Training Problem Gambling Counsellors in *Congruence Couple Therapy*: Evaluation of Training Outcomes

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ABSTRACT *Congruence Couple Therapy (CCT) is an integrative, humanistic, systemic model for problem gambling treatment. This study evaluates the efficacy of CCT training in imparting key concepts, skills and values of CCT to a sample of problem gambling counsellors (N = 21) from 13 Ontario problem gambling treatment programmes. CCT training comprised of a 4-day residential workshop followed by 12 weeks of CCT application to couples supported by teleconference consultation. Two cycles of training were conducted. The evaluations were driven by two controlled designs using quantitative measures complemented by qualitative data. Triangulated mixed methods findings indicate that counsellors increased significantly their knowledge of CCT concepts, values and skills from both training cycles. Trainee satisfaction was highly positive. Further studies on CCT and CCT training are recommended in light of these results.*

Introduction

Development of evidence-based treatment is a movement in health and psychosocial interventions (Davidson et al., 2003; Swinkels et al., 2002) and a recognized research priority in the problem gambling field (Ladouceur and Shaffer, 2005). Among approaches used for problem gambling treatment, cognitive-behavioural therapy for gamblers has received the best empirical support (Oakley-Brown et al., 2004). However, an expansion of approaches to problem gambling treatment, and in particular, couple treatment is needed (Nathan, 2005; O'Connor et al., 2000). A recent review of the literature confirms the clear gap in couple and family-focused treatment for problem gamblers (Kalischuk et al., 2006).

Developing evidence-based treatment requires an arduous programme of research spanning many years that eventually leads to a model's validation with randomized controlled clinical trials (Gotham, 2004; Miller et al., 2006; Najavits, 2003). The index model needs specificity in its conceptual framework and interventions to allow others to replicate its implementation. Prelude to client outcome studies, training counsellors to learn the requisite concepts and skills to ensure their fidelity and adherence to the model tested is a critical but often overlooked and unreported stage in the development of evidence-based treatment (Rounsaville and Carroll, 2001; Shaffer, 2007; Shaffer and

Costikyan, 2002).

Conspicuously absent in psycho-social treatment studies in addictions is the 'science of treatment training', that is, what constitutes training, how training outcomes are evaluated, and how training outcomes are linked to client outcomes (Shaffer and Costikyan, 2002). Admittedly, evaluation of training and supervision effectiveness has been a daunting challenge to researchers and trainers in the psychotherapy, substance abuse, and marriage and family therapy professions (Liddle, 1991; Piper, 2004; Ravitz and Silver, 2004; Walters et al., 2005).

This paper reports the results in training counsellors in a new conjoint intervention, Congruence Couple Therapy (CCT) for pathological gamblers and their spouses. CCT training uniquely combines a 4-day residential, didactic and experiential workshop to introduce the core elements of CCT with a 12-week teleconference-supported and monitored application of the model by trainees with clients at their respective sites. The evaluation utilizes a mixed method, multi-level evaluation framework to fortify its findings. While counsellors' learning outcomes are the main focus of this study, we obtained preliminary indications of the effects of trainees' application of CCT on their clients reported in the companion paper (Lee and Rovers, 2008).

Congruence Couple Therapy

CCT is an integrative, humanistic and systemic model extending and systemizing the work of Virginia Satir, a pioneer in family therapy (Satir et al., 1991) into the twenty first century context. The therapeutic focus of CCT is the person rather than the symptoms. In CCT, a person is conceptualized as a four-dimensional system: (1) intrapsychic; (2) interpersonal; (3) intergenerational; and (4) universal-spiritual (Lee, 2002c; 2008). CCT gains access to the client's 'life-world' initially through the interpersonal dimension which further opens up and makes visible other dimensions for change and integration in the client's system with self and significant others. The core construct of CCT is congruence (Lee, 2002a; 2002b; 2008). Congruence is living with awareness and acknowledgment of the four vital dimensions whose alignment is expected to lead to increased awareness, expanded choice and flexibility, higher self-esteem, better communication, and transcending of adverse impacts of intergenerational family patterns.

CCT's aim broadens beyond abstinence as the desired outcome of treatment by addressing the factors that contribute towards a higher quality of life. The Pathological Gambling Family Systems Framework posits that pathological gambling is the result of a profound existential disconnection (Lee, 2003); CCT is the therapeutic corollary of reconnecting the pathological gambler in the four key life dimensions into congruent living, thus rendering the need for gambling to offset personal and interpersonal distress obsolete (Lee, 2002c, 2003, 2008).

Congruence Couple Therapy Training

The CCT protocol was based on a clinical study previously conducted by the first author

with eight couples in which one partner was a pathological gambler (Lee, 2002c). The preliminary outcomes were encouraging. Based on a natural, systematic progression of interventions, the stages and steps for CCT were developed from this earlier clinical work.

