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DEVELOPING A REFLECTION CYCLE MODEL

BY

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A Final Project submitted to the

Campus Alberta Applied Psychology: Counselling Initiative

in partial fulfillment of the requirements for the degree of

MASTER OF COUNSELLING



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CAMPUS ALBERTA APPLIED PSYCHOLOGY: COUNSELLING INITIATIVE

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Abstract

This qualitative study is an initial step in the creation of a theoretical model about reflection as a process in counsellor education and development. The study purports that distance learning environments enhance reflective learning processes. Five coresearchers, graduate students in a counselling psychology program, participated in a fourteen-day asynchronous forum to discuss eight research questions. Synchronous online discussions confirmed co-researcher data. Constant comparative analysis generated eight main theme categories. ATLAS/ti software was used for further interpretation of text. Results produced a reflection cycle model with four dimensions: triggers, mediators, actions, and outcomes. Future testing of the model and research about how reflection can enhance counsellor identity development and practice may lead to the generation of new learning and digital tools.

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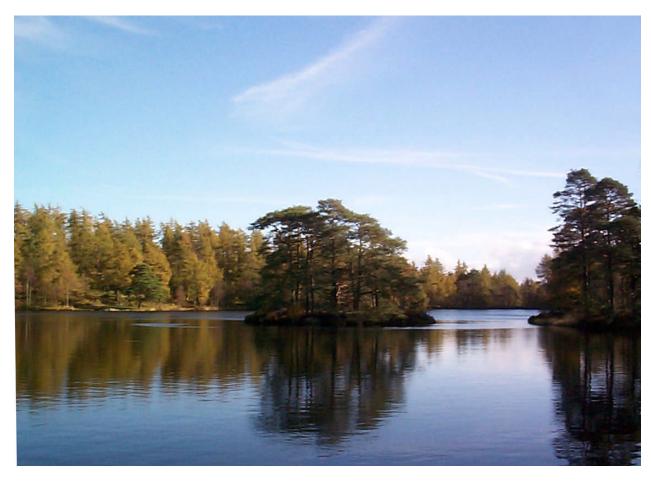
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PROLOGUE:

My Journey as a Researcher



Prologue: My Journey as a Researcher

When I think about the scientist-practitioner model for counsellors, I strive to incorporate that model in my training; however, at the same time, I continue to be challenged by the 'how' of doing so. Questions arise such as, 'How do client and counsellor development co-exist without overshadowing the other?' 'In what ways can we study the lived experiences of others while honoring their interpretations of their own experiences?' 'My philosophical approaches to life and work are important to me, how do I stay true to these as a scientist/researcher?'

Before embarking on a phenomenologically-oriented study, these questions began early on in my graduate training. A key pre-requisite to research, I believe, is knowing oneself. This is no small task. My own journey toward being a full-time graduate student brought to light a renewal of personal identity, an understanding of self, and a re-ignited passion for counselling. Equally exciting was the prospect of undertaking a study that may create a helpful tool for students, counsellors, clients, and educators. The road was anything but linear. Digesting the literature, deciding on a design that meshed with my life philosophies, counselling orientation, and a desire for collaborative discovery with others all happened in an overlapping way. Picture a woven basket where all of its pieces of straw are necessary to hold it together. Gradually I discovered how my personal self was mirroring my professional identity and visa versa. There was no longer a clear separation. How could there be. In my eyes, the research had to be personally meaningful enough to spark my interest and motivation over the long run. The excitement for me came with the discovery of new meaning, the sharing of ideas and stories with others, the collaborative questionning of a concept that has always intrigued me. As I write this now,

I am struck once again by how my research methodology seems to mirror interactions in life and in work. And, so, the journey continues – discovering ways to blend theory, practice, experience, and research in the field of counselling.

CHAPTER I INTRODUCTION



Studying the expeditions of others in search of meaning, direction, and tools to help along the way

Introduction

Researcher's Journal Note

At first the concept of *reflection* seemed expansive, almost lacking in direction. And, yet, at the same time I did not want to quell the possibilities. As well, I wanted, as much as possible, to honor the *discovery* methodology I read about in texts describing hermeneutics. A type of tug-of-war occurred between the need for boundaries and the desire for freedom to explore.

Problem Statement

An understanding of how students in a distance education program conceptualize reflection, how they enact reflective processes, and how these conceptualizations and processes facilitate counsellor identity development and an orientation to counselling summarizes the problem. A summary of research questions appears in Appendix A. *Rationale*

A counsellor's ability to reflect on client and peer interactions and on personal development is a key competency (Pedersen, 2000). This competency contributes to how counsellors practice in the field and how they continue developing as a professional (Dempsey, Halton, & Murphy, 2001; Schön 1982, 1987). As counsellors develop awareness of their personhood and their "counsellor identity" (Marshall & Andersen, 1995), they often also gain increased understanding of the "value of their self-development as instruments in the counselling process" and this is an important area for further study (Rak, MacCluskie, Toman, Patterson, & Culotta, 2003). "Open-ended investigations" about how this process unfolds for counsellors requires further analysis (Marshall & Andersen, 1995). Development of personhood occurs amidst both a myriad

of experiences, words, symbols, relationships, memories, and feelings across the lifespan (Mahoney, 1994; Schön 1982; Sela-Smith, 2002) and against a backdrop of cultural and social forces (Mezirow, 1996).

Contemporary education programs geared to adult learners (Mezirow, 1985a, 1985b, 1996) that incorporate both asynchronous and synchronous computer-mediated communication (CMC) will continue to evolve within a cultural context defined in large part by technology. As this occurs so too must research about the impact of CMC on instruction and learning processes, self-identity development, and cognitive processes such as reflection (Hara, Bonk, & Angeli, 2000). In fact, studies often conclude that more research in the area of on-line learners' lived experiences of this emerging learning environment and the personal meaning learners assign these experiences is needed (Andrusyszyn & Davie, 1995; Andrusyszyn, et al., 2002; Boud, Keogh, & Walker, 1985a; Davie, n.d.; Fahy, 2001). More specifically, a better understanding of how dialogic and transformative learning contributes to self-knowledge and reflection (Andrusyszyn & Davie, 1997; Mezirow, 1985a, 1990, 1997) within a CMC environment may lessen the conceptual gap about how students develop a counsellor identity and personal orientation to counselling. Chen (2001) reports the need for qualitative research to assess synchronous learner interactions in relation to both learner characteristics and learning environments.

