and feedback process in the moment)	6.51 (1.38)	6.82 (0.83)
Category 2: Initiation of the Supervisory Relationship		
Delineate supervisor expectations	7.29 (0.98)	7.52 (0.68)
Conduct an orientation which includes either a verbal or written contract with students regarding the details of the clinical placement and supervisory relationship	7.28 (1.24)	7.46 (0.70)
Explain when and how supervision will occur	7.23 (1.32)	7.28 (0.84)
Engage with students to establish a mutually trusting relationship/working alliance	7.19 (0.94)	7.28 (0.76)
Clarify roles of genetic counselors at the site in the supervision process	6.93 (1.21)	6.89 (0.86)
Explain the roles of other professionals	6.60 (1.30)	6.28 (0.92)
Describe their supervisory style to students	5.87 (1.88)	5.84 (1.14)
State the purpose of supervision	5.41 (2.24)	5.23 (1.47)
Provide students with information about their own credentials	5.27 (2.00)	4.87 (1.40)
Category 3: Supervision Dynamics		
Recognize that some student anxiety is normal	7.36 (0.95)	7.34 (0.73)
Elicit and are open to candid and ongoing feedback from students about the supervision experience	7.04 (1.21)	7.23 (0.67)
Are sensitive to the evaluative nature of supervision and the power differential inherent in the process	7.28 (0.86)	7.20 (0.75)
Effectively respond to students' anxieties regarding performance evaluations	7.08 (1.00)	7.08 (0.69)
Deal with student resistance in productive ways	6.97 (1.07)	6.87 (0.62)
Recognize and address transference and countertransference issues in supervision in ways that are productive for the supervision process	7.01 (1.01)	6.83 (0.62)
Seek to lessen students' anxieties and help students find productive ways to manage anxiety	6.55 (1.17)	6.54 (0.99)
As needed, explore the students' tendencies to over identify with a patient or supervisor	6.11 (1.48)	6.36 (1.15)
Recognize that student resistance is a normal response to challenge, growth, and change	6.19 (1.66)	6.31 (1.07)
Category 4: Conflict Resolution		
Attend to conflicts that interfere with the supervision process	7.29 (0.87)	7.20 (0.68)
Resolve problems with interpersonal dynamics that arise by creating an action plan	6.96 (1.31)	6.82 (0.92)
Recognize that some level of disagreement is inevitable in supervisory relationships	6.88 (1.29)	6.80 (0.68)
Use key principles of conflict resolution in practice and supervision	6.61 (1.28)	6.43 (0.89)
Provide students with information about due process when they disagree about feedback or a rotation evaluation	6.36 (1.78)	6.36 (1.20)

Evaluation, Feedback, and Remediation. The items in this domain involve supervisor skills that reflect awareness of and effective management of the evaluative nature of supervision.

The fourth domain is *Student Centered Supervision* (see Table 6), including 32 items divided into two categories – Use of Appropriate Methods and Techniques, and Facilitation of Student Development. Domain 4 items reflect supervisor

