

1 **TITLE: A model for peer experiential and reciprocal supervision (PEERS) for genetic**
2 **counselors: development and preliminary evaluation within clinical practice**

3 Authors: A. Sexton^{1,2,*}, L. Hodgkin¹, M. Bogwitz¹, Y. Bylstra¹, K. Mann¹, J. Taylor¹, J.
4 Hodgson^{2,4}, M. Sahhar^{2,3} and M. Kentwell¹

5 ¹Royal Melbourne Familial Cancer Centre, Level 2-Centre, Royal Melbourne Hospital,
6 Grattan St, Parkville VIC 3050, Australia

7 ²Department of Paediatrics, University of Melbourne, Parkville VIC 3052, Australia

8 ³Genetic Health Services Victoria, Level 4, MRCI building, Royal Children's Hospital,
9 Flemington Rd, Parkville VIC 3052, Australia

10 ⁴Murdoch Children's Research Institute, Level 5 West, Royal Children's Hospital,
11 Flemington Rd, Parkville VIC 3052, Australia

12

13 *Corresponding author: Dr Adrienne Sexton, Royal Melbourne Familial Cancer Centre,
14 Level 2-Centre, Royal Melbourne Hospital, Grattan St, Parkville VIC 3050, Australia

15 T: +613 9342 7151

16 F: +613 9342 4267

17 E-mail: adrienne.sexton@mh.org.au

18

19

20

21

22 **Abstract**

23 A model for practising genetic counselors to obtain clinical supervision via reciprocal peer
24 observation and feedback was developed and trialled. The model was developed in response
25 to a perceived lack of opportunity for immediate observational feedback for practising
26 genetic counselors. The aims reached by consensus were to facilitate learning new
27 approaches and skills, to revitalise current ways of practising, and to enhance supervision
28 skills in a two-way process, where the observer learnt from the counselor, and vice-versa.
29 The genetic counselors agreed on a process of paired reciprocal observation whereby the
30 observer was present in the room during the counseling session, and a reflective feedback
31 discussion was arranged within 24 hours of the session. Four main themes emerged from
32 analysis of the recorded discussions were (i) *“I wasn’t sure if I-”*: voicing of doubts or
33 internal questions that occurred during session for the counselor conducting the session, (ii)
34 *“I really liked that”*: positive feedback and validation from the observer, (iii) *“I wonder
35 whether-”*: offering of alternative views, insights and strategies by the observer, and (iv)
36 *“That’s a real thing for me to take away and think about”*: evidence of learning by both
37 observers and counselors.

38 This paper describes the development and initial evaluation of a model for peer experiential
39 and reciprocal supervision (PEERS). We also describe counselor’s perceptions of the
40 learning outcomes and highlight the unique features of this model as a learning tool, and the
41 adaptability of the model for other genetic counseling teams.

42

43 **Key words:** genetic counseling, professional development, live supervision, peer
44 supervision, feedback

45

46

47

48

49 **Introduction**

50 In Victoria, Australia, the majority of genetic counseling services are delivered through seven
51 publically funded health institutions. The services include paediatric, general adult, prenatal,
52 and cancer genetics, which are embedded within tertiary hospitals specialising in these areas.
53 There are subspecialty clinics within some of these services such as cardiogenetics and
54 neurogenetics. Services are also offered to rural and regional areas by the major specialty
55 hospitals on a regular basis. There are also a small number of genetic counselors employed in
56 the private healthcare sector, such as in In Vitro Fertilisation services and private ultrasound
57 clinics.

58 Almost all clinical genetic counselors in Victoria are involved in training and supervision of
59 genetic counseling students enrolled in the Masters of Genetic Counseling program at the
60 University of Melbourne. Completion of the Masters course is the requirement for becoming
61 Board Eligible for Genetic Counseling Certification in Australia/New Zealand. Workplace
62 training continues post-graduation through the Certification process of the Australasian
63 Society of Genetic Counselors, under the governance of the Human Genetics Society of
64 Australasia (HGSA). In Australasia, in order to be eligible for Certification in Genetic
65 Counseling, the candidate must, at a minimum, participate in one hour of counseling
66 supervision on a weekly basis. The HGSA emphasises supervision as a tool for self-
67 awareness and competency in reflective practice, as well as for improving clinical and
68 interview skills. HGSA guidelines recommend a mix of group and individual counseling
69 supervision involving a supervisor with a greater level of experience (HGSA 2011). Ongoing
70 participation in supervision is also encouraged after Certification has been obtained (HGSA,
71 2011; Sahhar et al. 2005).

72 Clinical supervision has been defined as regular, protected time for in-depth reflection on
73 clinical practice, which aims to enhance the personal and professional development of the
74 supervisee, and ultimately ensure the best-quality service for clients (Bond and Holland 1998;
75 Carroll and Gilbert 2005; Cleak and Wilson 2007). In the context of genetic counseling, Weil
76 (2000) has described supervision as helping counselors to continue to develop counseling
77 skills, to identify abilities and limitations, to have awareness of ethical issues and ways of
78 resolving those issues, and to identify professional “blind spots.”

79 Kennedy (2000) has previously described three models of supervision relevant to genetic
80 counseling: individual supervision (one counselor meeting regularly for mentoring with a
81 more senior clinician), peer group supervision (a specific group of colleagues meeting
82 regularly to mentor each other), and leader-led peer group supervision (a peer supervision
83 group with a senior clinician as facilitator). Individual supervision provides an opportunity
84 for one-on-one private and tailored learning with a more senior clinician, while peer group
85 supervision can produce a variety of perspectives and ideas where all members can learn, as
86 well as provide support and validation (Kennedy 2000; Zahm et al. 2007). A potential
87 drawback of individual supervision is that it may become counter-productive when there is
88 conflict or imbalance of power in the working relationship. Similarly peer group supervision
89 may become problematic if there are personality and group conflicts such as differing
90 agendas. The leader-led group supervision model is designed so these problems may be
91 overcome, as there is a “gatekeeper” to oversee and attend to the group’s structural needs and
92 group dynamics (Kennedy 2000). Recently Phillips et al. (2012) in the UK developed a dual
93 supervision model combining individual supervision with an external supervisor plus team
94 supervision.

95 An additional model of supervision which has been described in the genetic counseling
96 setting is live supervision. This involves a “live” observation of a genetic counseling session
97 by a peer or supervisor. Live supervision has evolved as a learning tool from the discipline of
98 family therapy where it commonly involves live observation of a counseling session through
99 a one way glass (Gaff and Bylund 2010). There is limited research investigating the live
100 supervision model in the genetic counseling setting. In the context of training genetic
101 counseling students, live supervision has been acknowledged as an effective method of
102 promoting skill development and professional development for both students and supervisors
103 (Hendrickson et al. 2002). Goldsmith *et al.* (2011) piloted a method of “peer observed
104 interaction and structured evaluation” (POISE) whereby genetic counselors observed, and
105 were observed by each other during patient appointments. Advantages of the POISE model
106 included a reduction in recall bias, and an increased opportunity for concrete feedback
107 regarding patient interactions. The pilot also demonstrated that counselors were comfortable
108 with receiving and processing feedback from their peers.