Three areas of CCT were covered in the training: (i) conceptual knowledge; (ii) values; and (iii) skills in six phases of CCT. These three domains of knowledge were taught didactically and experientially within a training culture in which CCT values and practice were modelled and practised. The 4-day residential training workshop consisted of short lectures, videos, demonstrations, role plays, de-briefings and discussions. Following the workshop, trainees applied CCT to one to two pathological gamblers and their spouses while supported by 12 weekly group teleconference consultations with the trainer in groups of four to five trainees. Two trainees unable to recruit suitable couples still attended the teleconferences to benefit from the application phase of training. The trainer (first author) is a Clinical Member and Approved Supervisor of the American Association for Marriage and Family Therapy (Canadian Registry).

The CCT training was approved by the Canadian Addictions Counsellors Certification Federation and the Canadian Problem Gambling Counsellors Certification Board for 40 continuing education hours. The CCT training and evaluation (2004-2006) proceeded with the approval of the University of Ottawa Research Ethics Board.

Method

A mixed methods controlled evaluation was used to determine the efficacy of CCT training in facilitating problem gambling counsellors in learning the key concepts, values and intervention skills of CCT. The classic training evaluation framework developed by Kirkpatrick (1996, 1998) and elaborated by Guskey (1998, 2000) guided the evaluation of five levels of CCT training: (1) trainees' reactions; (2) trainees' learning outcomes; (3) organization support and change; (4) trainees' use of new knowledge and skills; and (5) impact on clients.

In this paper, the authors focus on findings at level 1, trainees' reactions in relation to their learning outcomes and level 2, trainees' learning outcomes in acquiring the core CCT concepts, values and skills.
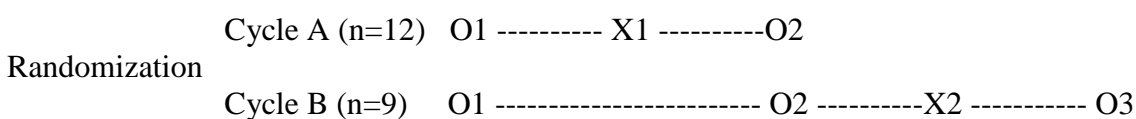
Controlled Evaluation Designs

Two consecutive cycles of training were conducted for two groups of trainees and were evaluated by two controlled designs: cycle 1 by an experimental design; and cycle 2 by a within-subjects waitlisted control design (see Figure 1). Participants (N = 21) were first randomized into an intervention group that received CCT training and a control group that did not (cycle 1). After the completion of cycle 1 training, the control group acted as their own wait-listed control and received identical CCT training in a second cycle of training (cycle 2). Cycle 1 participants' data were collected at baseline (O1) and post-training at (O2). Cycle 2 participants' data were collected at three points: baseline (O1),

wait-listed with no training at (O2), and after training (O3).

Counsellors meeting eligibility criteria were grouped according to their organization of employment. Organizations were stratified into two groups: those with one counsellor and those with two or more counsellors. Stratification of counsellors by organization was performed for two reasons: (1) to avoid mixing counsellors from experimental and control group in the same organization which could confound the results; (2) to maximize a culture of conversation and support for those working in the same organization during their learning of a new treatment model. Data collection and analysis were conducted at the counsellor level.

Figure 1: Study Design: Two Training Cycles

                    Cycle A (n=12)   O1 ---------- X1 ----------O2
Randomization

                    Cycle B (n=9)   O1 ----------------------- O2 ----------X2 ----------- O3

Notes:
O1, O2, O3 = Observation points for data collection
X1 = Cycle 1 CCT Workshop + 12-week application with clients
X2 = Cycle 2 CCT Workshop + 12-week application with clients

Sample

Counsellor trainees for this study were recruited from Ontario-funded gambling treatment services in Canada. Recruitment, training and evaluation of participants proceeded following the approval of the human subjects research by the University of Ottawa Research Ethics Board. To be part of the study, organizations agreed to provide release time and support to counsellors to undertake the training and evaluation procedures. Counsellor inclusion criteria included the following: minimum of one year's experience counselling problem gambling clients, self-assessed solid foundation in individual counselling skills, commitment to the training and evaluation process, and self-assessed stable psychological condition for experiential workshop participation. Of all inquiries to participate in the training, 87% met eligibility criteria. Of the inquirers, 75% were counsellors and 25% were administrators, and 50% of inquirers enrolled by sending in signed consent forms to participate. Those who did not enrol cited scheduling conflicts, lack of support from their organization, and feeling unable to meet the time and commitment required for the training and evaluation. Retention rate of participants after training began was 100%.