Implications

Students of distance education programs, instructors, and those involved in curriculum design will benefit from the exploration of student interactions and learning patterns, an assessment of student reflective processes, and the role of technology in

counsellor identity development. Enhancements to existing distance education programs may result that promote both "student exploration and refinement of personal beliefs" and "self-awareness in counsellor theory formation" (Wong-Wylie, 2003, p. 135).

Open discussions about reflective processes may further foster an environment where students share personal learning and growth techniques. Study participants may adopt new reflective practices, revise previous ones, and become more confident in questioning how reflective process and practice fosters ongoing personal and professional growth and self-definition (Dempsey, Halton, & Murphy, 2001; Liimatainen, Poskiparta, Karhila, & Sjögren, 2001). Students' abilities to incorporate new information into existing schema, to reflect on personal values, beliefs, and experiences, and to problem solve translates to their work with clients (Boyd & Fales, 1983; Pedersen, 2000). "Naming (Nystrand, 1977) and valuing the process are the first steps" (Boyd & Fales, 1983, p. 113). Ongoing invitations for "critical social consciousness to examine one's personal theory of counselling" (Wong-Wylie, 2003, p. 134) follow.

The analysis of this study's outcomes in relation to reflective learning theory, transformative learning theory, adult education models, and developmental models may generate a provisional model for future research. Identification and development of theoretical constructs and models for distance education is timely (Chen, 2001).

Project Overview

This project intended to design a preliminary reflection model using grounded theory methodology. Co-researchers who are all counselling students provided their ideas, experiences, and insights for eight research questions posted on a graduate program Discussion Forum. Using constant comparative methodology, responses to these

questions formulated thematic patterns, or the beginning of theory development. From there, these responses were further analyzed using ATLAS/ti software for qualitative studies. The coding of data using this software generated further development of the model through groundedness and density of the data. Network diagrams (a sample appears in Figure 2) represent linkages among the data for the eight research questions and thematic relationships. A type of code tree or mapping occurs. The triangulation of data analysis stems from comparative methods, member checks, and discourse analysis using software. A preliminary Reflection Cycle Model was developed. Recommendations for future testing of the model, and potential next steps such as the development of a counsellor reflection facilitation guide are discussed.

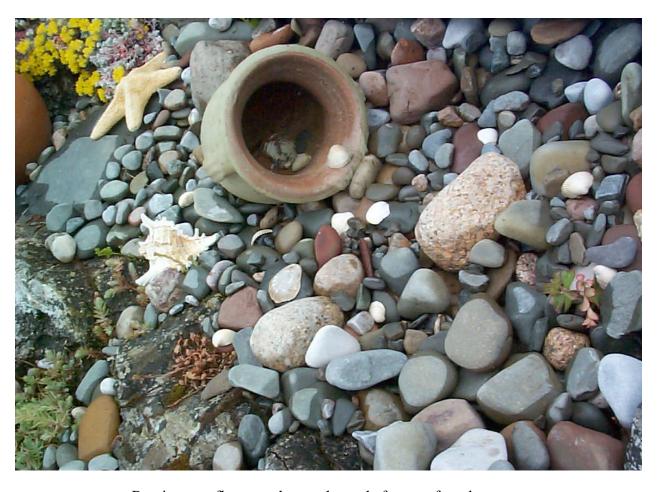
Summary and Document Overview

This qualitative study was intended to improve understanding about the construct of *reflection*, particularly for counselling students, practitioners, and educators. The study generated a preliminary Reflection Cycle Model through discourse analysis and constant comparative methodology. Two weeks of online discussion among five counselling graduate students was analyzed for key themes and thematic relationships. Discussion of the model's four Dimensions (Triggers, Mediators, Actions, and Outcomes) highlights key adult learning principles. Reflective processing of life events is deemed an essential tool for counsellors because of its capacity to facilitate personal growth and professional competency.

Following the study's introduction in the first section, the second section discusses a detailed literature review from the perspectives of learning theories, distance education, and reflection. The third section outlines the study's method. Next, the fourth section

discusses results and divides these results into two phases. The first Phase reports "preliminary thematic patterns" and the second Phase reports "thematic relationships." The fifth section is a discussion that synthesizes research, theoretical constructs, and the study's results. This section is divided into two parts. The first part represents the synthesis of research and the study's outcomes. The preliminary Reflection Cycle Model represents this synthesis. The second part discusses implications of the study and model. Lastly, the sixth and final section concludes the study including limitations of the study and considerations for future online research. There are eight appendices displaying the main research tools and instruments used. One appendix outlines the thematic units and codes generated by Atlas/ti software. There are four tables depicting discussion forum themes, details about thematic units, and groundedness and density data related to eight research questions. There are four figures; two represent drafts of the model, one provides a sample of an Atlas/ti generated thematic network diagram, and one depicts groundedness and density for thematic units.

CHAPTER II LITERATURE REVIEW



Pausing to reflect on what explorers before me found,

What do I take with me now?

Literature Review

Researcher's Journal Note

The collective discourses of researchers, writers, poets, scientists, philosophers, practitioners, and educators afford so much in the form of ideas, inspiration, energy, and foundation from which to grow. In the words of others who write about *shaping a professional identity* and the impact of personal experiences,

As you travel to new places, you will learn much from those who have walked these trails before you. They will provide you with direction, yet they will respect your journey and let you find your own way. They are the travelers of days gone by and they have much wisdom to share with you. Listen to their voices and learn alongside them (Whelan, 1999, p. 23).

Introduction

As technology continues to evolve and enhance modes of learning, research strives to assess and compare distance education programs throughout the world. Theories and constructs pertinent to learning, such as transformation, educational, experiential, and reflective learning models are an essential consideration when reviewing studies about learning outcomes and student perspectives as distant learners. This review provides an overview of these theoretical perspectives as a way to guide critical analysis of research studies aiming to integrate theory and practice.