109 The live supervision model we describe here was developed in response to feedback from
110 students and practising genetic counselors within our clinical service. Many students
111 commented during clinical placement about the value of observing multiple counselors with

112 differing styles and techniques. The practising genetic counselors in this service expressed a
113 desire for ongoing opportunities for direct observational feedback as a means to continue life-
114 long learning and development, as these were not formally available after completion of
115 training. They also anticipated that the process of both observing and being observed would
116 enhance reflective learning and preparing written case reports that are required as part of the
117 Australasian Certification process. Genetic counselors also expressed a desire to improve
118 their skills in giving and receiving feedback, as they thought that this learning process would
119 be beneficial when supervising students and other counselors. They also reported that some
120 peer support post-clinic was already occurring informally, with many finding this opportunity
121 to debrief and reflect with a trusted colleague to be beneficial. All of the seven counselors
122 within our team also expressed a keenness to learn from one another.

123 Here we firstly detail the development process for a live peer supervision model of two-way
124 learning, which we have called the “PEERS” **PEer Experiential and Reciprocal Supervision**
125 model, and secondly, the results of thematic analysis of our preliminary trial. Supporting data
126 from an anonymous survey of the genetic counselors’ experiences of the supervision model is
127 also presented.

128 While this PEERS model has similarities to the POISE model described by Goldsmith *et al.*
129 (2011), there are some key differences. In the PEERS model described here, the format was
130 intended to create a collaborative, two-way learning model by reducing any power difference
131 between observer and counselor. In this PEERS model, the supervision was (i) conducted in
132 pairs to enable a reciprocal approach, whereas in the POISE model multiple observers were
133 used, (ii) the PEERS focus was on learning through self-awareness and reflective practice
134 rather than assessing the skills of the genetic counselors, whereas POISE used a formal
135 assessment check list, (iii) there was a detailed process of establishing the PEERS model
136 contract which emphasized the mutual peer working relationship. In addition to the non-
137 evaluative two-way learning aspect, another key difference of PEERS was that (iv) the
138 observer was present in the room, to enhance experiential learning, whereas in the POISE
139 model, observers watched from outside the counseling room through one-way glass.

140 The following sections describe the development (Part I) and preliminary evaluation (Part II)
141 of the PEERS model.

142

143

144

145

146 **Part I Development of the peer experiential and reciprocal supervision (PEERS) model**147 **Methods (Part I)**148 *Participating genetic counselors*

149 A Quality Assurance application for this project was approved by The Royal Melbourne
150 Hospital Ethics Committee. The genetic counseling team participating in development of the
151 peer observation model included all seven genetic counselors at The Royal Melbourne
152 Familial Cancer Centre at that time. Six counselors participated in the recorded feedback
153 discussions, and the seventh counselor analysed the de-identified transcripts. The six
154 counselors participating in recorded feedback sessions included five women and one man,
155 with ages ranging from 25-50 years, and genetic counseling experience of one to nine years
156 (with a median of four years of experience). Previous time period as co-workers ranged from
157 one to four years.

158

159 *Development of the peer supervision model*

160 The aim of this part of the first stage of this project was to develop a model of live (in the
161 room) peer supervision. Participants were invited to attend three planning meetings with the
162 opportunity to withdraw at any stage of the process. This opt-in model was adopted based on
163 evidence that choosing to be at supervision is a critical part of a successful supervision
164 experience (Carroll and Gilbert 2005). All counselors elected to participate in the three
165 stages.

166 The first planning stage involved developing a peer observation and feedback model into a
167 format which fitted with the purpose of experiential supervision for each genetic counselor
168 and the group. During this stage the group identified gaps in their skills and knowledge which
169 they believed may impact on the learning experience. These gaps were (i) knowledge about
170 developing a supervision contract, and (ii) skills for giving feedback in supervision. To
171 address these gaps, the group sought literature on supervision (with emphasis on learning
172 about effective dialogue and communication), and on giving and receiving feedback (Carroll
173 and Gilbert 2005; McCarthy Veach et al. 2003; Osmond and Darlington 2005). As further
174 preparation the group also participated in an education session on giving feedback, which was

175 provided by an external supervisor with extensive experience in training genetic counseling
176 students and genetic counselors.

177 The second planning stage involved setting a supervision contract. The contract involved
178 clarification of the purpose and goals, explanation of the ground rules of the working alliance,
179 the duties and responsibilities of the observer and counselor, and defining procedural and
180 practical issues (Carroll and Gilbert 2005; Clarke et al. 2007; Kennedy 2000). In the second
181 stage, there was also discussion about how the informed consent process would occur for
182 participation in the data collection and analysis phase. The group agreed that the process of
183 setting and agreeing to the contract would satisfy the informed consent requirements for the
184 project. Setting the contract included clarification that the project would not relate to work
185 performance review, and that confidentiality would be maintained between the pairs and by
186 de-identifying the audio-recording transcripts.

187 This stage also involved identifying potential limitations with the project. These were time
188 constraints, and differing levels of experience within the team. In order to overcome these,
189 the team agreed on an achievable number of observation sessions within their workload (two
190 sessions per pair), and the reciprocal pairs were grouped based on similar years of experience.

191 The third planning stage involved developing post-observation questions to guide the
192 learning discussion. The questions were intended to be used as a collaborative exploratory
193 process, and focused on five key areas to emphasize critical reflection for both the supervisor
194 and supervisee (in this case, observer and observed counselor) (Carroll and Gilbert 2005;
195 Harms 2007; Osmond and Darlington 2005). These five areas were: (i) immediate
196 impressions of the session, by identifying particular aspect/s of the session which were
197 obvious to either of the pair, (ii) the area of practice to which this aspect/s related to (process,
198 tasks, counseling skills, strategies, emotions), (iii) exploration and reflection on this area of
199 practice, (iv) consideration of alternative strategies, and (v) identification of key learning
200 areas. A list of guided prompts compiled by the group and by drawing on literature was also
201 available as a reference if required by the pair, to facilitate reflection and encourage self-
202 awareness (See Appendix) (Osmond and Darlington 2005). The questions were not designed
203 to be utilised in a linear or systematic way. This is because the group wished for a balance of
204 a focussed discussion without too many sidetracks, but also flexibility such that the post-
205 observation feedback evolved naturally.

206

207 **Results (Part I)**208 *Group development of the PEERS model*

209 The outcome of group discussions was the **PEer Experiential and Reciprocal Supervision**
 210 (PEERS) model. This was designed so that there was an emphasis on a peer exchange model
 211 of reciprocal observation and feedback, and incorporated the key learning goals identified by
 212 the counseling team. The resulting contract is summarised in Table 1. According to the group
 213 the key features of this model include: being present in the room to experience the session
 214 (e.g. emotion), provision of feedback immediately after the session to minimise recall issues,
 215 provision of a mutually respectful learning experience for both participants, an opportunity to
 216 be able to practice and develop skills for supervising counselors and students in the future,
 217 and an opportunity to maintain and develop clinical skills beyond Genetic Counseling
 218 Certification. Counselor-observer pairs chose the session on the basis of a mutually
 219 convenient time, not on session content or predicted ease or difficulty of the session.
 220 Observers were not given any prior background information about the session, to allow them
 221 to focus without presupposition on the immediate client-counselor interaction. It was also
 222 agreed that client consent to have an observer present would be obtained verbally. This was
 223 requested as follows (or similar): “My colleague would like to observe this session today, as a
 224 way of learning from each other. They will not be involved in the session in any other way.
 225 Would this be ok with you? You are welcome to say if you prefer not.”