The sample of participants in this study included 13 organizations representing 25% of Ontario-funded problem gambling programmes in 2004, and 21 counsellors, representing 18% of the problem gambling counsellors in 2004. Five of the 13 organizations had two or more counsellors enrolled in the study. Median age range of participants was 40–49 years, with a mean of 15 years of experience in counselling and a mean of 10 years in the

addictions field. There was nearly equal distribution between male (54%) and female (46%) participants. Of the participants, 83% spoke English as their first language and 47% had over 6 years of experience counselling problem gamblers with the first government funded treatment programmes for problem gamblers in Ontario. The majority of participants (66%) held a Bachelor's degree and 17%, a Masters, while 38% had certification with the Canadian Problem Gambling Certification Board or were actively working toward certification (21%) and 17% held additional professional registrations in social work, marriage and family therapy, and nursing.

Those participants having reported attending workshops and having had some training with couples and families amounted to 58%. The majority of participants reported their existing therapeutic orientation as cognitive-behavioural (88%) and solution focused (83%). Only 21% indicated an experiential orientation adopting such method as 'emotionally focused therapy'.

Mixed Methods

This evaluation of training was driven by a dominant quantitative experimental design and complemented by qualitative methods. Quantitative methods measured trainees' conceptual knowledge and skills and their self-ratings of learning in CCT, while qualitative data based on their written narratives, focus groups input and satisfaction questionnaires provided descriptions yielding insights into trainees' values, quality and substance of their learning. These findings were further triangulated with teleconference transcript analysis when trainees reported on their challenges and progress when applying CCT. In view of the small sample size, the qualitative data were especially important to validate the quantitative findings. Therefore, mixed methods added richness to our findings and lent trustworthiness and validity to our interpretations of the training results.

Evaluation Instruments

In the absence of established training evaluation instruments specific to CCT, two mixed methods evaluation instruments were developed to evaluate trainees' acquisition of CCT concepts, values and skills: (1) a written test of CCT concepts and values (WT) and (2) a role-play test of CCT skills and interventions (RT). These 'custom-designed' instruments contained items closely aligned with the aims and content of CCT training, an important factor in ensuring the validity of the evaluation (McConney et al., 2002). In particular, due diligence was applied to the development of the WT and the RT, both of which had been piloted before use (Lee et al., 2006).

1. *Written test on CCT concepts and values*

The WT consists of two parts taking approximately 1–1.5 hours to complete. Part I covers seven closed-ended questions for short answers and multiple choice. These questions were based on CCT including: (1) four dimensions of CCT; (2) systems approach; (3) beliefs and values in CCT; (4) philosophical underpinnings; (4) communication stances; (5) congruent communication; and (6) ways to expand and deepen communication. The

closed-ended questions are scored objectively according to a scoring rubric. The full score for the eight closed-ended questions is 36.

Part II of the WT comprises of three open-ended essay questions on trainees' conceptualization and counselling in problem gambling and their experience of counselling couples. Their answers to these open-ended questions were entered by a research assistant into a coding matrix. The open-ended answers were analysed qualitatively by two researchers independently for content and themes, and assessed for shifts before and after training. Results of the two researchers' analyses corroborated for the most part. Discrepancies in interpretations were reconciled by a third researcher.

Content and construct validity in the development of the WT was first ensured by the use of three expert judges to determine the salience of the test items relevant to CCT. Wording and scoring criteria for the quantifiable items were arrived at by consensus with four research team members. One indication of validity was the close correspondence between pre-post training results on the WT and the trainees' subjective ratings and reports of their learning of CCT concepts and values. Internal consistency of items on the WT calculated using the Cronbach a correlation yielded a reliability coefficient of 0.74 indicating acceptable internal consistency of the test. Two independent scorers used the scoring rubric to score 25% of the WT and obtained an intra-class correlation coefficient of 1.0 indicating highly satisfactory inter-rater reliability.

2. *Role-play test of CCT skills and interventions*

The role-play test consists of six written scenarios of representative vignettes encountered when working with pathological gamblers and their spouses across six phases of CCT. It takes approximately 1 hour to complete. These vignettes were created from therapy process in an initial study using CCT with pathological gamblers and their spouses (Lee, 2002c). Participants role-played as counsellors and audiotaped six 5-minute scenarios with volunteers who were not actual clients. Trained judges (not involved in the training) rated the trainees' interventions using a 58-item observational checklist for the demonstration of CCT interventions. Judges also supplied a brief qualitative evaluation of each scenario in the role-plays in addition to their numerical scoring. Each item on the checklist was rated as: 0 = skill not demonstrated; 1 = skill demonstrated; and 2 = skill demonstrated very well in terms of overall appropriateness, timing and integration into the flow of the clinical process, with a maximum total score of 116. Participants' RT score was used as an indicator of their skills in CCT. Three judges blindly scored the audiotapes and a fourth judge replicated the scoring of 50% of the sample.