Table 5 Competency Domain III: Student Evaluation

Genetic counselor supervisors:	Rd 1 (n=75) M (SD)	Rd 2 (n=61) M (SD)
Category 1: Goal Setting		
Set realistic learning goals through discussion with students	7.25 (1.08)	7.51 (0.60)
Identify learning needs of students at various levels of training and experience	7.36 (0.78)	7.46 (0.62)
Recognize that planning and goal setting are critical components of the supervisory process	7.35 (0.88)	7.39 (0.69)
Incorporates the student's developmental level into the goal setting process	7.32 (0.74)	7.39 (0.76)
Incorporates the student's self-identified areas of weakness into the goal setting process	7.39 (0.73)	7.39 (0.71)
Incorporates opportunities available at the particular site into the goal setting process	7.32 (0.81)	7.26 (0.68)
Incorporates the student's past clinical experiences into the goal setting process	7.15 (0.91)	7.18 (0.70)
Incorporates the student's learning priorities into the goal setting process	6.61 (1.35)	6.74 (0.87)
Initiate a renegotiation of rotation goals if needed	6.68 (1.33)	6.52 (0.92)
Incorporates the student's report of feedback from previous supervisors into the goal setting process	6.04 (1.50)	6.20 (1.11)
Use the ABGC practice based competencies in setting goals	6.37 (1.72)	6.16 (1.04)
Category 2: Evaluation		
Identify students' areas of strength and weakness	7.57 (0.64)	7.70 (0.53)
Engage in active listening and observing during sessions with students	7.73 (0.55)	7.69 (0.56)
Provide a final summative evaluation which includes topics discussed in previous evaluations	7.33 (0.99)	7.61 (0.74)
Evaluate students' skills for purposes of grade assignment or completion of a rotation	7.29 (1.11)	7.42 (0.77)
Specify and explain criteria used to determine if a student meets expectations set by the site and or genetic counseling program	7.27 (1.04)	7.39 (0.80)
Evaluate student performance and skill development	6.44 (1.41)	7.39 (0.74)
Collaborate with other genetic counseling colleagues also supervising the student if compiling a mid-point or final evaluation	7.07 (1.50)	7.11 (1.24)
Use evaluation tools to effectively document student skill development and progress during the course of the rotation	6.89 (1.23)	6.77 (0.94)
Provide a summative evaluation as a progress report to students midway through the rotation	6.52 (1.55)	6.54 (1.52)
Evaluate interpersonal dynamics among genetic counseling staff, other clinical, and non-clinical personnel, patients, and students	6.08 (1.65)	5.88 (1.21)
Category 3: Feedback		
Provide feedback that is clear	7.85 (0.39)	7.84 (0.37)
Provide feedback that is honest	7.68 (0.83)	7.84 (0.42)
Comment on positive changes made by students in response to feedback	7.73 (0.60)	7.82 (0.50)
Provide feedback that is specific	7.69 (0.70)	7.79 (0.52)
Provide feedback that is objective	7.52 (0.94)	7.75 (0.51)
Provide specific feedback to students in a timely manner regarding skills used in clinical encounters	7.59 (0.72)	7.72 (0.58)
Provide feedback during the clinical rotation in a private area	7.44 (0.93)	7.70 (0.49)
Prioritize feedback based on student developmental level	7.47 (0.72)	7.51 (0.62)
Respond to students' self-assessments in a manner that enhances the supervision process	7.36 (0.78)	7.51 (0.54)
Elicit students' thoughts and feelings regarding their clinical skills	7.33 (0.98)	7.31 (0.74)
Help students process immediate and summative feedback	7.13 (0.88)	7.16 (0.76)
Provide both verbal and nonverbal supportive feedback	7.03 (1.27)	7.16 (0.78)
Provide feedback about student behavior rather than personal traits the student cannot change	7.17 (0.88)	7.07 (1.06)
Category 4: Remediation		
Interact with the genetic counseling program faculty to discuss difficulties with students	7.48 (0.99)	7.74 (0.51)
Recognize student impairment and take steps to document if needed	7.43 (0.74)	7.61 (0.56)
As needed, collaborate with genetic counseling program faculty to create interventions for students with impairment relevant to areas of deficit	7.25 (1.16)	7.45 (0.67)
As needed, provide information about consequences of underperformance	6.27 (1.85)	6.44 (1.27)

Table 6 Competency Domain IV: Student Centered Supervision

Genetic counselor supervisors:	Rd 1 (n=75) M (SD)	Rd 2 (n=61) M (SD)
Category 1: Use of Appropriate Methods & Techniques		
Demonstrate the ability to communicate critical reasoning behind clinical practice decisions	7.35 (0.77)	7.61 (0.59)
Provide a balance of challenge and support appropriate to student developmental level and experience	7.53 (0.60)	7.61 (0.53)
Model effective collaboration and communication skills in an interdisciplinary team	7.33 (0.84)	7.56 (0.56)
Encourage student autonomy, as appropriate	7.44 (0.72)	7.49 (0.57)
Expect students to own consequences of their actions with patients and supervisors	7.33 (0.81)	7.38 (0.61)
Use supervisory methods appropriate to students' level of conceptual development, training, and experience	7.34 (0.91)	7.18 (0.72)
Ensure that students have an appropriate amount and type of clinical duties	7.04 (0.95)	7.08 (0.62)
Assign students to patient referrals or roles in sessions that are appropriate to the student's developmental level and experience	6.15 (1.86)	7.00 (0.78)
Make a plan with the student for progression from observation to participation in genetic counseling sessions	6.97 (1.33)	6.95 (0.90)
Take on various supervisory roles as needed	7.09 (1.12)	6.92 (0.85)
Elicit new alternatives from students for solutions, techniques, and responses to patients	7.04 (1.06)	6.86 (0.75)
Effectively co-counsel with students	7.00 (1.39)	6.80 (1.07)
Understand the value of providing students with multiple observation opportunities	6.85 (1.28)	6.75 (0.89)
Adjust rotation activities based on the student's learning needs	6.67 (1.49)	6.46 (0.79)
Allow students to observe genetic counseling sessions over the course of an individual rotation, whether they are in a beginning or an advanced rotation	6.43 (1.84)	6.42 (0.96)
Engage in varied supervisory interventions	6.32 (1.48)	6.35 (0.99)
Effectively evaluate and share knowledge with students in the form of new educational materials, literature, and patient educational materials	6.37 (1.63)	6.31 (0.99)
Adjust rotation activities based on the student's training and experience	6.59 (1.41)	6.28 (0.97)
Adjust rotation activities based on the student's conceptual development	6.20 (1.66)	6.14 (0.84)
Create learning opportunities in subject matter that is lacking during the course of the rotation	5.76 (1.83)	5.47 (1.11)
Adjust rotation activities based on the student's area of interest	5.33 (1.91)	5.07 (1.24)
Category 2: Facilitation of Student Development		
Promote students' problem-solving abilities	7.55 (0.64)	7.70 (0.49)
Promote students' self-evaluation	7.59 (0.57)	7.68 (0.50)
Encourage development of critical reasoning skills in students	7.39 (0.80)	7.64 (0.63)
Encourage students to develop their own personal styles of genetic counseling	7.41 (0.87)	7.44 (0.72)
Promote students' self-exploration	7.19 (1.06)	7.28 (0.78)
Understand the developmental nature of supervision	6.96 (1.25)	6.89 (0.86)
Incorporate individual student learning styles and feedback preferences into the supervision process	6.73 (1.18)	6.80 (0.95)
Help students develop teamwork skills	6.93 (1.24)	6.74 (0.83)
Conduct self-assessment after sessions as a means of modeling professional growth for the student	6.69 (1.48)	6.56 (1.06)
Discuss with students current professional issues in genetic counseling	6.05 (1.55)	6.00 (1.13)
Encourage multicultural readings and educational opportunities	5.37 (1.87)	5.49 (1.32)