226

227 **Table 1.** Peer experiential and reciprocal supervision (PEERS) contract

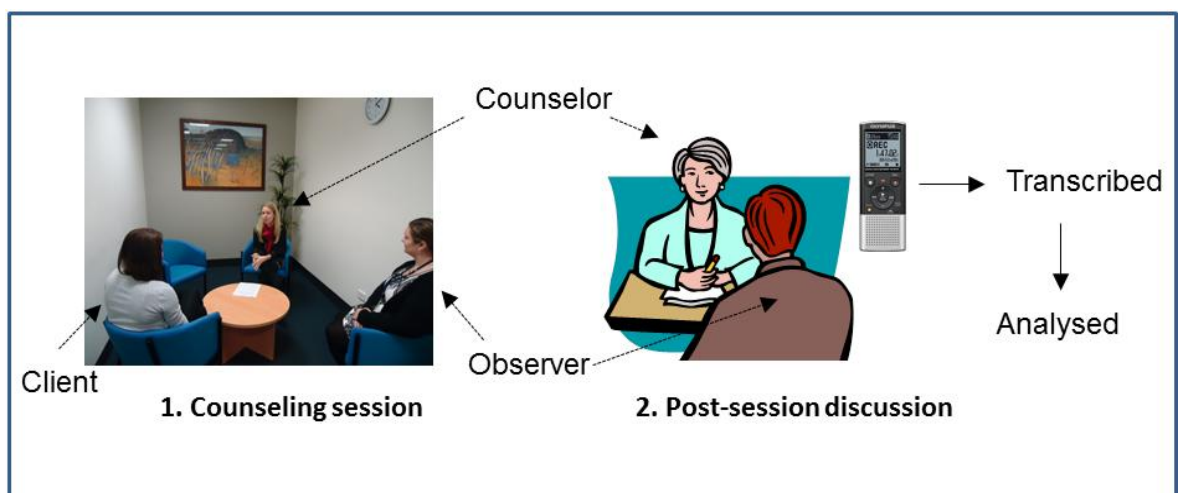
1. *What do we expect from each other during the post-observation reflective discussion process?*

- Two-way mutual learning and collaboration
- Honesty and genuineness
- Openness to being challenged and receiving feedback
- Being prepared to feel vulnerable or uncomfortable
- Acknowledge diversity and alternative ways to practice
- Assist each other to see other possibilities, to challenge firmly held ideas and assumptions

<ul style="list-style-type: none"> • Provide safe atmosphere and holding environment (genuineness, non-judgemental attitudes, warmth) • Accept accountability
<p>2. <i>What are the roles and responsibilities of the observer and counselor?</i></p> <ul style="list-style-type: none"> • Client permission • The observer to observe only (no intervention) • The observer to have no prior information about the session • Both responsible for booking observation sessions and post-observation discussion within set timeframe
<p>3. <i>What are the practical issues?</i></p> <ul style="list-style-type: none"> • Time and availability required • Room set up to optimise learning goals (see Fig. 1) • Each pair will have similar level of experience in years • Feedback reflective discussion up to one hour long to be held within 24 hours and audio-recorded

228

229 The outcome of the group discussion and supervision contract was a reciprocal learning
 230 model in which the observer could be present within the session, and a reflective discussion
 231 would be held as soon as possible after the session (Figure 1).



232

233 **Fig. 1** Outline of the peer experiential and reciprocal supervision (PEERS) model.
 234 The observer is present in the room during the counseling session, but does not
 235 participate in the session. Within 24 hours of the counseling session, the observer and
 236 the counselor who conducted the session meet for a two-way reflective discussion
 237 about the session. Then the roles are reversed and the process repeated.

238 During the preliminary evaluation of the model (see Part II), the discussions were
 239 audio-recorded, transcribed by an independent person, de-identified and analysed for
 240 recurring themes .

241

242 The group discussions also led to development of a list of guide questions and prompts
 243 (Table 2), intended to facilitate learning during the post-session discussion. These were not
 244 intended to be followed strictly, but to be utilised as a more as a flexible tool if needed.

245

246 **Table 2.** Question guide for reflective discussion after the observed counseling session.

Questions for post-session discussion and feedback

1. Initial and immediate impressions of counselor - What was your general sense of the session?
2. Is there anything in particular which immediately occurs to you? Or resonates with you? Why? Thoughts, feelings, behaviors?
3. What area of practice does this have to do with (e.g. process, tasks, counseling skills/strategies, emotions)?
 - How do you think this aspect of the session went for the client? Why? Where does this knowledge come from?
 - How do you think this aspect of the session went for you? Why? Where does this knowledge come from?
 - What thoughts/emotions/behaviors do you think the client brought to this aspect of the session? Why? What is this

assessment based on?

- What skills/thoughts/emotions/behaviors do you think you brought to the session? Why? What is this based on? Where did you generate this idea from? If you chose particular skill/strategy, what was the intention behind this?
- What thought/feelings are you left with? Where do you think these feelings come from? Why?
- What thoughts/feelings do you think the client was left with? Where do you think these come from? Why?

4. Alternative strategies?

- Is there anything you would have done differently or try differently next time? Why? Why not?
- What do you think would have happened if you had done?
- Are there any additional skills / training you feel may be beneficial to you?

5. Initial and immediate impressions of observer - What was your general sense of the session?

- Is there anything else that immediately occurs to you or resonates with you?
- Explore as above if not already covered.

6. Summary points for project for both counselor and observer

- Was there an area of learning? If so, what was this?
- What went well? Which effective strategies do you want to keep?
- What do you want to change about your practice?

247

248

249

250

251

252 **Part II. Preliminary evaluation of how genetic counselors use and experience a peer**
253 **observation model of supervision**

254 *Research questions,*

255 The specific research questions for the evaluation component of this project are: (i) How do
256 genetic counselors use/experience a peer observation model of supervision? (ii) What are the
257 learning outcomes? (iii) How does this model of supervision fit within reflective genetic
258 counseling practice?

259

260 **Methods (Part II)**

261 *Theoretical framework*

262 We chose social constructivism as the theoretical framework (Vygotsky 1978). Social
263 constructivism has been previously applied to the fields of teaching (see Palincsar (1998) for
264 review) and also to counseling and psychology practice (Cottone 2007; Gergen 1985;
265 Neimeyer and Mahoney 1995). Both the development of the peer observation model, and the
266 preliminary evaluation were conducted with a social constructivism viewpoint, which
267 assumes that meaning is constructed through social interaction and alternative viewpoints,
268 linked with the language and group culture of the setting for the interactions (Gergen 1985);
269 see Cottone (2007) for review). Social constructivism assumes that reality is ever changing,
270 and that knowledge is socially constructed through communities of shared understanding.
271 The aim was for counselors to learn firstly through observing each other and secondly
272 through the interaction of giving and receiving feedback in a socially acceptable way (ie. with
273 interpersonal sensitivity, active empathic listening and a willingness to be challenged).
274 Therefore using a social constructivism framework, we did not seek an objective right or
275 wrong way to conduct a counseling session, but acknowledged subjectiveness for counselor,
276 observer, client, and researchers, and valued the potential for learning from alternative
277 perspectives and social interaction. The findings were co-constructed between participating
278 counselors and researchers.

279

280 *Data collection and analysis*

281 For the purpose of the preliminary evaluation of the model, there were two data sets:
282 (i) transcripts of the post-session discussions, and (ii) responses to an anonymous online
283 survey eliciting direct opinions about involvement with the PEERS model.