Online learning environments strive to reduce the transactional distance that learners experience so that learners experience all dimensions of learning - cognition, affect, and behaviour or skill building. A review of distance learning environments points to factors that contribute to reductions in transactional distance such as level of learner

participation, a sense of community and trust, and various program design elements. This review examines a total of thirteen studies. Eight of these studies were conducted using online learners as participants, two used classroom-based settings, one used videotaped sessions with health counselling clients, one used the narratives about workplace stories, and one is about the development of a Reflection Questionnaire.

This review informs the research project that investigated participant perspectives, experiences, and opinions about what reflection means to them, how they do it, and the influences of distance learning on their reflective processes and practices. The rationale for this study is to provide needed research in the area of reflective learning at a distance. There is an absence of research exploring how counsellors learn to reflect, how they apply it, and how it bears on their work with clients. Further, the influence of reflective learning on how counsellors develop personal and professional identities may arise from the study. The author of this study is a full-time graduate student in a Canadian distance education program in counselling psychology, namely, the Campus Alberta Applied Psychology: Counselling Initiative, a collaborative partnership between Athabasca University, the University of Calgary and the University of Lethbridge. This literature review includes an exploration of how distance education fosters reflective learning, and, those features of distance education that reduce transactional distance. Concluding remarks point to supportable future research in the area of counsellor distance education.

Review Methodology

A key word search was conducted for primary sources about theories, constructs, and studies about 'learning' and 'reflection.' It is important to this literature review that both theoretical literature and empirical literature are combined because the current

review strives to critically analyze research purporting to investigate learning models, constructs, and theories. A key word search was conducted for the following key words and phrases: "reflection," "reflective process," "reflective practice," "online learning," "distance education," and "counsellor." The databases searched included: Academic Search Premier, CBCA Fulltext Education, ERIC Digests (Educational Resources Information Centre), JSTOR Journals, Psychology and Behavioral Sciences Collection, ScienceDirect, Sociological Collection, PsycINFO, Social Sciences Abstracts, and an Internet search using the Google search engine. Once potential resources were located, they were categorized as either a primary or a secondary resource. Potential resources were reviewed first for relevance to reflective learning and then for relevance to distance education. While the study is specific to counsellor education, the present literature review includes studies related to other professions such as nursing and occupational therapy.

Background: Transformative, Educational, Experiential Learning Theories

Mezirow (1990) defines learning as "the process of making a new or revised interpretation of the meaning of an experience, which guides subsequent understanding, appreciation, and action" (p. 1). Transformation theory (Mezirow, 1991, 1997) is a critical theory of adult learning and "provides a dialectical synthesis and a third alternative with a fresh look at the nature of learning and learning theory" (p. 158) and its emphasis is on how individuals negotiate and act on purposes, values, feelings, and meanings — individual and social (Mezirow, 2000). Transformative learning (Mezirow, 1991, 1997) is the process of effecting change in a *frame of reference*. These frames of reference include the many experiences that come from associations, concepts, values, feelings, conditioned

responses and are comprised of habits of mind and points of view, more accessible to consciousness than habitual ways of thinking, feeling, and acting (Mezirow, 1990, 1991, 1997). Mezirow (1991, 1997) specifies that critical reflection transforms frames of reference through *communicative learning*, "searching sometimes intuitively for themes and metaphors in order to fit the unfamiliar into a meaning perspective, so that interpretation in context becomes possible" (1990, p. 9) or so that frames of reference are more 'inclusive' (Mezirow, 2000). Critical reflectivity based on this model includes conceptual reflectivity, psychic reflectivity, and theoretical reflectivity (Mezirow, 1981). Central to transformative theory is the self-directed nature of adult education. Mezirow's (1981, 1985b) framework for self-directed learning incorporates three functions of adult learning: (1) instrumental (task or problem-solving oriented); (2) dialogic learning (trying to understand what others are communicating to us); and (3) self-reflective learning (how we come to understand ourselves). Mezirow (1985a) describes meaning perspective as "the structure of cultural and psychological assumptions within which new experience is assimilated and transformed by one's past experience" (p. 144) and considers meaning schemes, which involve rules, roles, relationships, and social expectations as "sets of related expectations governing cause-effect relationships, social action, ourselves, values, and making connections between feelings and action" (1985b, p. 22). He stresses that adults learn to understand the reasons for the psychocultural assumptions that may impede growth and development and he also stresses the need for adult education programs to tend to the 'psychodynamics of adult transitions.' The three core learning processes in transformative theory are: (1) learning within meaning schemes or elaborating on an existing point of view; (2) learning new meaning schemes and establish new points of view; and (3) learning through meaning transformation (Mezirow, 1985b, 1997).

Bloom's (1956) taxonomy of educational objectives contains six major levels, which are knowledge, comprehension, application, analysis, synthesis, and evaluation. According to this taxonomy, *knowledge* is the identification and recall of information; *comprehension* is a way learners organize and select facts and ideas or discover or use a relationship between two or more ideas; *application* refers to applying new information or solving some type of problem; *analysis* involves separating a whole into component parts including elements, relationships, and organizational principles; *synthesis* is how learners draw on elements from many sources and engages in imaginative, original thinking; and *evaluation* is the way learners make judgements about the value of ideas, works, solutions, methods, and materials.