behaviors that allow them to work effectively with student individual differences, in particular, student learning styles and developmental levels. The fifth domain is *Guidance and Monitoring of Patient Care* (see Table 7), with three categories containing 20 items – Documentation, Case Preparation, and Counseling Interventions and Post-Counseling Debriefing. Items in this domain describe supervisor skills in ensuring students learn to provide a standard of patient care. The sixth domain is *Ethical and Legal Aspects of Supervision* (see Table 8),

with 12 items across two categories – Professional Conduct, and Nature and Boundaries of Supervision. This domain consists of items reflecting supervisor behaviors that model ethical and professional treatment of patients and students.

Appendix B contains a summary of the survey items found in Tables 3, 4, 5, 6, 7 and 8. The items are arranged into the domains and categories identified from the content analysis. This summary is intended to be used for supervisor training purposes and for further research regarding supervisor best practices.

Table 7 Competency Domain V: Guidance and Monitoring of Patient Care

Genetic counselor supervisors:	Rd 1 (n=75) M (SD)	Rd 2 (n=61) M (SD)
Category 1: Documentation		
Provide guidance to students in effectively documenting clinical encounters	7.23 (0.97)	7.54 (0.56)
Emphasize the importance of accurate and timely medical documentation	7.32 (0.92)	7.51 (0.67)
Provide guidance to students in identifying appropriate information to be included in a verbal or written report	7.08 (1.09)	7.48 (0.54)
Provide guidance to students in adapting verbal and written reports for the work environment and type of communication	7.21 (0.74)	7.36 (0.75)
Category 2: Case Preparation		
Assist students in developing a counseling plan for patients	7.16 (1.05)	7.21 (0.76)
Assist students in prioritizing goals in the counseling plan for patients	7.03 (1.01)	7.20 (0.63)
Guide students in case preparation	6.93 (1.23)	7.20 (0.70)
Assist students in incorporating patient psychological and behavioral characteristics into the genetic counseling session	6.81 (1.18)	7.13 (0.69)
Facilitate students' understanding of when and how to work with an interpreter for linguistically diverse patients	6.32 (1.65)	6.72 (1.14)
Require students to include cultural considerations in developing counseling plans	6.72 (1.24)	6.67 (0.94)
Require students to consider relevant ethical issues in planning for sessions	6.48 (1.50)	6.49 (0.85)
Facilitate understanding of the difference between clinical and research based genetic testing and implications for patients	6.53 (1.29)	6.43 (0.96)
Facilitate the discussion and use of current research in patient care	5.95 (1.30)	5.92 (1.05)
Category 3: Counseling Interventions & Post-Counseling Debriefing		
Help students manage extreme patient behaviors	7.27 (0.87)	7.46 (0.53)
Elicit students' perceptions of patient psychosocial dynamics	7.36 (0.99)	7.44 (0.67)
Assist students in determining whether the objectives for the patient have been met	7.26 (0.83)	7.41 (0.53)
Help students process and learn effective coping strategies for emotionally difficult cases	7.31 (0.82)	7.41 (0.59)
Assist students in adjusting counseling goals for a patient based on ongoing assessment and evaluations during the genetic counseling session	7.12 (1.03)	7.33 (0.65)
Intervene during sessions to direct students towards presenting information in a logical, concise, and clear manner as needed to ensure patient care	7.07 (1.15)	7.33 (0.70)
Guide and evaluate students' abilities to permit the patient to express intense emotional states	7.11 (0.98)	7.16 (0.61)