284 Recordings of post-session feedback discussions were transcribed verbatim and all names
285 replaced with pseudonyms. Pseudonyms do not necessarily reflect gender of participants.
286 Participants were given an opportunity to remove any identifying text from the transcripts. To
287 avoid potential bias, the counselor undertaking the analysis did not include his/her own
288 recorded post-session discussions in the analysis. Transcripts were analysed using a constant
289 comparative method of thematic analysis (Braun and Clarke 2006). The coding procedure
290 involved development of many codes to classify the content of each transcript, and
291 subsequent organisation of these into broader categories. The coding scheme was refined by
292 comparison across transcripts, forming a hierarchical list including information about the
293 frequency that each item was coded and across how many transcripts. The overarching
294 themes were induced from the categories and codes by searching for linking patterns and
295 concepts. The coding scheme was verified by a second researcher reading the transcripts.
296 Verbatim quotes to substantiate each theme are presented, and for ease of reading [...] indicates that text has been removed without altering the original meaning.

298 In the second part of the evaluation, participating counselors completed an anonymous survey
299 online (using SurveyMonkey (www.surveymonkey.com)) to provide further unbiased insight
300 into their experiences and opinions about the process, one to two months after the post-
301 session discussions. The questions asked were:

- 302 • Would you like to repeat the peer supervision observer/counselor experience?
- 303 • Is your answer above dependent on any particular factors?
- 304 • How many more times would you like to do this (none, only one more time, once-
305 yearly, twice-yearly, quarterly, monthly)?
- 306 • What were the benefits and/or drawbacks of the process?
- 307 • How did you feel about giving feedback as an observer?
- 308 • How did you feel about receiving feedback as a counselor?
- 309 • Did you feel able to challenge each other?
- 310 • How has this experience impacted on your working relationship or dynamics with
311 your peer supervision partner? Have there been any changes?
- 312 • Any further comments on the peer supervision model and your experience of it?

313 Comments sections were included with each question. The survey was completed by all six
 314 participants and each participant answered every question. The survey data were analysed
 315 using content analysis (Liamputtong 2009). Data are presented to further support the
 316 thematic analysis described above, and to enable direct questioning about participant opinions
 317 of the process. Data are presented as selected quotes with counselor numbers C1-C6 that
 318 cannot be matched to the pseudonyms used in the post-session discussions because the survey
 319 responses were anonymous.

320

321 **Results (Part II)**

322 *Analysis of the counselors' experiences of the peer supervision model: Themes arising from*
 323 *discussion/feedback sessions*

324 The main themes focussed on giving and receiving feedback, as well as the learning
 325 outcomes in both the observer and observed roles. We have referred to the observing
 326 counselor as the “observer” and the observed counselor conducting the session simply as the
 327 “counsellor” throughout. These themes were (i) voicing of doubts or internal questions that
 328 occurred during session for the counselor conducting the session, (ii) positive feedback and
 329 validation from observer, (iii) offering of alternative views, insights and strategies by
 330 observer, and (iv) evidence of learning for both observer and counselor.

331

332 *Theme (i) “I wasn’t sure if I...”: voicing of doubts or internal questions arising that occurred*
 333 *during the session for the counselor*

334 The discussions between observer and counselor following the sessions were used as an
 335 opportunity to voice doubts or internal questions that had arisen for the counselor conducting
 336 the session. It seemed that counselors valued this unique situation of being able to reflect and
 337 discuss with someone who was present in the room.

338 “I always wonder when we haven’t been able to give a very definitive answer and
 339 we’re still going to do some more follow up and investigation, if what she [the client]
 340 was after was [...] met and so I’m left with that feeling, did I meet her needs? Did she
 341 get the information that she wanted to get?” (Kelly, Counselor)

342 “I think what I struggled with is that the cues were there and [...] ok I’ve gone straight
 343 down the line and it’s like boom ok and then it’s – it was such a delicate – [...] I felt
 344 like going straight down the line and saying, ‘How are you coping?’, like doing the
 345 direct typical counseling [...] wasn’t working but I didn’t know how to tease it out in a
 346 gentle way [...]. Do you know what I mean?” (Alex, Counselor)

347

348 Counselors often asked the observer directly for their thoughts or approach to the perceived
 349 problem.

350 “I don’t know – I felt like I needed to give her more than that, I couldn’t – she’s
 351 saying, you know, ‘My mum might be still here [...],’ so that was really hard for her. I
 352 don’t know what else I could have given her. Any ideas?” (Kim, Counselor)

353

354 *Theme (ii) “I really liked that”: Positive feedback and validation from the observer*

355 Validation and support was noted in all transcripts.

356 “I could see you attending and connecting with her, in fact even just the degree of her
 357 emotions and [...] it was really powerful when [...] you said ‘What I’m hearing from
 358 you is that you dream – children are important to you’ and the language and the tone –
 359 everything matched, I think, how important it was.” (Chris, Observer)

360 “One thing on that, I liked how you would say each time you went out of the room
 361 why you were doing that and so that she didn’t worry, “What have they got me in for,
 362 why have they had to go out?” [...] That was quite sensitive and thoughtful.” (Leigh,
 363 Observer)

364 Sometimes the positive feedback also described something the observer had learned.

365 “You gave him lots of time to [talk]. I actually realized it was a really good approach I
 366 thought. There were a couple of times, if it was me I kind of might have filled that gap
 367 by saying something. It was quite a good strategy for getting thoughts out of him.”
 368 (Sam, Observer)

369 At other times this positive feedback took the form of mutual validation between observer
 370 and counselor in comparing their approaches to part of a session.

371 “But I would’ve given the same information, because you’ve got to go there.” (Jamie,
372 Observer)

373 “I think the writing down is a good strategy, just to break it up, isn’t it? [...] I thought
374 that also shows [...] – things someone might put down [on paper] makes me feel like
375 it’s important. I don’t know what you think?” (Chris, Observer). “Yes, no I’m the
376 same.” (Kim, Counselor)

377

378 *Theme (iii) “I wonder whether...”: offering of alternative views, insights and strategies by*
379 *observer*

380 Observers offered alternative views or strategies they might have used in an indirect way,
381 often softening the impact by including something that the counselor did well.

382 “I could see her [the client] getting a little bit – maybe for the lack of a better word
383 maybe – agitated that you were perhaps prying for a deeper response [...] I think it was
384 very gentle prying, very gentle, yeah, gentle style of trying to get information and just
385 saying that that information’s very useful and thanking her for that was a big moment
386 in building rapport as well, so that – I thought that was really quite good.” (Shannon,
387 Observer) “Ok, and I probably wouldn’t have picked up on that” (Morgan,
388 Counselor)

389

390 Another way that seemed to serve to “soften’ the impact of feedback and avoid direct
391 criticism was the observer’s use of ‘we’ instead of ‘you’.