A type of learning from experience underlies Kolb's model of experiential learning. This model involves acting upon an experience through reflective observation followed by active experimentation and feedback, which then produces a change in practice (Kolb, 1984). Researchers believe that this approach to learning provides students with valuable self-monitoring skills and self-constructive abilities (e.g., Dempsey et al., 2001). "The reflective learning process encourages students to develop a beginning framework of values, knowledge and skills, which can be added to, modified and expanded throughout the professional life cycle" (Dempsey et al., 2001, p. 632). *Reflective Learning*

Dewey (1910/1997), considered to be the originator of the concept *reflective* thinking, stated that "[a]ctive, persistent, and careful consideration of any belief or

supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends, constitutes reflective thought" (p. 6). Dewey (1910/1997) believed that reflective learning involves: (1) a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and (2) an act of searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity. "[R]eflection in the context of learning is a generic term for those intellectual and affective activities in which individuals engage to explore their experiences in order to lead to new understandings and appreciations" (Boud, Keogh, & Walker, 1985a, p. 19), "taking place in either isolation or with others" (Boud, Keogh, & Walker, 1985b, p. 27). Boud et al.'s model of reflection has three components or stages: (1) Returning or recollecting an experience; (2) Attending to feelings; (3) Re-evaluating experience. "Reflective learning is the process of internally examining and exploring an issue of concern, triggered by an experience, which creates and clarifies meaning in terms of self, and which results in a changed conceptual perspective" (Boyd & Fales, 1983). Schön (1982) considers reflection critical to professional development because of its influence on how people practice in the field. Reflection mediates personal repertoires (consisting of experiences, images, memories, schemata and understanding) and outcomes such as interaction with others, dialogue, and work with clients (Schön, 1982). Much of the literature considers reflection a problem solving tool (e.g., Boyd & Fales, 1983; Dewey, 1910/1997, Schön, 1982). A key goal of reflection is to encourage individuals to surface, criticize, analyze, and develop alternatives to tacit understanding, knowledge, and beliefs (Schön, 1982). Some consider reflection a "deliberate cognitive activity" with the "intention" of connecting thoughts, feelings, and experiences (e.g., Andrusyszyn &

Davie, 1997). On the other hand, Bruning, Schraw, and Ronning (1999) state that critical thinking is a reflective activity intended to better understand the nature of a problem, not solve it. Furthermore, Boyd, and Fales (1983) in their research with counsellors reported that participants described the beginning of a "reflective episode as an awareness that something does not fit, or does not sit right within them, or of unfinished business" (p. 106) such as forgotten memories, feelings, bodily sensations, dreams, or the unconscious; more like a 'vague awareness.'

Distance Education

Educational computer conferencing appeared in the early 1980s with theories emerging in the later part of the 1980s (Harasim, 1990). Computer-mediated communication (CMC) (Kaye, 1989) is changing the face of traditional classroom-based learning. Studies about e-learning consider this mode of education from the perspectives of students, course instructors, computer programmers, and educational institutions. And, there are many dimensions to consider when asssessing the efficacy of distance education programs such as the CMC learning environment, student outcomes and perspectives, and patterns of interaction. Literature draws attention to both the student-centeredness of distance education as well as the need for students to become more *responsible* for their own learning (e.g., Chen, 2001; Kao, 2001; Mezirow, 1997). Moore and Kearsley (1996) highlight the need in distance education for planned learning experiences due to the nature of the teaching and learning occurring in two distinct places.

Distinct from traditional classroom or campus-based education, CMC is "characterized by a clear separation in space and time of the majority of teaching and learning" (Kaye, 1989, p. 6). Open Universities use a variety of web-based learning tools

such as discussion forums, chat rooms, electronic mail, and bulletin boards. Collins and Dobbs (2001) highlight a central challenge in distance education, that of maintaining both a relational focus and opportunities for meaningful interactions among learners. Another challenge faced by distance education providers is the maintenance of a learning environment that fosters learner growth and development as well as an online persona or student-professional identity through exploration and communication of cognitive and affective domains (Jerry & Bryson, 2003; Jerry, Demish, & Collins, 2003a, 2003b).

Modes of communication are either asynchronous, a delayed-time messaging form of CMC where information can be entered at any time (e.g., e-mail, threaded discussion boards, and newsgroups), or synchronous where communication is real-time such as chat systems. Studies about online learning environments hypothesize that asynchronous CMC contributes positively to adult learning due to its convenience, flexibility, and ability to revisit permanent electronic discussions and postings in order to reflect on personal meaning and learning from shared knowledge and experiences (e.g., Andrusyszyn & Davie, 1997; Hara, Bonk, & Angeli, 2000). In comparison, the amount of information available can be overwhelming to students, and, as well, students juggling family, work, and education may find it difficult to devote time to more in-depth review of information (Andrusyszyn & Davie, 1997).

Transactional Distance and the On-line Learning Environment

Chen (2001) purports that the concept of *transaction* was derived from John Dewey and developed by Boyd and Apps (1980), who define it as "the interplay among the environment, the individuals, and the patterns of behaviours in a situation" (p. 5). Much of the literature about distance education refers to *transactional distance* because

there are many factors aside from geographical distance that affect the educational experiences of distance students (e.g., Chen, 2001). Strategies for dealing with transactional distance fall into two clusters: dialog and structure. Moore and Kearsley (1996) define *dialog* as "a term that helps us focus on the interplay of words, actions, and ideas and any other interactions between the teacher and learner when one gives instruction and the other responds" (p. 201). *Structure* deals with the rigidity or flexibility of elements in the instruction (Moore & Kearsley, 1996). Moore (1989) defines three types of interaction in distance environments as: learner-content, learner-instructor, and learner-learner.

Transactional distance (a function of the variance in dialogue and structure as they relate to each other) is seen to decrease when dialogue increases and structure decreases (Saba & Shearer, 1994). Interested in testing Moore's theory of transactional distance, Chen (2001) administered a 23-item five-point Likert-scale questionnaire to 82 students enrolled in the same online course. Four independent variables were measured: learner's skill level in using the Internet, learner's previous experience with distance education, type of learner support, and the extent of online asynchronous interaction. Chen (2001) found an inverse relationship between learner-perceived transactional distance and skill level in using the Internet and the extent of online asynchronous interaction. That is, the stronger the skill, the less transactional distance. However, transactional distance was not affected by either learner's previous experience with distance education or learner support.

Fahy, Crawford, and Ally (2001) analyzed interaction patterns (e.g., "questions, statements, reflections, engaging comments [scaffolding], and quotations/citations," p. 1)

in order to measure the intensity or depth and persistence of online interactions. In their study, structure refers to the number of online members, to the links per member (density), and to the intensity or responsiveness and attentiveness of members to each other. Content refers to the information exchanged in interactions and participant perceptions. The researchers concluded that level of 'connectedness' among online participants was reflected in the number of posts to the widest variety of people. As well, topical progression, or the number of threads per main topic, indicated depth of online interactions. However, this study does not consider other dimensions of distance learning such as quality of posts, depth of discussion, elements of reflective learning, or displays of affect. Quantity of posts does not necessarily indicate 'connectedness.'