Content and construct validity of the role-play items were assessed by their correspondence to the checklist of CCT interventions skills used in the training. Internal consistency of the items was gauged by Cronbach a correlation yielding a coefficient of 0.79 that was deemed satisfactory. Inter-rater reliability using intraclass correlation yielded a coefficient of 0.79 that was satisfactory. Results of the role-play scores were well-aligned with the trainees' reports of their levels of self-assessed competence and confidence in CCT and their reported use of CCT interventions during their clinical

application with clients (Lee et al., 2006).

These triangulated indicators suggest a good content and construct validity to the representativeness of CCT skills elicited by the role-play test.

3. *Training satisfaction questionnaires*

Two training satisfaction questionnaires consisting of 18 and 39 self-rated items respectively using a 7-point Likert scale indicating a range of trainee reactions (1 ¼ strongly disagree, 7 ¼ strongly agree) were completed by trainees at two points: (1) after the workshop, and (2) after the application phase of the training. Questions covered the process and content of the training, including training components, trainees' assessment of their own learning, and overall rating of the workshop and training as a whole. Trainees also supplied written comments at the end of the questionnaires.

4. *Focus group interview guides*

Two focus group interview guides were developed for the semi-structured group interviews: each consisting of four or five trainees after the workshop and after the application phase at the end of training. A total of four post-workshop focus groups and five post-application focus groups were conducted by independent facilitators. Trainees' experience of content and process of the workshop and training, their assessment of their own learning, and feedback on training barriers and facilitators to learning were tapped. Each focus group was approximately 1 hour in duration.

Table 1. Training Evaluation Measures for CCT

Evaluation Instrument	Quantitative	Qualitative	Observation Point
Written Test on CCT Concepts and Values	X	X	O1, O2, O3
Role-play Test of CCT Skills and Interventions	X	X	O1, O2, O3
Training Satisfaction Questionnaire	X	X	Post-workshop; Post-training (O2, O3)
Focus Group Interviews		X	Post-workshop; Post-training (O2, O3)

Results

Quantitative Outcomes

Quantitative outcomes are based on results of the WT, the RTand the trainees' self-reported learning on the training satisfaction questionnaires. Data were analysed using SPSS 14.0.

1. *Baseline*

At baseline (O1), no significant difference was found in the means or ranks of the scores for participants in the intervention and control groups on the WT and RT, indicating that the two groups were successfully randomized.

2. *Cycle 1 training: Intervention vs control group at O1 and O2*

(a) Written test. Non-parametric tests were selected for the analysis of difference score values in the results of the intervention versus the control group at O2 (minus baseline O1) because of small sample size and high kurtosis on the WT distribution. A Mann–Whitney U test was conducted to determine whether the scores of the intervention group (n =12) differed significantly from the scores of the control group (n = 9 with no missing values). There was one missing value for the intervention group which was replaced with linear trend at point method. The mean rank of intervention group scores was found to be highly significantly different than the mean rank of the control group scores, $z = 2.71$, $p = 0.006$ (two-tailed).

(b) Role-play test. A Mann–Whitney U test was conducted at O2 (minus baseline O1) to determine whether the scores of the intervention group (n = 12) with two missing values differed significantly from the scores of the control group (n = 9) with no missing value. The missing values for the intervention group were replaced with linear trend at point method. The mean rank of intervention group scores was found to be highly significantly different than the mean rank of the control group scores, $z = 3.09$, $p = 0.001$ (two-tailed).

The highly significant difference on both the WT and RT between the randomized intervention and control groups indicate significant acquisition of the concepts values and skills at O2 as displayed in Table 2.

**Table 2. Difference in Trainees' Pre-Post Outcome Scores:
Randomised Training and Control Groups (Cycle 1)**

Variable	Control Group n = 9	Training Group n = 12	Z	Sig. (2-tailed)
	Mean Rank (O2-O1)	Mean Rank (O2-O1)		
Concepts and Values (Written Test)	6.78	14.17	2.71	0.006
Skills and Interventions (Role-play Test)	6.17	14.63	3.09	0.001

3. *Cycle 2 training: Baseline (O1), waiting period (O2) and post-intervention (O3)*
a) Written test. A non-parametric Friedman test, equivalent of the parametric repeated measures ANOVA, was selected to determine whether CCT training resulted in increased scores of trainees from Baseline O1 (M = 5.81, SD= 2.56) compared to waiting-listed condition at O2 (M = 7.61, SD = 3.72) to post-training at O3 (M = 21.41, SD = 5.24) (see Table 3). Values were available for nine cases. There were two missing values at O3 which were replaced by linear trend at point method. The Friedman test comparing Written Test scores at three observation points was highly significant, χ^2 = 14.97 (df =2), p = 0.001. Follow-up pairwise comparisons using a Wilcoxon test with a Bonferroni correction found that concepts and values scores were not significantly different between baseline (O1) and waitlisted observation (O2), Z = 1.05, p = 0.3 (two-tailed); however, there was a significant increase of these scores between O2 and post-training at O3, Z = 2.67, p = 0.008 (two-tailed) as shown on Table 3.