392

393 “I guess one thing also that when we were talking about the risk assessment and
394 saying that she was in a high risk, I wonder if she still had that percentage figure in
395 her head. And whether we needed to – [...] low/moderate/high usually covers giving
396 people an idea of what their risk is, but I just wondered whether she still had such
397 high percentages in her head that even some of our very, very high risk carriers aren’t
398 at that high risk.” (Leigh, Observer)

399

400 *Theme (iv) “That’s a real thing for me to take away and think about”: evidence of learning*
401 *by both observer and counselor*

402 Observed counselors reported achieving learning outcomes in the areas of process,
403 client/counselor relationship, skills and strategies and emotions. Alternative approaches in
404 these areas were often contemplated in the post-session discussion. For example, Kelly
405 considered the task of providing risk information to a client and reflected on alternative
406 strategies to maximising the relevance or effectiveness:

407 “Perhaps just thinking more about the way I deliver information as well, so, as you
408 said, maybe giving a bit more of [...] a realistic figure of what the actual risk was and –
409 just thinking really about the way that I give information and giving it in more than
410 one way.” (Kelly, Counselor)

411 Learning in regard to the process of the clinic and the session also occurred:

412 “It is interesting, now reflecting on it, that that one little thing of the doctors having
413 not made a call on the testing [in the pre-clinic meeting], how much it changed the
414 session and the process of the session.” (Shannon, Counselor)

415 Increased confidence about being observed, and also affirmation of effective use of existing
416 strategies was a learning outcome for most of the counselors:

417 “I’ve learnt that some of my bits that I felt were ‘clunky,’ to you they didn’t appear
418 clunky, so that’s nice. [...] it’s nice to have it confirmed that I am an attentive listener
419 [...]– and as you say, responding to things that need to be responded to perhaps in the
420 here and now[...] It’s good to learn that.” (Kim, Counselor)

421 Observers had the opportunity to learn about their own emotional responses:

422 “I think I realised about myself that I – I actually could easily cry when someone
423 does, [...]– I guess that’s what I took away from it [...] about genuineness coming
424 through.” (Chris, Observer)

425

426 Learning for observers was often based on a new awareness of strengths of other counseling
427 strategies and how/when to use these. For example, observers frequently noted new strategies
428 and skills they would like to try in their own sessions:

429 “The checking in really was a great highlight for me and the – your use of writing
 430 down ‘cos I tend not to do that. I just wasn’t trained like that but I really could see that
 431 was powerful, especially for him.” (Jamie, Observer)

432 Visual learning occurred for both counselor and observer.

433 “I think – yeah to pay more attention to the body language. I think I focus a lot on
 434 people’s faces and not on how they’re sitting. [...] maybe that’s another area of non-
 435 verbal cues that I could take more notice of.” (Morgan, Counselor)

436 “I noticed – what really jumped out is – [...] I noticed she kept putting her hands down
 437 in her boots, trying to hold herself together and it was almost I could see, like the tears
 438 were going to come at some stage. I could see – like the anxiety was just, was there
 439 and I think it needed to surface for her to be able to move on.” (Chris, Observer)

440 “I don’t know if you know this, I was – it was really interesting to me to see it. So you
 441 had the pedigree laid out and – and when you said that, ‘Oh let’s come full circle,’
 442 you actually physically put your file to cover up the rest of the family and just him
 443 was showing.” (Jamie, Observer). “I didn’t know I did that!” (Alex, Counselor)

444

445 *Experiences and opinions of GCs about the peer supervision model (survey responses)*

446 The responses from the anonymous survey showed that all of the counselors identified
 447 benefits related to learning and professional development. All were keen to repeat the
 448 supervision process, and unanimously chose twice-yearly as the preferred frequency. All of
 449 the participants stated that time commitment was the main drawback. No specific issues with
 450 power differences were reported, however one participant reflected on the importance of re-
 451 establishing a mutually agreed contract as an important factor if the process is to be repeated.

452

453 “For me, part of the project's success was the fact that we had meetings beforehand
 454 and all agreed upon ‘the contract’ of working together. If this was done with a
 455 different group of counselors (or indeed with the same group again), I feel it would be
 456 necessary to do some preliminary work together to promote trust and openness so that
 457 all involved view the reflective phase as a safe and non-judgemental space.” C2

458

459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491

Two of six participants simply said they felt able to challenge each other. Four of six participants thought that, although they felt able to give feedback and challenge the other person, more practice or training might help with how to provide constructive comments more effectively. All participants enjoyed providing positive feedback, but several worried that they may have “softened” or “watered down” negative feedback too much so that it might have become ineffective.

“I had to think about what feedback to give in advance and it would be good to get more experience to give constructive feedback. I think I will become more comfortable if we do more sessions too. The [discussion] guide definitely helped.” C3

“This was difficult to provide some negative feedback, however I found that both my observer and I found ways to provide some feedback in a constructive way. Perhaps I restrained from providing too much constructive feedback. It was great however to be able to feedback positive comments.” C1

Participants were sometimes nervous about receiving both positive and negative feedback from peers, but feedback was appreciated in terms of increasing learning.

“I really valued receiving feedback that was so immediate and from someone ‘in the room’: it felt more relevant, more believable almost. I appreciated being challenged in ways to think and work differently. Interestingly, I was less comfortable in receiving positive feedback.” C2

“I was nervous about what my peer had to say. In the end it wasn't that scary to hear what my peer thought and questions or alternative views they had.” C6

“I even feel embarrassed sometimes when receiving complements! The criticism I received did give me ideas about how to improve my practice, but was delivered very carefully, and so it was not difficult to hear” C4

492 None of the participants reported any negative changes in co-worker relationships, and four
493 of six participants saw benefits in workplace relationships.

494

495 "I haven't noticed any changes in the dynamic with my colleague. If anything it has
496 made me appreciate different counseling styles and that it really is ok not to do a
497 perfect session and be comfortable with acknowledging improvements." C3

498

499 "I feel closer to my peer as we went through this nerve-wracking process together and
500 then so relieved together at the end of it. So doing it together meant we shared another
501 part of ourselves and I think helped our working relationship." C6

502

503 Participants reported learning from each other, and commented that the opportunity to discuss
504 the finer details of a session with an observer who had been present in the room provided
505 benefits that were not achieved through other models of supervision.

506

507 "I learned things that I haven't learned through a leader-led group or one on one
508 counseling or informal peer supervision. These were to do with the process of the
509 session and all the little/subtle things that were happening in the room for the client
510 and for me." C6

511

512 "Benefits of the project were 1) learning from each other, 2) enhancing team
513 cohesiveness, 3) gained appreciation and respect for other counselor's strengths and
514 skills, 4) shining a light on my own competencies, 5) shining a light on ways I can
515 enhance and/or improve my patient care." C2

516

517

518

519 Discussion

520 In Victoria, most counselors participate in regular leader-led group supervision,
521 multidisciplinary genetics supervision, and individual supervision with a more senior (fully
522 certified) counselor. The PEERS model outlined in this paper utilises direct observation as a
523 learning tool and combines aspects of individual supervision, leader-led and peer group
524 supervision which have been described previously in the context of genetic counseling
525 (Clarke et al. 2007; Kennedy 2000; Phillips et al. 2012). The PEERS model was intentionally
526 designed to enhance the positive features of these traditional three models, while overcoming
527 some of the potential challenges described in the literature (Clarke et al. 2007; Kennedy
528 2000; Middleton et al. 2007). Kennedy (2000) previously proposed a leader-led model most
529 suitable for the genetic counseling setting, because of the presence of a facilitator or
530 gatekeeper. In the PEERS model developed here, the process of contract setting and the
531 guided questionnaire were designed so that the gatekeeping functions would be attended to,
532 ensuring that the supervision session remained focussed. The detailed process of setting the
533 supervision contract was designed to overcome potential drawbacks of peer group
534 supervision such as: group conflict, unequal opportunity/comfort with speaking in the group
535 setting, and lack of containment (Clarke et al. 2007; Counselman and Gumpert 1993;
536 Kennedy 2000). The resulting transcripts and themes suggested that the question guide (Table
537 2) helped focus the feedback/supervision experience whilst maintaining flexibility in
538 discussion topics between counselor and observer. Similarly, evaluation of a dual model of
539 team and individual supervision found that trust, flexibility and learning from colleagues
540 were perceived as important factors (Phillips et al. 2012).