Hara et al. (2000) investigated how students interact online in a student-centered environment, and more specifically, how "electronic environments encourage higher-order cognitive and metacognitive processing" (p. 116). Moreover, the study was interested in exploring how online discussion fosters student social interaction and dialogue. Building on Henri's (1992) criteria for online content analysis, the researchers conducted an investigation of twelve weeks of electronic discourse. Henri's model of content analysis has five key dimensions, namely, (1) participation rate (e.g., raw number and timing of messages); (2) interaction type (e.g., direct response); (3) social cues (e.g., "What a great discussion so far..."); (4) cognitive skills (e.g., judgment, depth of processing); and (5) metacognitive skills and knowledge. More concerned with the categorization of text than the process of communication or specific speech acts, they added to Henri's model of message interactivity (e.g., explicit, implicit, and independent commenting), by tracking the patterns between online messages as a way to code

metacognitive skills such as planning, regulation, evaluation, self-awareness, and reflection. By structuring learning activities, students have more time to reflect on course content "and make in-depth cognitive and social contributions to a college class than would be possible in a traditional classroom setting" (Hara et al., 2000, p. 140). Students tended to use the online environment for planning and discussing course topics and weekly questions, however, the study is not clear about how students achieved higher order 'metacognitive' skills such as reflection or critical thinking. As well, the study does not elaborate on how the participants learned from one another. It would be helpful to know the type of virtual environment created by the participants.

A major theme in the literature is the community or collective nature of learning. This type of learning environment is thought to reduce transactional distance. "For Dewey, experience is always social, such that a person is never an individual only. Nor is a person merely social" (Clandinin & Connelly, 1991). Group discussion often fosters reflective learning. Over five years from 1983 to 1988, Mattingly (1991) investigated what she calls "two action research studies" in which professionals [project officers and occupational therapists] recounted workplace stories and analyzed them in order to investigate underlying values and assumptions. She concluded that differing perspectives become a learning tool, and that it is helpful to transfer this learning to work with clients, or to become "researchers in their own practice" (Mattingly, 1991). In comparison, sharing the self with a virtual *audience* is a process that lends itself to people understanding their own perspectives, as well as those of others (Diamond, 1991). The sense of being *networked* to a virtual community has been linked to a collaborative, cocreation of knowledge, awareness, and meaning (Andrusyszyn & Davie, 1995, 1997;

Boud et al., 1985a, 1985b). "Students and instructors can then build meaning, understanding, and relevant practice together...." (Jonassen, Davidson, Collins, Campbell, & Haag, 1995). Boyd and Fales (1983) point out the need for personal growth and the testing of this development. They suggest doing so "against the mirror of others [as] an essential component of all growth" (p. 112). Irving and Williams (1995) conjecture about the need for counsellors to be mindful of the responses of others because it is in this way that "we see ourselves" and that "reactions to our behaviour are mirrors of our own actions" (p. 113).

Qualitative and Quantitative Studies about Reflection

"Reflective experiences, commonly used in traditional classroom courses to help learners gain conceptual clarity and enhance metacognitive awareness can help learners maintain or improve attention and facilitate meaningful learning" (Andrusyszyn et al., 2002). To test this notion, these researchers randomly assigned 56 graduate students in various disciplines enrolled in online graduate courses to an intervention or control group. In addition to self-administered questionnaires at three time points and an online interview at the end of their course, the intervention group engaged in reflective activities such as journal writing and the posting of 'stimulating' questions by professors and peers. No statistically significant findings were found and the researchers concluded this may be because both groups were already engaged in personal strategies to 'help them reflect and gain conceptual clarity' and that the self-selected participants were already highly motivated learners.

In another similar study, Andrusyszyn and Davie (1997) conducted a qualitative study to examine reflections of online graduate students who engaged in 'interactive

reflective journal writing with a course instructor.' The purpose of the study was to generate learner-driven themes about their experiences. Three main themes emerged, namely, reflection as a personal process, as synthesis, and as a dialogical process.

In a follow-up study by Liimatainen et al. (2001), 16 nursing students videotaped health counselling sessions and then participated in stimulated recall interviews involving 14 open-ended questions. Coding schema was used derived from a variety of reflective frameworks, including Mezirow's levels of reflection. The coding schema used seven levels of reflection: (1) Reflectivity: awareness, observation, description; (2) Affective reflectivity: awareness of feelings; (3) Discriminant reflectivity: assessment of decision making process; (4) Judgemental reflectivity: being aware of value judgements and the subjective nature of these; (5) Conceptual reflectivity: assessment of the need for further learning; (6) Psychic reflectivity: recognizing the habit of making judgements based on limited information; and (7) Theoretical reflectivity: awareness of the limits of routine practice, learning from experience, a change in perspective. Levels 1-4 represent consciousness or 'how' questions concerning process and content. Levels 5-7 represent critical consciousness or 'why' questions looking for reasons and consequences of perceiving, thinking, or acting. Findings showed that half of the participants achieved 'critical reflection' when evaluating their videotaped client sessions and half demonstrated a level of 'consciousness' in terms of reflection.

A pilot study, part of a larger research investigation about the role and effects of reflection in educational CMC courses, was conducted by Andrusyszyn and Davie (1995). Graduate students were asked to recall and analyze their contributions to a course on program evaluation. Five online interviews were also administered. Participants were

encouraged to approach their study involvment from a personal 'frame of reference.' Data was analyzed using qualitative data analysis software known as NUD.IST (Nonnumerical Unstructured Data, Interpreting, Synthesizing, Theorising, 1994). Andrusyszyn and Davie (1995) analyzed the reflective papers of 10 participants and summarized the common themes into three categories: learning, collaboration, and risk. Based on participant feedback, the researchers concluded that "[t]he opportunity to apply new understandings to a meaningful personal context became powerful tools for the construction, synthesis, and internalization of new knowledge. Intensive study of the way in which ideas emerged and expanded over time through reflection was helpful in solidifying confidence and understanding" (p. 14).