Table 3. Cycle 2 Trainee Means Across Observation Points

	Baseline (O1)		Observation (O2)		Observation (O3)		χ^2 (df)	Sig. (2-tailed)
	N=9		n=9		n=9		χ^2 (df)	Sig. (2-tailed)
	Mean	SD	Mean	SD	Mean	SD		
Concepts and Values (Written Test)	5.81	2.56	7.61	3.72	21.41	5.24	14.97 (2)	0.001
Skills and Interventions (Role-play Test)	24.89	7.76	20.66	10.0	34.46	6.87	9.56 (2)	0.008

(b) Role-play test. A non-parametric Friedman test was selected for the analysis of the role-play scores. Paired values were available for nine cases. There were two missing values at O3 which were replaced by linear trend at point method. The Friedman test comparing role-play test scores at three observation points was highly significant, χ^2 = 9.56 (df = 2), p = 0.008 (see Figure 1). Follow-up pairwise comparisons using a Wilcoxon test with a Bonferroni correction found that CCT skills and interventions were not significantly different between baseline (O1) and control observation (O2), with Z = 1.54, p = 0.12 (two-tailed), but there was a significant increase of these scores between O2 and post-training at O3, with Z = 2.67, p = 0.008 (two-tailed).

In summary, for cycle 2, non-significant difference was found in WT and RT scores during the waiting period but highly significant increases in both sets of scores were found after CCT training.

4. *Item analysis of written test*

By comparing trainee scores before and after training, we were able to calculate the percentage improvement trainees attained on the test items (Table 4). This analysis informed us that trainees showed a great improvement on items that had a direct translation into clinical practice and interventions, such as the four CCT dimensions, communication stances, and components of congruent communication. More abstract items pertaining to values, beliefs and philosophical underpinnings and systems showed less improvement immediately after training. Items showing less or negative improvement call our attention to two issues: (1) strengthening training focus in those areas; and (2) re-working the items for their improved validity and reliability.

5. *Item analysis of role-play test*

Items indicating an improvement of 10% and higher on the role-play scoring criteria after training constitute 47% of the total of 58 items. An analysis of these items indicates trainees' most marked improvement in the following areas:

- Structuring and balancing a couple's session .
- Motivating engagement through tapping into couples' hopes, wishes and yearnings .
- Working on couples' communication .
- Deepening intrapsychic exploration .
- Working experientially in the here and now grounded in specifics .
- Delineating intergenerational patterns .
- Consolidating and anchoring gains

Only nine items in the role-play criteria showed either no improvement or a negative score compared to the baseline scores, constituting 16% of the total 58 items. In future use, whether these nine items are sufficiently discriminating to pick up CCT-specific skills needs to be determined. We also need to ascertain whether the training paid sufficient emphasis on developing these skills.

In addition to numerically scoring the audiotaped role plays, judges were asked to write their comments after each scenario assessing the strengths and weaknesses of each trainee. Comments were collated and a content analysis was performed at baseline (O1), control (O2), and post-training for Cycle 1 (O2) and Cycle 2 (O3). Before training, many trainees used a didactic, psycho-educational approach with their clients that the judges described as 'lecturing', 'teachy', 'problem-solving' and 'speaking for clients'. Judges observed that trainees seemed to struggle to stay centred and in charge of a couples' session. They focused on behaviours and problem-solving. In terms of opening up the process of interpersonal, intrapsychic and intergenerational exploration, their skills were limited. The control group showed minimal departure from pre-training styles: 'teaching', 'abrupt', 'does not explore motivations and feelings', 'struggling to follow his own agenda', 'counsellor did most of the talking' and 'did not allow clients to go introspectively'.

After CCT training, judges observed that trainees were more attuned to their clients' process and went into more depth in exploring issues with their clients ('follows flow of client's narrative', 'goes more deeply into topic'). They were observed to structure, assess, motivate, set goals, reframe blame and negativities, and generate hope and changes more readily in these role-play scenarios (e.g. 'elicits clients' motivations', 'balances input from both partners', 'reframes blame into hope', 'interrupts arguments to delineate negative cycle', 'differentiates each partner's experience and perception' and 'links past and present patterns well'). The judges also identified areas that reflected less change in some trainees and the need for further CCT skill development(e.g.'did not deepen exploration of perceptions','did not explore impact of interaction' and 'stayed at behavioural level').