541 The PEERS model, informed by theoretical literature and current genetic counseling practice,
542 involves a reciprocal reflective process rather than an evaluative format. Participants
543 involvement in the planning stages, especially development of the contract and the opt-in
544 method, is congruent with the principle of choosing to be at supervision- the first and most
545 fundamental component for the supervisees (Carroll and Gilbert 2005). This model of
546 supervision fits within reflective genetic counseling practice by allowing dedicated time for
547 mutual discussion, and by facilitating learning outcomes that enhance self-awareness in both
548 the observer and counselor (Carroll and Gilbert 2005; McCarthy Veach et al. 2003; Runyon
549 et al. 2010). It is consistent with theoretical supervision frameworks, as reviewed by the UK
550 working group (Clarke et al. 2007), such as the three-part model of Proctor (1986). Proctor's
551 model involves (i) learning and skills development, (ii) managing emotions and stress, and

552 (iii) maintaining accountability and standards of practice, which can all be attended to
553 through the PEERS model.

554 One of the unique aspects of the PEERS model compared with other models is the presence
555 of an observer in the room, thereby allowing the counselor to learn in a format not biased
556 toward their own recall and interpretation (such as when reporting back to an external
557 supervisor). Counselors learn through their own reflective process but also from the equally
558 valid perspective of the observer. The short time interval between the session and the
559 feedback/supervision meeting was seen by participants as important in avoiding loss of
560 important details. This concurs with findings from other studies (Goldsmith et al. 2011). This
561 minimises the biases with time as individuals' inner narratives interpret and re-interpret the
562 experience of the session (Kessler 2007). This format provides the opportunity to reflect on
563 macro and micro skills used in the session with the benefits of immediate discussion allowing
564 highly detailed recall and analysis. Finally, another novel aspect is that the *observing*
565 counselors as well as the *observed* counselors reported various learning outcomes, resulting
566 from experiential and visual learning during the session. Overall, counselors appreciated the
567 opportunity for detailed and immediate discussion of a session - to voice questions or doubts
568 about their own strategies or responses, discuss alternative viewpoints or approaches, and to
569 learn visually and experientially. They also reported increased team cohesiveness due to the
570 peer interaction process.

571 Analysis of the post session discussions and the anonymous survey responses demonstrate the
572 potential value of the PEERS model in professional development. The Experiential Learning
573 Cycle (Kolb 1984) is a theoretical explanation of the way in which learning was achieved.
574 The Experiential Learning Cycle involves four steps: Activity, Reflection, Learning, and
575 Application. It views learning as a process whereby ideas are constantly formed and reformed
576 through transforming experience into knowledge (Kolb 1984). In the PEERS model described
577 here, the cycle is followed through the activity of conducting/observing a session, then by
578 reflective discussion, and specific learning for observers and counselors. Counselors often
579 mentioned how they thought they would apply what they had learnt to their future work.
580 Whether the final step of applying the learning to their work occurs, over what period of time,
581 and how much they perceive it to improve their skills, is a topic for further investigation. The
582 cycle becomes more complex as the reflection and learning steps are two-way processes
583 between observer and counselor. Therefore the effectiveness of the social interaction
584 becomes integral, including the issue of discomfort giving and receiving feedback.

585 Positive feedback was noted in all interactions. This may have contributed to the observed
586 counselors' willingness to accept and learn from alternative views or challenging questions
587 from the observer. Immediate positive feedback and validation of effective techniques may
588 be something that does not happen as often in other one-to-one models of supervision, as
589 counselors may tend towards self-reflection focussed on searching for aspects that could be
590 improved. Positive feedback appeared to lead to counselors feeling a sense of affirmation
591 about effective counseling interventions and increased confidence in their abilities, although
592 it was interesting to note that some counselors felt uncomfortable responding to positive
593 feedback. Some of the feedback issues can be understood using Politeness Theory (Brown
594 and Levinson 1987). Politeness Theory is a model for explaining social interactions in terms
595 of face-saving or face-threatening speech patterns or acts, and has previously been discussed
596 for counselor-client interactions in genetic counseling (Benkendorf et al. 2001). There are
597 two aspects to this – “positive face,” referring to maintaining a positive self-image and
598 wanting acceptance by the other person, and “negative face,” referring to a freedom to act
599 that is unencumbered by impositions or directives from others [see Watts (2003) for further
600 discussion of politeness and limitations/variations on these theories]. Potentially “face-
601 threatening acts” to speaker or hearer are inherent in giving/receiving feedback, and include
602 giving advice, suggestions, criticism, disagreement or challenges, or any conversation where
603 one person acquiesces to the opinions of the other (especially where there is a power
604 imbalance). Interestingly, compliments may also be seen as threats to face because the hearer
605 may feel pressured to respond or accept the compliments (Brown and Levinson 1987). In the
606 transcripts here, counselors used a variety of politeness strategies to avoid threats to face.
607 Examples include showing attention and interest in the other person, including their own
608 practice in the suggested approach/criticism (eg. Using “we” instead of “you” in suggesting a
609 different approach), minimising, indirectness, and presenting corrective feedback as a
610 question rather than a directive (Benkendorf et al. 2001).

611 The results indicated a developing awareness and competence around giving feedback which
612 is an important skill for both supervisors and peers. While there was some discomfort evident
613 in providing constructive or challenging feedback to peers, this was not reported to cause any
614 negative impacts on co-worker relationships, and this is similar to previous findings
615 (Goldsmith et al. 2011). Several participants stated increased team cohesiveness as an
616 outcome. While genetic counselors' training and skills may facilitate giving feedback in a
617 sensitive way, several participants expressed concerns about their feedback being too indirect

618 to be useful, and this is also consistent with Politeness Theory (Brown and Levinson 1987).
619 Some additional training could be offered, particularly for those becoming supervisors,
620 regarding the nuances of feedback interactions in cultural and social contexts that may help or
621 hinder effective feedback, and perhaps training in how to employ strategies to overcome
622 these sociocultural reservations. Cushing *et al.* (2011) analysed a feedback model with
623 medical and nursing students and found that training in peer feedback was considered
624 important, and students felt that specific directives to give constructive feedback would
625 overcome reluctance by giving direct permission to constructively criticise. This idea was
626 also reported in a Canadian genetic counseling study, where an evaluative format seemed to
627 “give permission” for corrective feedback, but on the other hand may have increased anxiety
628 about the process (Goldsmith *et al.* 2011).

629 The supervisory relationship is central to successful feedback and supervision (Carroll and
630 Gilbert 2005; Kennedy 2000; Zahm *et al.* 2007). A strained relationship can result in
631 decreased confidence and increased anxiety (Hendrickson *et al.* 2002). This PEERS model
632 emphasised joint exploration and mutual sharing to encourage a successful supervision
633 experience that enabled rich learning. Kennedy (2000) points out that “good supervision
634 requires an atmosphere of safety, created by respect, trust, and acceptance on the part of
635 supervisor and supervisee” (p.381). Similarly, Hendrickson *et al.* (2002) in their analysis of
636 focus group data from genetic counseling students and supervisors regarding live supervision
637 concluded that the supervisory relationship was important in determining positive or negative
638 emotional impacts on genetic counseling students of receiving feedback. The PEERS phase
639 of contract development actively involved the members in choosing and defining the values
640 and atmosphere in which they wished to work. This may have encouraged responsibility and
641 accountability to the agreed values. In turn, this may have facilitated the outcome of
642 increased collegiality that some participants noted.