Although this next study is classroom-based, it exemplifies research outcomes that differ markedly from many of the results found in the reflective experiences of students and faculty of distance education programs. Stewart and Richardson (2000) conducted a longitudinal study with a purposive sample of 22 undergraduate students, who had completed their first year of undergraduate studies, using focus groups and individual interviews. Faculty members were also interviewed. While they do not dispute the need for therapists to be 'reflective practitioners,' they do question whether or not reflection should be taught and assessed at the undergraduate level. The researchers contend that despite the well-documented view suggesting that reflective practice 'helps remediate the theory-practice gap,' they argue that there is no evidence indicating whether reflective professionals are more effective in their work than non-reflective colleagues. At the School of Occupational Therapy and Physiotherapy at the University of East Anglia, reflective practice is introduced to first year students in the forms of workbooks, portfolio

tools, learning logs, critical incident analysis tools and procedures, and two reflection assignments. Progressive sampling, coding, and categorization of transcribed tapes were checked with participants two times. Themes were generated and discussed by the researchers and participants. Participants viewed the draft findings report. The researchers used assignment mark sheets, annual course evaluations, and student fieldwork reports to further address validity. Participants reported that they found the assessment of personal reflective processes in the form of two assignments both anxiety-provoking and at odds with their ideas about reflection. That is, the participants reported that two products or papers do not accurately or sufficiently represent their personal processes of reflection. In addition, the participants stated that those who wrote well about reflection may not necessarily have experienced the process of reflection. Lastly, participants reported feeling vulnerable about disclosing personal information during their first year of studies for graded assignments. They indicated that sufficient trust had not yet been established.

This next qualitative study about the reflective practice experiences of 11 teachers of diploma nursing students at two schools in Ireland used 'intensive' interviews and conducted analysis of data based on Glaser and Strauss' grounded theory (Glaser & Strauss, 1967; Glaser, 1992). O'Connor, Hyde, and Treacy (2003) state that the rationale of their study was to explore the meaning, perceptions, and experiences ascribed the concepts of *reflection* and *reflective practice*. Purposive sampling was used to select teachers who had been teaching for two years in the field and who were actively using the process of reflection with their nursing students. An interview guide was used and all interviews were conducted in private rooms and audio taped. Codes were assigned to units of meaning in order to formulate clusters of meaning and then categories.

Credibility was established through the use of participant excerpts and ongoing consultation with experienced supervisors. Findings indicated the integration of various themes into four categories, however, the study is not clear about what these are and only reports two categories or 'two principle constructions': "(1) Reflection and reflective practice as a way of reviewing clinical experiences; and (2) Reflection and reflective practice as a way of valuing, developing and professionalising nursing practice knowledge" (p. 110). The data revealed that the participants perceived the process of reflection as involving both 'cognitive and affective dimensions' and that this seems consistent with reflective learning theories, such as those espoused by Boud, Keogh, Walker, Schön, Mezirow, and others (O'Connor et al., 2003). Participant views about reflection varied from reflection as a process, problem-solving tool, and outcome to reflection as a self-validation of feelings, thoughts, and attitudes. The participants considered reflective practice a key way to learn from the affective domain and to transfer this learning into the field by establishing trust, care, and attention to the needs of patients.

Considering the development of a 'counsellor' identity, Marshall and Andersen (1995) interviewed five graduate students enrolled in an off-campus or distance M.Ed. program in Counselling. Goals of this investigation were: (a) to have counsellor trainees relate how they experience their development, (b) to see whether counsellor trainees would spontaneously report specific instances of counsellor identity, and (c) to test the methodology for a larger study. Only one open-ended question was asked: "What is your experience of the process of becoming a counsellor?" Interviews lasted 60 to 75 minutes and were audio taped and transcribed. All participants recounted their experiences as a

chronology of experience or narrative. Some of the shared themes that emerged included a sense of increased confidence and willingness to take risks, a sense of increased competence, and expanded knowledge and skill level.

Schwier and Balbar (2002) were interested in comparing synchronous and asynchronous CMC with seven graduate students taking an educational communications and technology theory course. A one-hour weekly chat session in the year-long course occurred. Most of the students taking this course were part-time students with full-time career and family responsibilities and many of the students lived in rural communities. The rationale for piloting the weekly chat sessions was instructor observation that the monthly (Friday evenings and all day on Saturdays) in-class sessions for the course were not 'promot[ing] the kind of vibrant interpersonal engagement that is necessary in a good graduate seminar, especially for this kind of course content.' Other concerns included lengthy in-class sessions of challenging content, intellectual saturation, time management constraints, and student fatigue at the end of the week. The researchers note that participant skill level was high due to the nature of their graduate work. Graduate students organized and moderated the weekly online sessions with ongoing involvement of the instructor. Participants received readings and key questions in advance of the online lesson. Participant reports indicated the importance of regular participation in the chat discussions and the utility of chat logs for future reference due to the interrupted nature of chat rooms. Participants highlighted the convenience of CMC, the sense of 'community' and 'safety' in the chat rooms. Some participants found the volume of typing difficult due to poor keyboarding skills. The researchers pointed out that the success of the chat rooms depended on the content chosen and moderator and instructor planning activities.

Concerned about the "scarcity of readily usable instruments to determine whether students engage in reflective thinking and, if so, to what extent," Kember et al. (2000, p. 381) developed and tested a measurement based on the constructs found in the reflective thinking literature, particularly those of Mezirow. The researchers developed a four-scale 16-item instrument measuring four constructs: habitual action, understanding, reflection, and critical reflection. They indicate the scales are valid "because they were derived from a well-established literature on the nature of reflective thinking" (p. 392). The final version of the Reflection Questionnaire was tested with a sample of 303 students from eight different classes in a health science faculty. While other qualitative studies by Kember et al. assessed reflection through analysis of reflective journals, they note that not all courses incorporate journal writing and yet most courses require some level of reflective thinking (Kember et al., 2000). The researchers acknowledge that there is an affective dimension to developing reflective thinking however chose not to measure this dimension. The first trial version was tested using 350 students from a university in Hong Kong. Over four trials, cronbach alpha values for each scale were used to determine reliability and factor analysis was performed. Alpha coefficients for reliability for the four scales ranged from 0.621 to 0.757. A shortfall, as noted by the authors, is the potential that a test based on an academic sampling population may need to be modified for use with practicing professionals.