Discussion

In this study, program directors and experienced genetic counseling clinical supervisors, representing a majority of the ABGC-accredited genetic counseling programs, rated the importance of each of 158 genetic counseling supervisor competencies. The supervisors represented a variety of practice areas, which allowed survey items to be viewed from a variety of perspectives. The high degree of consensus for item ratings suggests the resulting list of competencies is "universal" across practice settings. Major findings, study strengths and limitations, practice implications, and research recommendations are discussed in the following sections.

Genetic Counseling Supervisor Competencies

Content analysis of the 158 individual items resulted in six domains of supervisor competencies. These domains encompass topics, methods, and skills identified in prior research as important in genetic counseling supervision, in particular, supervision boundaries (Gu et al. 2011); multicultural competence (Lee et al. 2009); student-supervisor conflict resolution (Lindh et al. 2003); student evaluation and feedback (Hendrickson et al. 2002; Lindh et al. 2003; McIntosh et al. 2006); awareness of process (McIntosh et al. 2006); relationship development; and management of anxiety (Hendrickson et al. 2002; McIntosh et al. 2006).

Two domains contain several items with the highest mean importance ratings - Personal Traits and Characteristics and Student Evaluation (particularly Feedback). With respect to supervisor traits and characteristics, "who one is" (i.e., qualities) may subsume what one "does" (i.e., specific supervisor skills). The domain with the largest number of items (24 items) is Student Evaluation. Student evaluation/feedback is a pivotal component of supervision; indeed, the evaluative component distinguishes supervision from many other types of interpersonal relationships (Bernard and Goodyear 2008) and it is often the most problematic for supervisors to implement (Borders and Brown 2005).

Table 8 Competency Domain VI: Ethical and Legal Aspects of Supervision.

Genetic counselor supervisors:	Rd 1(n=75) M (SD)	Rd 2 (n=61) M (SD)
Category 1: Professional Conduct		
Are ethical in practice and supervision	7.75 (0.62)	7.79 (0.45)
Demonstrate professional and ethical conduct in patient care and professional interactions[a]	–	7.70 (0.53)
Model ethical and professional standards of genetic counseling practice	7.72 (0.65)	7.69 (0.53)
Seek appropriate consultation in situations of ethical uncertainty	7.41 (0.83)	7.30 (0.72)
Communicate an understanding of legal and regulatory documents and their impact on the profession	6.84 (1.29)	6.82 (0.76)
Demonstrate knowledge of the professional Code of Ethics of relevant professional organizations such as NSGC and CAGC[b]	6.27 (1.65)	6.49 (1.13)
Category 2: Nature and Boundaries of Supervision		
Maintain confidentiality from those outside their site about student evaluation and feedback	7.12 (1.44)	7.21 (0.99)
Clearly define the boundaries of the supervisory relationship	6.38 (1.70)	6.51 (1.03)
Avoid simultaneous roles in addition to supervision with students or monitor them for negative effects on students when unavoidable	6.54 (1.67)	6.43 (0.94)
Explain the rationale for addressing the student's personal issues during the supervision process	5.99 (1.80)	5.85 (1.36)
Communicate to students knowledge of ethical considerations that pertain to the supervisory relationship	5.83 (1.95)	5.82 (1.20)
Explain to students the boundaries around discussing the student's' personal issues as part of the supervision process	5.48 (1.88)	5.59 (1.27)

[a] This item was added after Round 1. [b] CAGC=Canadian Association of Genetic Counsellors

The names given to some of the themes and domains, and the overall organizational framework of the genetic counseling supervisor competencies, differ somewhat from the other health professions described in this study. These differences emphasize the ways supervision competencies from other health professions are uniquely applied in genetic counseling. Nonetheless, there was a great deal of overlap between the genetic counseling supervisor competencies and supervisor competencies in other allied health professions. Since the original survey items were drawn from documents in these fields, the overlap is not surprising. In particular, the broad domains identified in this study (e.g., personal traits and characteristics, goal setting, feedback, supervision methods and techniques, ethical issues) are evident in those documents. A few areas that are less common in the other health professions were rated highly by the present sample. These include facilitating student development, which emphasizes the development of critical reasoning skills and personal style, case preparation and counseling interventions, and post-counseling debriefing.