643

644 **Limitations**

645 This study is preliminary only, and was limited to one setting with a small team of genetic
646 counselors. A limitation of the analysis is that there was potential for non-random sampling
647 of sessions. Although the session choice was mainly based on finding a mutually convenient
648 time for counselor and observer, it is possible that counselors may have avoided having an
649 observer present in sessions they thought might be very difficult. Repeating the process with

650 a variety of counseling sessions will be important. Enthusiasm of participating genetic
651 counselors regarding the model may have also influenced the positive outcomes, and this is
652 could be a potential limitation when considering its use in other teams.

653 Further investigations would be beneficial, such as trialling the PEERS model in other
654 genetic counseling teams, rotating peer observation partnerships within teams, and assessing
655 whether learning outcomes are applied in practice. Evaluation of the model in a similar
656 method to that of Phillips et al. (2012) using a questionnaire to look at change as a result of
657 the supervision and specific aspects contributing to change or learning outcomes could be
658 applied. The potential drawbacks of this model include the time commitment, receiving
659 feedback from one viewpoint only, the potential for increased anxiety/fear of negative
660 feedback, or reluctance to provide constructive feedback leading to collusion or an ineffective
661 learning environment (Carroll and Gilbert 2005). Some of these drawbacks can be managed
662 through pre-training about giving/receiving feedback, and by careful mutual agreement on a
663 contract for the peer roles and relationship.

664

665 **Conclusion**

666 The views of participating counselors regarding this peer experiential and reciprocal feedback
667 supervision (PEERS) model suggested that it was a successful way to meet the definition of
668 supervision as outlined by Kennedy (2000) in creating “a safe, respectful, trusting and
669 accepting space in which to reduce anxiety, ask questions, experiment with ideas, increase
670 self-awareness, and gain new perspectives on one’s counseling style and technique”
671 (Kennedy 2000, p. 382). Participating in a variety of supervision formats overcomes the
672 limitations of any one model (Middleton et al. 2007; Phillips et al. 2012). This PEERS model
673 of “live” supervision provided benefits through experiential learning and immediate two-way
674 reflection in a non-judgemental setting, as well as increased awareness of giving and
675 receiving feedback. The model also allows counselors to build on diversity and individuality
676 in counseling style. In her paper, Kennedy (2000) proposes re-defining supervision in line
677 with the mental health model of mentoring or facilitating rather than as one’s work being
678 directed by a person in authority. From this perspective, counselors are the supervisors
679 “acting as consultants, facilitators, and mentors to their peers” (Kennedy 2000, p.381) – this
680 is the aim of this peer live supervision project.

681 The model has general applicability and adaptability for other genetic counseling teams, as a
 682 modified contract could be mutually agreed at the outset, depending on the needs and
 683 cohesiveness of each team. Setting a contract of trust and confidentiality and establishing the
 684 goal of a reflective two-way learning process (rather than an evaluative purpose) will be
 685 important. Some pre-training or discussion around the potential issues in giving and receiving
 686 feedback could be beneficial in reducing discomfort. For example, principles of good
 687 feedback described by various authors (Carroll and Gilbert 2005; Nichol and Macfarlane-
 688 Dick 2006; Osmond and Darlington 2005) could be reviewed. Awareness of learning styles,
 689 such as activist, reflector, theorist, and pragmatist styles would also reduce potential
 690 discomfort (Honey and Mumford 2007).

691 Future research such as a discourse analysis of post-session discussions would shed further
 692 light on interactions where counselors give and receive feedback from their peers. This would
 693 enable a more detailed analysis of for example, how compliments and suggestions for
 694 practice are effectively given and received, how to deal with self-criticism and respond to
 695 emotional cues from peers. Identifying points of discomfort, and evaluating the overall
 696 stressfulness and usefulness of this type of peer observation will highlight areas where
 697 improved skills may facilitate more effective peer supervision and could enhance reflective
 698 practice and improve learning outcomes.

699

700 **Acknowledgments**

701 The authors are very grateful to Flora Pearce (Genetic Health Services Victoria) for helpful
 702 discussions, ideas and advice. We also thank Prof. Geoff Lindeman and Prof. Ingrid Winship
 703 for their support and advice.

704

705

706 **Appendix**

Examples of prompts for critical reflection and feedback session
Ask - Why? Where does this knowledge/feeling come from? What is the evidence?

Consider both counselor and client's perspective.

Use descriptive words / 'Name' appropriately (e.g. cohesive, flowing, mismatch, client-centered)

Process / Working relationship

- How would you describe the working relationship between client and counselor?
- How did co-counseling go?
- How did the process of the session flow?
- What do you think was the impact of genetic information provided?
- What do you think was happening between you and your client when...?

Strategies / Skills

- What counseling interventions were used? Why did you use those?
- What skills / strategies did you use? Why?
- What was the impact on the client? – on yourself? Did you think it was successful? How do you know this?

Emotions

- How do you think the client felt?
- How did you feel? Why did you feel this way? Where is this feeling coming from? Whose feeling is it?
- What feelings did you think your client/you brought to the session?
- Where did you feel most or least uncomfortable?
- What were you thinking/feeling at the point in the session when

Tasks

- How was rapport built?

- How was client agenda established? Were client expectations ascertained?
- Was the client agenda met? Were client expectations met?
- Was the appropriate information provided? – at the appropriate level?
- Were psychosocial enquiries addressed?
- Were psychosocial issues explored adequately?
- What psychosocial aspects were not addressed?
- Was consent informed? Explain how you enabled informed consent.
- How did the appointment unfold?
- Did you advocate for the client? What made you think this was necessary?
- Were there any set-backs to achieve tasks?

Alternatives

- Explore together, “What if?” questions
- What if you had used this word rather than ...?
- What if you had explored this client response at that time?
- If something didn't go how you intended, what had you wished would have happened?
- Is there anything you would have done differently? Why?
- What do you think would have happened if you had done this....?
- Was there anything that surprised you? Why?