Taken together, judges' comments, trainees' own comments and trainees' scores on the WT and RT paint a consistent picture. Trainees experienced and demonstrated significant learning of CCT concepts, values and skills from the CCT training.

6. *Counsellors' self-assessed learning*

On the training satisfaction questionnaires, administered post-workshop and post-training, counsellors' self-rating scores on a 7-point Likert scale on their overall learning of CCTin the two training cycles obtained a mean of 6 (range 5.8 – 6.1). Their self-reported learning in the three areas of CCT concepts, values and interventions were similarly high in the three domains. A slight increase in reported learning in the combined areas was reported after the application of CCT (M = 6.1) compared to after the workshop (M = 6.0).

In assessing the areas of change resulting from CCT training, trainees rated a high symmetry between their pre-existing orientation with the orientation and values of CCT. Hence, they did not consider themselves to have changed dramatically in the way they viewed their clients or their role as a counsellor. What was rated as a significant shift was in their approach with their clients using a 'family systems lens of interrelationships'. Cycle 2 trainees expressed less of a shift to systems which could be explained by the fact that one organization of three counsellors had already been receiving training in couple work prior to CCT training. Trainees indicated a strong desire to take part in future training (M = 6.9, SD = 0.3) and expressed in the focus groups a need for more training to work with traumatic experiences, the intergenerational (family of origin influences) and the universal–spiritual dimensions of CCT.

7. *Counsellor characteristics and training outcomes*

Kendall's τ-b test was used to examine the strength of relationships between differences in scores on the WT completed by trainees before and after CCT training with each of the following counsellor characteristics: (1) age; (2) level of education; and (3) years of counselling experience. Three missing values were replaced with linear trend at point, resulting in 21 individuals available for analysis. A non-significant positive correlation

was found for counsellor age ($\tau = 0.006$, p = 0.97). Non-significant negative correlations were found for levels of education ($\tau = -0.73$, p = 0.69) and years of counselling experience ($\tau = -0.28$, p = 0.11). These findings indicate that years of counselling experience, extent of post-secondary education and counsellor age were not significantly related to counsellors' learning of CCT concepts and values.

A similar Kendall's τ-b operation was applied to examine the same three variables with counsellors' change scores on the RT. Five missing values were replaced with linear trend at point, resulting in 21 individuals available for analysis. Non-significant negative correlations were found for counsellor age ($\tau = 20.14$, p = 0.44) and years of experience ($\tau = 20.16$, p = 0.37), and a nonsignificant positive correlation was found for levels of education ($\tau = 0.15$, p = 0.42). These findings indicate that age, extent of post-secondary education, and years of counselling experience are not significantly related to differences on role-play scores before and after CCT training.

In summary, the correlation analysis indicates that regardless of age, level of education and years of experience, counsellors were equally able to benefit from the CCT training leading to statistically significant learning outcomes.

Qualitative outcomes

Pre-post training experiential, substantial and perspectival changes were difficult to quantify. Hence, open-ended qualitative questions on the WT captured the experiential shifts narrated by trainees in the following areas:

- pathological gambling assumptions;
- couple relationship in pathological gambling;
- gambling treatment approaches, philosophy and values;
- experience of themselves as problem gambling counsellors when counseling couples.

Thematic findings in these areas are incorporated into the section on synthesis of mixed methods findings.

Overall trainee counsellors' reactions

1. *Satisfaction with training*. Trainees rated their overall satisfaction of the training very highly: (1) the entire training fully met my expectations (M ¼ 6.1; SD ¼ 0.7); and (2) I would recommend the training to a colleague (M ¼ 6.7; SD ¼ 0.6). Trainees rated on a Likert scale of 1–7 (1 ¼ strongly disagree; 7 ¼ strongly agree) the degree to which they agreed with these statements. No significant mean difference was found between the two cycles.

Keywords trainees used to describe their overall training experiences in the focus groups and written questionnaire comments were consistent with the scale results (e.g. 'comprehensive', 'thorough', 'hands-on' and 'empowering professionally and

personally').

Both cycles of trainees indicated a strong desire for further CCT training (M = 6.9; SD = 0.4) and to participate in future CCT research (M = 6.6; SD = 0.4). Some counsellors explicitly recognized in their comments the importance of their own continued personal integration in order to work effectively with clients' pain and trauma.

2. *Important training components*. Chief among the factors contributing to both cycles of trainees' satisfaction were the trainer's ability to provide a safe learning environment (M = 6.8, SD = 0.43), trainer's knowledge and skills in CCT, particularly as demonstrated in her answering of questions and concerns (M = 6.8, SD = 0.4) and her embodiment of CCT values, which was described in the focus groups. Demonstrations and role plays were described as 'very effective' and 'enlightening'.