Case preparation may be more extensive in genetic counseling relative to other health professions, given the need to research and prepare specific information about genetic conditions. Therefore, skills and behaviors relative to case preparation likely would be rated as more important for genetic counseling supervisors. Counseling interventions and post-counseling debriefing involve psychosocial counseling skills which are emphasized in counselor education and psychology supervision, but less so in other allied health professions. Research is a supervisor competency that received greater emphasis in other allied health professions. Items related to research in the current study received some of the lowest importance ratings. Comments about these items indicated that although participants believed these skills are important, they did not regard them as a focus of clinical supervision.

The competency documents in some other health professions, such as counselor education (Borders and Brown 2005; Dye and Borders 2001) and psychology (Falender et al. 2004), also include specific training recommendations for supervisors (e.g., coursework, workshops, and/or or years of experience in the profession). Training recommendations were not investigated in the present study.

Although the competencies were arranged into a framework the investigators believe is most appropriate (see Appendix B), there are multiple ways the items could be summarized. Furthermore, as mentioned previously, the

items are not mutually exclusive conceptually. Indeed, many of the competencies likely are correlated.

Study Strengths and Limitations

Strengths of this study include recruitment of participants with expertise in supervision, regional diversity, and representation of a variety of practice specialties. Data collection and analysis were done by investigators with expertise in supervision (collectively representing: three experienced genetic counselors, four experienced graduate program directors/assistant director, one licensed psychologist, and one counselor educator). There was a high response rate to the survey. This Delphi study included more participants than the usual recommendation of 15–20 (Linstone and Turoff 1975) in order to ensure adequate representation of the profession. Overall, this process resulted in the development of the first comprehensive list of competencies for clinical supervisors in genetic counseling.

Despite these strengths, there are also limitations to the study. The surveys included a lengthy list of items, which may have resulted in participant fatigue. In order to be comprehensive regarding this initial list of competencies, however, brevity was sacrificed for completeness. Although many multi-faceted competencies were split into separate items for inclusion in the survey, this was not done in every case, as that would have made the survey even longer. Thus, further clarification of the importance of the components of some items is warranted because they may have been interpreted differently by participants. In addition, study participants were not likely to have remembered the ratings they assigned to individual items in the first round, although they could see the mean rating of each item. There was some participant attrition from Round 1 to Round 2. Although common in Delphi studies, this attrition may limit generalizability of the findings. Generalizability might be further limited to the extent that non-respondents differ in salient ways from respondents. Finally, social desirability may have prompted respondents to provide certain ratings regardless of their actual opinion about the items' importance.

Practice Implications

Although the study limitations suggest caution in drawing definitive conclusions from the findings, the results have implications for practice. The comprehensive list of genetic counseling supervisor characteristics, knowledge, and skills provides a basis for future training of supervisors. Training and curriculum development may take the form of workshops, courses, journal articles, and/or online curricula. Training should begin with preparation in minimal competencies and extend to continuing education to maintain and deepen those competencies. One or more of the competency domains developed in this study could be targeted in such trainings. Formal supervision training efforts may promote consistency in the supervision process for genetic counseling students across graduate programs. The supervision competencies developed in this study could also be used by supervisors as a means of self-evaluation of their supervision strengths and areas for improvement. Increased awareness of their strengths and growth areas would allow them to seek specific types of professional development opportunities.

Research Recommendations

The present study resulted in an initial description of empirically-derived competencies for genetic counselor supervisors. Additional research is needed to further validate and refine the present findings. Studies could be conducted using the case-based narrative approach employed in the development of the ABGC practice-based competencies for genetic counselors (Fine et al. 1996) to determine if additional topics should be added, or to confirm the importance of the topics included herein. Investigations could also be done to assess the frequency with which different competencies are demonstrated (e.g., provision of feedback is an on-going type of supervisor behavior throughout the supervision relationship, whereas setting boundaries on the supervision relationship may primarily occur at the beginning). Whether and how these competencies vary as a function of supervisee developmental level or experience as a supervisor should be explored, and research to identify strategies for promoting optimal supervisor development of these competencies also is warranted. Although the purpose of the present study was to begin to identify supervision competencies, further studies could attempt to identify the relative importance of items as compared to each other. Similar to supervisor competencies in other allied health professions, the competencies identified for genetic counseling supervisors are broad conceptualizations of desired characteristics, knowledge, and skills. Future studies should involve attempts to identify specific, observable genetic counseling supervisor behaviors that correspond to each competency. Further studies could also determine if the domains identified for the competencies are optimal.