707

708

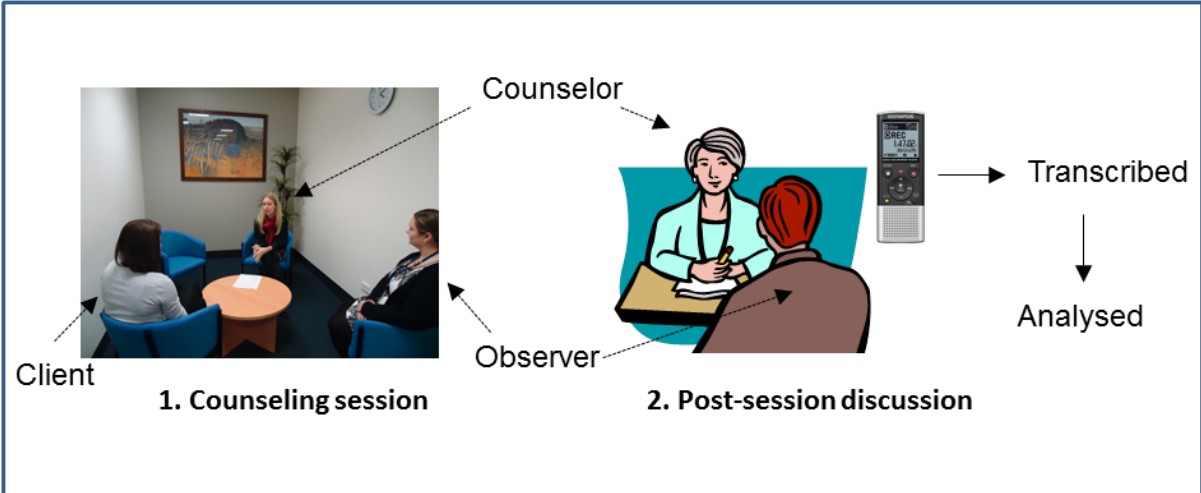
709

710 **References**

- 711 Benkendorf, J. L., Prince, M. B., Rose, M. A., De Fina, A., & Hamilton, H. E. (2001). Does
712 indirect speech promote nondirective genetic counseling? Results of a sociolinguistic
713 investigation. *Am J Med Genet*, *106*(3), 199-207.
- 714 Bond, M., & Holland, S. (1998). *Skills of clinical supervision for nurses*. Buckingham: Open
715 University Press.
- 716 Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qual Research*
717 *Psychol*, *3*(2), 77-101.
- 718 Brown, P., & Levinson, S. (1987). Universals in language use: Politeness phenomena. In E.
719 N. Goody (Ed.), *Questions and politeness* (pp. 56-289). Cambridge: Cambridge
720 University Press.
- 721 Carroll, M., & Gilbert, M. C. (2005). *On being a supervisee: Creating learning partnerships*.
722 London: Vukani Publishing.
- 723 Clarke, A., Middleton, A., Cowley, L., Guilbert, P., Macleod, R., Clarke, A., et al. (2007).
724 Report from the UK and Eire Association of Genetic Nurses and Counsellors (AGNC)
725 supervision working group on genetic counselling supervision. *J Genet Couns*, *16*(2),
726 127-142.
- 727 Cleak, H. M., & Wilson, J. (2007). *Making the most of field placement*. South Melbourne:
728 Thomson Learning Australia.
- 729 Cottone, R. R. (2007). Paradigms of counseling and psychotherapy, revisited: Is social
730 constructivism a paradigm? *J Mental Health Couns*, *29*(3), 189-203.
- 731 Counselman, E. F., & Gumpert, P. (1993). Psychotherapy supervision in small leader-led
732 groups. *Group*, *17*, 25-32.
- 733 Cushing, A., Abbott, S., Lothian, D., Hall, A., & Westwood, O. M. (2011). Peer feedback as
734 an aid to learning - what do we want? Feedback. When do we want it? Now! *Med*
735 *Teach*, *33*(2), e105-e112.
- 736 Gaff, C. L., & Bylund, C. L. (2010). *Family communication about genetics: Theory and*
737 *practice*. Oxford: Oxford University Press.
- 738 Gergen, K. (1985). The social constructionist movement in modern psychology. *Amer*
739 *Psychologist*, *40*(2), 266-275.
- 740 Goldsmith, C., Honeywell, C., & Mettler, G. (2011). Peer Observed Interaction and
741 Structured Evaluation (POISE): a Canadian experience with peer supervision for
742 genetic counselors. *J Genet Couns*, *20*(2), 204-214.
- 743 Harms, L. (2007). *Working with people: communication skills for reflective practice*.
744 Melbourne: Oxford University Press.
- 745 Hendrickson, S. M., McCarthy Veach, P., & LeRoy, B. (2002). A qualitative investigation of
746 student and supervisor perceptions of live supervision in genetic counseling. *J Genet*
747 *Couns*, *11*, 25-49.
- 748 HGSA. (2011). *Human Genetics Society of Australiasia, Guidelines for Training and*
749 *Certification in Genetic Counseling*. Document Number 2010 GL/01.
- 750 Honey, P., & Mumford, A. (2007). *The manual of learning styles*. Maidenhead: Peter Honey.
- 751 Kennedy, A. L. (2000). Supervision for practicing genetic counselors: An overview of
752 models. *J Genet Couns*, *9*(5), 379-390.
- 753 Kessler, S. (2007). Closing thoughts on supervision. *J Genet Couns*, *9*(5), 431-434.
- 754 Kolb, D. A. (1984). *Experiential learning: Experience as a source of learning and*
755 *development* (5th ed.). New Jersey: Prentice-Hall Inc.
- 756 Liamputtong, P. (2009). *Qualitative research methods* (3rd ed.). Melbourne: Oxford
757 University Press.

- 758 McCarthy Veach, P., LeRoy, B. S., & Bartels, D. M. (2003). *Facilitating the genetic*
 759 *counseling process: A practice manual*. New York, NY: Springer-Verlag.
- 760 Middleton, A., Wiles, V., Kershaw, A., Everest, S., Downing, S., Burton, H., et al. (2007).
 761 Reflections on the experience of counseling supervision by a team of genetic
 762 counselors from the UK. *J Genet Couns*, *16*(2), 143-155.
- 763 Nichol, D., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning:
 764 A model and seven principles of good feedback practice. *Studies Higher Educ*, *31*(2),
 765 199-218.
- 766 Osmond, J., & Darlington, Y. (2005). Reflective analysis: techniques for facilitating
 767 reflection. *Austr Social Work*, *58*(1), 3-14.
- 768 Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. *Annu Rev*
 769 *Psychol*, *49*, 345-375.
- 770 Phillips, A., Mannion, G., & Birch, J. (2012) Crafting practice through consultative
 771 supervision. *Healthcare Couns Psychotherapy* *12*(2), 30-33.
- 772 Proctor, B. (1986). Supervision: A co-operative exercise n accountability. In M. Markem &
 773 M. Payne (Eds.), *Enabling and ensuring - supervision in practice* (pp. 21-34).
 774 Leicester: National Youth Bureau, Council for Training in Youth and Community
 775 Work.
- 776 Runyon, M., Zahm, K. W., Veach, P. M., Macfarlane, I. M., & Leroy, B. S. (2010). What do
 777 genetic counselors learn on the job? A qualitative assessment of professional
 778 development outcomes. *J Genet Couns*, *19*(4), 371-386.
- 779 Sahhar, M. A., Young, M. A., Sheffield, L. J., & Aitken, M. (2005). Educating genetic
 780 counselors in Australia: developing an international perspective. *J Genet Couns*,
 781 *14*(4), 283-294.
- 782 Vygotsky, L. (1978). *Mind in society*. London: Harvard University Press.
- 783 Watts, R. J. (2003). *Politeness*. Cambridge: Cambridge University Press.
- 784 Weil, J. (2000). *Psychosocial genetic counseling*. New York: Oxford University Press.
- 785 Zahm, K. W., McCarthy Veach, P., & Leroy, B. S. (2007). An investigation of genetic
 786 counselor experiences in peer group supervision. *J Genet Couns*, *17*(3), 220-233.
 787
 788
 789

790



791



Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:

Sexton, A; Hodgkin, L; Bogwitz, M; Bylstra, Y; Mann, K; Taylor, J; Hodgson, J; Sahhar, M; Kentwell, M

Title:

A Model for Peer Experiential and Reciprocal Supervision (PEERS) for Genetic Counselors: Development and Preliminary Evaluation Within Clinical Practice

Date:

2013-04-01

Citation:

Sexton, A; Hodgkin, L; Bogwitz, M; Bylstra, Y; Mann, K; Taylor, J; Hodgson, J; Sahhar, M; Kentwell, M, A Model for Peer Experiential and Reciprocal Supervision (PEERS) for Genetic Counselors: Development and Preliminary Evaluation Within Clinical Practice, JOURNAL OF GENETIC COUNSELING, 2013, 22 (2), pp. 175 - 187

Persistent Link:

<http://hdl.handle.net/11343/220449>

File Description:

Accepted version