Summary

This literature review about reflection as a process and practice in distance education started with an overview of transformative, educational, experiential, and reflective learning theories. An exploration of the distance education learning

environment featured the transactional distance model. Interaction patterns among the virtual environment, learners, and learner behaviours can either increase or reduce transactional distance, a major theme in this review. Future examination of influences on transactional distance is warranted. Computer skill level and familiarity with the Internet reduces transactional distance. A study about interaction patterns involving structure and content found that the more students post to discussion threads and get involved with other learners, the less they will experience transactional distance. Furthermore, it seems that structured learning activities facilitate greater student involvement, increase reflection, and decrease transactional distance. Another major theme that emerged is the importance of students feeling connected to a learning 'community.' In virtual settings, classroom-based settings, workplace settings, and in practicum settings, students and workers value group discussion and feedback. Learning from others is an important element of reflective learning. This type of relational and experiential learning demonstrates how theory and practice merge. Additional studies about how students practice reflective skills in practicum settings and how they use reflective tools when working with clients would augment the existing literature on how theory and practice integrate in meaningful ways for learners. In addition, since there does not appear to be a clear conceptualization about how reflective learning occurs for students, research studies that combine qualitative and quantitative methodology might be helpful. Kember et al.'s (2000) Reflective Questionnaire combined with descriptive, interpretive, and narrative approaches to research design may provide additional insight. Since researchers seem to agree that reflection is a process that evolves over time, longitudinal or follow-up studies

tracking the reflective learning experiences of students over longer periods of time would add to the existing literature.

The emergence of distance education throughout the world brings unique challenges to reflective learning. Adult distance learning is highly self-directed and relies on students' abilities to learn from others, from their experience, and from instructors. What seems clear from the literature whether the learning environment is virtual or classroom-based is that reflection combines cognitive, affective, and behavioral dimensions. For example, students asked to write reflective papers did not feel equipped with what they considered to be critical elements of reflection – trust, risk-taking in a safe environment, opportunities to explore feelings, and an ongoing process of reflection versus independent points in time. It is interesting to contrast these experiences to learners' in virtual settings where reflective activities are a more regular part of the program such as weekly chat room discussions. Other factors that seem to foster reflective learning include a sense of learner empowerment, a sense of control over learning, and a sense of community.

Concluding Remarks

While it is known that CMC enhances reflection, empirical studies that focus on how electronic learning environments facilitate reflection are limited. What seems clear from the literature is the need for ongoing exploration and assessment of reflection as a learning process and a skill used in the field. This is especially the case for students working directly with clients in capacities such as counselling. The ability to transfer reflective processes into their work with clients seems paramount. Graduate counselling programs that combine distance and on-site practicum learning must continue to evaluate

program efficacy based on the experiences, perspectives, and ideas from both students and faculty. If practitioners are to be effective in the use of reflection as an intervention tool, then knowing what it is, what it means to them personally, and how to do it is essential. "Naming (Nystrand, 1977) and valuing the process are the first steps" (Boyd & Fales, 1983, p. 113) followed by ongoing invitations for "critical social consciousness to examine one's personal theory of counselling" (Wong-Wylie, 2003, p. 134).

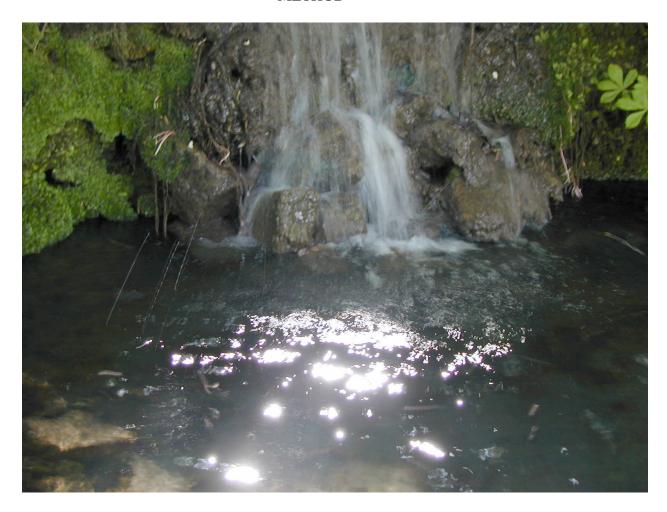
As distance education programs continue to evolve, enhancements to the learning technology requires continual student and faculty evaluation and narrative of personal experiences using it. Future research into how technology may be used in conjunction with counselling interventions may further the development of integrating theory and practice. Expanding the therapeutic work of Murdoch and Connor-Greene (2000), who investigate the use of reflective homework via e-mail assignments, seems a natural progression of reflective process and could even help bridge the emerging technology gap between users and non-users of computers, the Internet, and e-mail. Davenport and Lintern (2001) and Lintern (2001) discuss how the role of counsellors is changing and will continue to change over time through online learning and bringing technology into the counselling context.

Ongoing research about reflection may also illuminate how students come to develop a professional identity, how they integrate personal and professional selves, and even how they embark on decision-making processes about areas of specialization and areas of needed growth. This is not unlike a counselling context wherein clients are challenged by transitions and questions about self identity. Lifelong learning is here to stay. People's lives are becoming no less busy. Adult learners continue to want control

over their learning, they continue to thrive in empowering environments, and strive to find a balance among their family, work, and school roles. As a result, ongoing investigation into CMC, distance education, and reflective learning may help fill the gap in available research, but, more importantly, research results may provide educational institutions the information they need to enrich the learning experiences of students.