Appendix A

Table 9 Documents Detailing Supervision Topics and Supervisor Competencies in Allied Health Professions

Field	Year	Supervision Related Documents	Source	Description
Counselor Education (Clinical Counselors)	1990	Standard Competencies for Supervisors	The Supervision Interest Network of the Association for Counselor Education and Supervision (ACES), Dye and Borders 1990	Eleven core areas of knowledge, competencies, and personal traits that exemplify effective clinical supervisors
	1991	Curriculum Guide	ACES Supervision Interest Network, Borders et al. 1991	Seven major curriculum areas
	2005	The New Handbook of Counseling Supervision	Borders and Brown 2005	A detailed resource on the development of the skills described in the standards
Nursing	Various years	Multiple published studies	Haggman-Laitila et al. 2007; Landmark et al. 2003; Rice et al. 2007; Smedley and Penny 2009	Qualities desired in preceptors
		Journals specific to nursing supervision	Clinical Supervision for Nurses, Nurse Education Practices, etc.	
		Courses/workshops	Baltimore 2004; Schaubhut and Gentry 2010: Smedley and Penny 2009	Description of topics to cover in supervision training
Occupational Therapy	2006	Multiple documents	The American Occupational Therapy Association (AOTA) website	Purpose, recommendations, resources, goal writing, student evaluation
		Regional training workshops	AOTA	
Physical Therapy	1980s, updated 2009	Guidelines for Clinical Instructors	The American Physical Therapy Association (APTA) website	Six major categories, further subdivided into specific skills and activities
		Clinical Instructor Education and Credentialing Program	APTA	Six sessions and 15 h of instruction
Psychology	2004	Defining Competencies in Psychology Supervision: A Consensus Statement	Falender et al. 2004	Knowledge, skills, values and social context of supervision.
	Various years	Best Practices for the Supervised Clinical Experience	State specific Boards of Psychology websites – California Board of Psychology	Specific skills and how-to document
Field	Year	Supervision Related Documents	Source	Description
Social Work	1996, revised 2008	Code of Ethics	National Association of Social Workers	Section titled "Supervision and Consultation"
	2004	Clinical Supervision: A Practice Specialty of Clinical Social Work	The American Board of Examiners (ABE) in Clinical Social Work	Eight larger topic areas, broken into specific sub-areas by knowledge and skills
Speech Pathology	1985	Position Statement on Supervision	The American Speech Language Hearing Association (ASHA) website	Competencies for supervisors and the tasks of supervision
	2008	Knowledge and Skills Needed by Speech-Language Pathologists Providing Clinical Supervision	ASHA website	Lists various supervision topics and defines the knowledge and skills necessary for each
	2010	Ethics of Supervision	ASHA website	

Appendix B: Genetic Counseling Supervisor Competencies

Genetic counselor supervisors strive to facilitate the development of competent entry-level genetic counselors through supervised clinical experiences. Genetic counselor supervisors demonstrate knowledge and skills commensurate with the American Board of Genetic Counseling (ABGC 2004) practice based competencies which include communication, critical thinking, interpersonal, counseling, psychosocial assessment skills and professional ethics and values. In addition, the following are characteristics, knowledge and skills of effective supervisors of students in genetic counseling.

I. Personal Traits and Characteristics

Genetic counselor supervisors are competent genetic counselors as evidenced by their training, education and certification. They demonstrate a variety of personal qualities and related skills.

Genetic Counselor Supervisors

- Demonstrate knowledge and skills commensurate with the ABGC practice based competencies
- Recognize that care of the patients is their primary responsibility
- Are highly competent, ethical in practice and supervision, accessible to students, comfortable in the authority inherent in the supervisory role, flexible, transparent, and patient
- Have problem solving abilities and a sense of humor
- Demonstrate a commitment and desire to supervise and seek opportunities for training in supervision techniques and methods
- Advocate for students in the clinical setting
- Model appropriate professional behavior through appropriate dress and demeanor
- Demonstrate effective time management in practice and supervision
- Demonstrate knowledge of individual differences with respect to gender, race, ethnicity, culture, sexual orientation, spirituality or religion, and age, and understand the importance of these characteristics in supervisory relationships
- Explore their own cultural identity and how this identity affects their values and beliefs about counseling and supervision.
- Have knowledge about the particular genetic counseling program for which they are supervising students, including the overall objectives, evaluation process and the supervisor's role

- Keep up to date with changes in practice, new genetic technologies, and trends in the profession
- Maintain a commitment to lifelong learning and professional development, including knowing their strengths and weaknesses as a genetic counselor and supervisor

II. Relationship Building and Maintenance

Genetic counselor supervisors demonstrate knowledge and skills that promote a working alliance and a safe and positive learning environment.