Both quantitative and qualitative data highly rated the trial application of CCT with clients (M = 6.7; SD = 0.6) and the group teleconference consultations (M = 6.9; SD = .3) as integral parts of CCT training. These application components made CCT 'come to life', provided ongoing guidance, ensured adherence and built a community of practice around CCT.

Synthesis of Mixed Methods Findings

Quantitative and qualitative data from two dovetailing controlled designs compared results of counsellors before and after CCT training (N = 21). On almost all items of all quantitative and qualitative measures, both cycles of participants responded similarly to the training. Counsellors in both training cycles demonstrated highly statistically significant positive changes, evidenced by scores in quantitative measures of outcomes operationalizing CCT concepts, values and skills. Results captured by quantitative and qualitative methods were convergent. A synthesis of the triangulated mixed methods findings follows.

1. *Learning CCT concepts*

CCT concepts applied in practice were better learned than its philosophical concepts. Moreover, conceptualization of problem gambling shifted from an individual focus on gambling reduction to dealing with the contextual and deeper issues underlying problem gambling, such as family of origin influences, couple relationships, communication, self-awareness and self-esteem, risks posed by recent crises and life transitions. Another important shift was viewing the marital relationship as a precursor of problem gambling, and not only a result of it (e.g. 'gambling is more likely with those with poor support systems'). The couple relationship began to be seen as central in gambling treatment. Counsellors showed an increased ability to think in terms of systems and inter-relationships after training. Comments such as 'gambling is a learned behaviour' were replaced by 'problem gambling is at the surface, but there are many layers to unpack i.e. intergenerational, emotional patterns'. Counsellors showed a greater appreciation for complex intrapsychic and interpersonal issues, and expressed a greater specificity in

articulating their own observations and beliefs.

2. *Learning CCT values*

Changes in values and philosophy in line with CCT were present more ostensibly in some counsellors than others. Pre-training treatment orientations were primarily cognitive-behavioural with an individual or group focus. Counsellors also described many values that are consonant with a humanistic orientation, e.g. empathy, respect and client-centred. In post-training, participants' responses reflected greater multi-dimensionality in conceptualization of causes and interventions. They blended CCT values and ideas with their existing repertoires. Counsellors showed greater awareness of themselves in the counselling process and the use of themselves as models in their interaction with clients. They reported a greater propensity for reflection and attunement with their internal and interactional process as well as that of the clients. Significant was a shift from a value for objectivity, impartiality and directiveness to greater flexibility, exercising one's clinical judgment, following the process, greater freedom in asking questions and admitting to one's limitations. A sense of hopefulness, optimism and a trust in the clients' resourcefulness as well as in themselves was also evident in counsellors' narratives on open-ended questions.

3. *Learning CCT skills*

A shift was seen and reported by counsellors in their work from content to process, from psycho-education to facilitating change. Clinically, counsellors showed more skilful balancing and containment of couple dynamics, raising positive energy in reframes of problems and blame into hopes and wishes, setting more focused goals, facilitating greater exploration of each partner's issues, shifting communication stances and forming more efficient and solid engagement with their clients. There was a shift in seeing themselves as more attuned to the couple counselling process, with having an increased sense of agency, of when and how to intervene, and with viewing the self as an important part of the system in counselling. They voiced a desire for personal and professional growth and learning. 'Therapy is a two-way process in which clients and myself grow at the same time' summarizes their systemic engagement of self in the therapeutic process. Counsellors' development of CCT clinical skills, though statistically significant, can admittedly improve to attain a higher level of mastery. This conclusion was borne out by the counsellors' self reports, their role-play scores, and judges' observations and comments.

Discussion

Although the importance of training in psychotherapy and psychosocial addiction treatments has been highlighted in recent years (Greben, 2004; Greben and Segal, 2001; Walters et al., 2005), particularly its critical role in the development and dissemination of empirically supported treatments (Addis, 2002; Gotham, 2004; Ravitz and Silver, 2004), research on training evaluation is still in its infancy (Walters et al., 2005). Very few training evaluations go beyond trainee satisfaction and self-reported learning (Walters et

al., 2005). Unfortunately, the relationship of trainee self-reports with third-party observations of proficiency and client outcomes are not always commensurate (Levin et al., 1999; Miller and Mount, 2001).

This study examined an often overlooked area in empirically supported treatment development of therapist training outcomes. The strength of this evaluation is in the use of two controlled designs, complementary quantitative and qualitative data summarizing the trainees own perspectives and experiences, the supplementing of therapist self-reports with expert observer ratings of acquisition of crucial therapy skills, and attention to identification of facilitative features and features in need of improvement in future therapist training.