Facilitative Characteristics

Genetic Counselor Supervisors

- Are encouraging, motivating and respectful
- Are empathic, genuine, concrete and immediate (give swift attention to feedback and other student issues)

Initiation of the Supervisory Relationship

Genetic Counselor Supervisors

- State the purpose of supervision
- Conduct an orientation which includes either a verbal or written contract with students regarding the details of the clinical placement and supervisory relationship
- Describe their supervisory style to students and provide them with information about their own credentials
- Delineate supervisor expectations and explain when and how supervision will occur
- Clarify roles of genetic counselors at the site in the supervision process
- Explain the roles of other professionals (e.g., counselors, psychologist, physicians, social workers)
- Engage with students to establish a mutually trusting relationship/working alliance

Supervision Dynamics

Genetic Counselor Supervisors

- Recognize that some student anxiety is normal and seek to lessen students' anxieties and help students find productive ways to manage anxiety
- Recognize and address transference and countertransference issues in supervision in ways that are productive for the supervision process
- Recognize that student resistance is a normal response to challenge, growth, and change and deal with resistance in productive ways

- Are sensitive to the evaluative nature of supervision and the power differential inherent in the process and effectively respond to students' anxieties regarding performance evaluations
- As needed, explore the student's tendencies to over-identify with a patient or supervisor
- Elicit and are open to candid and ongoing feedback from the student about the supervision experience

Conflict Resolution

Genetic Counselor Supervisors

- Recognize that some level of disagreement is inevitable in supervisory relationships and use key principles of conflict resolution to attend to conflicts that interfere with the supervision process
- Resolve problems with interpersonal dynamics that arise by creating an action plan (to include contact with genetic counseling program faculty as needed)
- Provide students with information about due process when they disagree about feedback or a rotation evaluation (e.g., check with other genetic counseling supervisors on site, talk with genetic counseling program faculty, etc.)

III Student Evaluation

Genetic counselor supervisors demonstrate knowledge and skills that reflect awareness of and effective management of the evaluative nature of supervision.

Goal Setting

Genetic Counselor Supervisors

- Recognize that planning and goal setting are critical components of the supervisory process
- Set realistic learning goals through discussion with students
- Identify learning needs of students at various levels of training and experience
- Use the ABGC practice based competencies in setting goals
- Initiate a renegotiation of rotation goals if needed
- Incorporate into goals:

  - The student's self-identified areas of weakness
  - The student's past clinical experiences
  - The student's report of feedback from previous supervisors
  - The student's developmental level
  - The student's learning priorities
  - Opportunities available at the particular site

Evaluation

Genetic Counselor Supervisors

- Specify and explain criteria used to determine if a student meets expectations set by the site and/or genetic counseling program
- Engage in active listening and observing during sessions
- Identify student's areas of strengths and weaknesses
- Evaluate student performance and skill development for purposes of grade assignment or completion of a rotation
- Use evaluation tools to effectively document student skill development and progress during the course of the rotation
- Evaluate interpersonal dynamics among genetic counseling staff, other clinical, and non-clinical personnel, patients, and students
- Collaborate with other genetic counseling colleagues also supervising the student if compiling a mid-point or final evaluation
- Provide a summative evaluation as a progress report to students midway through rotation
- Provide a final summative evaluation which includes topics discussed in previous evaluations

Feedback

Genetic Counselor Supervisors

- Elicit students' thoughts and feelings regarding clinical skills and respond in a manner that enhances the supervision process
- Provide both verbal and nonverbal supportive feedback
- Strive to provide to students in a timely manner and private area, feedback that is clear, specific, honest, and objective
- Provide feedback about student behavior rather than personal traits the student cannot change
- Prioritize feedback based on student developmental level
- Comment on positive changes made by students in response to feedback
- Help students process both immediate and summative feedback

Remediation

Genetic Counselor Supervisors

- Recognize student impairment and take steps to document if needed
- Interact with genetic counseling program faculty to discuss difficulties with students

- As needed, collaborate with genetic counseling program faculty to create for students with impairment, interventions relevant to areas of deficit
- As needed, provide information about consequences of underperformance

IV. Student Centered Supervision

Genetic counselor supervisors demonstrate knowledge and skills that allow them to work effectively with student individual differences, in particular, student learning styles and developmental levels.

Use of Appropriate Methods and Techniques

Genetic Counselor Supervisors

- Provide a balance of challenge and support appropriate to student developmental level and experience
- Adjust rotation activities such as conferences, projects or other assignments based on the student's learning needs, training, experience, area of interest, and conceptual development
- Use supervisory methods appropriate to student's level of conceptual development, training and experience
- Ensure that students have an appropriate amount and type of clinical duties
- Encourage student autonomy, as appropriate
- Expect students to own consequences of their actions with patients and supervisors
- Assign students to patient referrals or roles in sessions that are appropriate to the student's developmental level and experience
- Make a plan with the student for progression from observation to participation in genetic counseling sessions
- Model effective collaboration and communication skills in an interdisciplinary team
- Understand the value of providing students with multiple observation opportunities and allow students to observe whether they are in a beginning or advanced rotation
- Engage in varied supervisory interventions (e.g., role playing, role reversal, live supervision, modeling, brain-storming, advising, reporting on cases)
- Take on various supervisory roles as needed (e.g., teacher, counselor, consultant, advisor, mentor, coordinator, evaluator)
- Create learning opportunities in subject matter that is lacking during the course of the rotation
- Demonstrate ability to communicate critical reasoning behind clinical practice decisions
- Effectively co-counsel with students

- Effectively evaluate and share knowledge with students in the form of new educational materials, literature, and patient educational materials
- Elicit new alternatives from students for solutions, techniques and responses to patients

Facilitation of Student Development

Genetic Counselor Supervisors

- Encourage development of critical reasoning skills
- Understand the developmental nature of supervision
- Promote student self-evaluation, self-exploration, and problem solving abilities
- Encourage students to develop their own personal styles of genetic counseling
- Help students develop teamwork skills
- Discuss with students current professional issues in genetic counseling
- Incorporate individual student learning styles and feedback preferences into the supervision process
- Conduct self-assessment after sessions as a means of modeling professional growth for the student
- Encourage multicultural readings and educational opportunities

V. Guidance and Monitoring of Patient Care

Genetic counselor supervisors demonstrate knowledge and skills in ensuring students learn to provide a standard of patient care.

Documentation

Genetic Counselor Supervisors

- Provide guidance to students in effectively documenting clinical encounters.
- Emphasize the importance of accurate and timely medical documentation
- Provide guidance to students in identifying appropriate information to be included in a verbal or written report
- Provide guidance to students in adapting verbal and written reports for the work environment and type of communication (to patient, to physician, etc.)

Case Preparation

Genetic Counselor Supervisors

- Guide students in case preparation.

- Assist students in developing a counseling plan and prioritizing goals in the plan for patients
- Assist students in obtaining and appropriately reviewing medical records, patient education materials and testing information
- Require students to consider relevant ethical issues and cultural considerations in planning for sessions
- Facilitate students' understanding of when and how to work with an interpreter for linguistically diverse patients
- Facilitate the discussion and use of current research in patient care
- Facilitate understanding of the difference between clinical and research based genetic testing and implications for patients
- Assist students in incorporating patient psychological and behavioral characteristics into the genetic counseling session

Counseling Interventions and Post-Counseling Debriefing

Genetic Counselor Supervisors

- Intervene during sessions to direct students towards presenting information in a logical, concise, and clear manner as needed to ensure patient care.
- Assist students in adjusting counseling goals for a patient based on ongoing assessment and evaluation during the genetic counseling session
- Assist students in determining whether the objectives for the patient have been met
- Guide and evaluate students' abilities to permit the patient to express intense emotional states and help students manage extreme patient behaviors
- Elicit students' perceptions of patient psychosocial dynamics
- Help students process and learn effective coping strategies for emotionally difficult cases

VI. Ethical and Legal Aspects of Supervision

Genetic counselor supervisors demonstrate knowledge and skills that model ethical and professional treatment of patients and students.

Professional Conduct

Genetic Counselor Supervisors

- Are ethical in practice and supervision
- Demonstrate ethical and professional standards of genetic counseling practice (e.g., confidentiality, duty to warn)

- Seek appropriate consultation in situations of ethical uncertainty
- Demonstrate knowledge of the professional Code of Ethics of relevant professional organizations such as the National Society of Genetic Counselors (NSGC) and Canadian Association of Genetic Counsellors (CAGC)
- Communicate an understanding of legal and regulatory documents and their impact on the profession (e.g., HIPPA, informed consent)

Nature and Boundaries of Supervision

Genetic Counselor Supervisors

- Communicate knowledge of ethical considerations that pertain to the supervisory relationship (e.g., multiple role relationships, due process, confidentiality)
- Clearly define the boundaries of the supervisory relationship
- Avoid simultaneous roles in addition to supervision with students (i.e., teacher, research mentor, employer, friend) or monitor them for negative effects on students when unavoidable
- Maintain confidentiality from those outside the site about student evaluation and feedback
- Explain the rationale and/or boundaries around addressing the student's personal issues during the supervision process

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