Correlational analysis revealed that regardless of age, level of education and years of experience, counsellors were equally able to learn from CCT training leading to significant learning outcomes in concepts, values and skills of CCT. The fact that this group of participants is self-selected and reported a compatible orientation with CCT could have played a mediating role in their motivation, evidenced by the 100% retention rate in training and their highly positive learning outcomes.

This evaluation is significant in providing some solid evidence that CCT training was effective, at least with this trainer and this sample of counsellors. External validity needs to be established in the future with other CCT trainers and counsellors. Statistically significant improvement in training is not the equivalent of clinical competence, the definition and evaluation of which remains a central but vexatious issue in psychotherapy (Procidano et al., 1995; Schottler et al., 2005), and no less so for CCT. However, the level of learning outcomes attained by counsellors from this training already allowed them to effect positive changes in clients in multiple domains targeted by CCT in a relatively short-term application (Lee et al., 2006; Lee and Rovers, 2008).

As CCT develops, segmentation of training may be in order with more advanced training to develop counsellors' proficiency in working with clients' intergenerational and universal-spiritual issues using CCT as identified by the counsellor trainees. The importance of the counsellors' own continued personal integration in order to engage with in-depth work with clients was recognized by both trainees and trainer, an aspect of training that needs more explicit attention in training programmes (Liddle, 1991).

Training that included actual application of CCT with clients, supported by small group teleconference consultation, was rated as a key positive feature of the training. Similar to what has been found in the literature (Sholomskas et al., 2005; Walters et al., 2005), our findings reinforce that while a didactic-experiential workshop training is core to clinical training, ongoing support for case applications is integral to deepening learning, giving trainees confidence to transfer their new learning into practice.

Most counsellors did not show a wholesale adoption of CCT conceptual framework; rather they incorporated parts of CCT with their prior operating knowledge frameworks, although their articulation of their treatment assumptions showed greater coherence and

clarity with increased ability to think systemically. A greater attunement to process, use of self, and respect and optimism for clients' and counsellors' resources in growth and change reflect a 'lived' appropriation of the humanistic, experiential and systemic values of the model. These findings were corroborated in the teleconference consultations by trainer's observations.

Several limitations in this study need to be acknowledged. First, instruments developed for the CCT training evaluation would benefit from future refinements and validation. The WToverall was found to be a sufficiently reliable measure that represents a full range of easy to difficult items, distinguishes well between high-and low-performers, and is sensitive enough to measure improvements in knowledge (Lee et al., 2006). Future use of the WT will allow us to make further refinements to the instrument and confirmation of its validity and reliability. Nearly half the items on the RT were sensitive to the impact of training, and a majority of items discriminated well. Items were too difficult overall but there remained a large number of adequately sensitive and discriminating items (Lee et al., 2006). Future modifications of the RT should represent a wider range of difficulty levels and should reduce the number of items for observation.

The fact that the principal researcher was also the trainer and the developer of CCT presented a potential bias in this study. To address this limitation, we relied on the use of independent focus group facilitators, anonymity of the participants in the transcripts, blind independent scorers not involved in the training, and the use of triangulation of scorers in the analysis and interpretation of data. We also conducted member-checking with participants and their organizations on the key findings of the evaluation delivered in an 11-page executive summary. Participants' responses were unanimously confirmatory of the findings and interpretations from the study.

Another threat to validity is the small sample size and missing data. We addressed this issue by complementing the quantitative with a substantial amount of qualitative data. Triangulation is an important way of confirming findings and interpretations, using multiple measures, mixed methods and multilevel data, multiple judges and scorers across two training cycles. The convergence of these different types of triangulation lent confidence to our findings and interpretations of the training outcomes.

In light of the characteristics of this self-selected group of counsellors and their supportive organizations, and the small sample size, results can only be considered generalizable to populations whose profiles are similar to the trainees in this study. The role of organizational support in mediating training success is an important systemic link for future exploration. Training replication utilizing a larger sample size is recommended. Another limitation is the uncertain degree of treatment adherence through therapist self-reports. There may be discrepancies between what therapists say they are doing in therapy and what they are actually doing.

Since CCT is a model still undergoing empirical validation, counsellors using CCT need to know the limits of their own competence with the model, and to self-monitor the effects of their use of CCT in clinical practice. A CCT self assessment tool was

developed for such purposes (see Lee et al., 2006). Applying CCT with the supervision of a qualified marriage and family therapy supervisor is recommended. CCT training was effective in teaching essential aspects of CCT to counsellors who demonstrated positive client outcomes in their first application with pathological gambling couples (Lee and Rovers, 2008). Positive training outcomes and preliminary favourable client outcomes indicate that CCT is a model poised for an efficacy study with pathological gamblers and their spouses.

Acknowledgements

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