CHAPTER III

METHOD



The Tale of Triangulation:

Listening to others on the journey and mapping what we found

Method

Researcher's Journal Note

The selection of a method I felt suitable proved to be a very interesting journey all on its own. I wanted a method that would mesh with my philosophical framework, counsellor-researcher paradigm, and the study of reflection. I was challenged personally and professionally on many levels. First, I wanted to embrace my passion for the study of lived experiences, discourse, and how humans process information. Next, I wanted to somehow use asynchronous on-line communication as a parallel process that mirrored the existing learning environment for the co-researchers. And, lastly, I wanted to create sufficient credibility to lend credence to the development of a preliminary model. The debates I had with myself! Joining qualitative on-line discussion groups was helpful, supportive, and reaffirmed my belief in virtual communities that transcend time, place, and communication barriers. The freedom to share viewpoints, embrace diversity, and learn about myself through these dialogues among people from all over the world continues to be invigorating! Again, I noticed the blending of my personal and professional identity and how theory and research were woven into these identities.

Introduction

This qualitative study embarks on an exploration of graduate students' perceptions, conceptualizations, and experiences related to their personal process of reflection and counsellor practice. Overall research design and methodology is a combination of heuristic, naturalistic, and grounded theory approaches to exploratory, descriptive research (Denzin & Lincoln, 1998; Douglas & Moustakas, 1985; Erlandson, Harris, Skipper, & Allen, 1993; Glaser & Strauss, 1967; Guba, 1978; Holstein &

Gubrium, 1994; Lincoln & Guba, 1985; Moustakas, 1990; Strauss & Corbin, 1998). The primary researcher, a student in the same distance education program as the participants, acts as a co-researcher, collaborator, and interpreter in the interactive research process. A comparison of data analysis software (Barry, 1998; Miles & Huberman, 1994; Schwandt, 1994) led to the selection of ATLAS/ti 5.0 (2002) as an appropriate fit for the research questions, data collection procedures, and analysis techniques (Eisenhart & Howe, 1992) of this study.

Participants

Purposive sample selection (Erlandson et al., 1993) was used. Students enrolled in the same distance graduate program in counselling volunteered for study participation by responding to a recruitment notice (Appendix B) posted in the program's web site. Five university graduate students (5 women, mean age = 37.6 years) volunteered to participate. One of the five participants is the primary researcher. Three participants were in their third year of studies and two in their second year of studies. Third-year participants began the program in 2002 and second-year participants began the program in 2003. All participants reside in Canada. One participant resides in British Columbia, one resides in Saskatchewan, one resides in Alberta, and two reside in Ontario. All volunteers were paid for their participation and were treated in accordance with the Athabasca University Research Ethics Board ethical guidelines (Athabasca University Research Ethics Board, 2003). Hereinafter "participant" will be referred to as "co-researcher."

Materials

Throughout the study, reflexive journal notes were maintained. A sample of these journal sheets appears in Appendix G. Another form of journaling was the use of a digital

camera to capture thoughts, feelings, and ideas in photographic form. The camera used was a Casio 4.0 Mega Pixels (QV-R40). Images taken with this camera can be converted to a JPEG (Joint Photographic Experts Group) file format that is easily inserted in Word files. A Toshiba Satellite laptop computer fully equipped with virus and firewall protection was used to maintain confidential journal and project notes, all research project documentation, co-researcher responses, and project write-up. This computer is equipped with a registered 2002 version of Microsoft Windows XP.

A research web site hosting the on-line discussion forum provided access to all coresearchers at any time during a 14-day period. Text from a 14-day on-line discussion forum was used. A total of 184 posts in this forum were comprised of eight posted research questions, 167 co-researcher responses, and nine miscellaneous interactions. All text analysis relates to these discussion forum posts. The nine miscellaneous posts were not used in any of the text analysis. Serving as raw data, all text was saved in Word format files and later converted to rich text files. ATLAS/ti, version 5.0, (Atlas/ti, 2002) software was used to code and interpret the text data. A software manual titled, ATLAS.ti The Knowledge Workbench: V5.0 User's Guide and Reference (Muhr & Friese, 2004), was used in conjunction with the software. A CD-version of ATLAS/ti v5.0 was used to load the software onto the primary researcher's computer. Microsoft Excel software was used to generate figures such as pie charts to illustrate constructs such as groundedness and density.

Design and Procedure

To ensure the reliability of the data recordings, verbatim transcripts, researcher journal notes, raw data including notes made on transcript printouts were maintained

throughout the study comprising a type of "audit trail" (Erlandson et al., 1993).

Credibility was ensured in two ways. Analyses proceeded directly from the data (Lincoln & Guba, 1985; Miles & Huberman, 1994) and a research supervisor well-versed and experienced in understanding the content and context of participant responses was selected. Appendix C provides a summary of how the equivalents of validity and reliability were established (Erlandson et al., 1993; Lincoln & Guba, 1985).

On-line discussion forum. Prior to co-researcher involvement, co-researchers were requested to complete an on-line electronic Informed Consent Form (Appendix D) and an on-line Demographic Sheet (Appendix E). Co-researchers logged in to a discussion forum by entering a user name and password to ensure confidentiality. The primary researcher posted eight initial questions (Appendix F) to generate discussion in the asynchronous discussion forum. The discussion forum operated for fourteen consecutive days with postings occurring whenever convenient for the co-researchers. Co-researchers were free to post any number of responses to the eight questions, could generate new questions, and could respond in any order. As well, co-researchers could respond to each other's postings at any time during the fourteen days. A specific discussion forum posting titled, Our Discussion Forum Format, was made in response to co-researchers' questions about interactivity, generation of ideas, the role of co-researchers, and the overall discussion forum expectations and format.

Primary researcher reflexive journal. Daily, the primary researcher maintained journal records. A sample of these reflexive journal sheets appears in Appendix G. These notes were typed at the end of each day of the study including the day following the 14-day study period in order to record overall thoughts and feelings about the study. The

journal notes served to capture ideas about emerging themes, semantic patterns, feelings, and attitude. In addition, the journal sheets were used to record ideas about emerging concepts, questions, and points of clarification to post the next day.

Bi-weekly thematic summaries. On both the eighth day of the study and on the fifteenth day, a summary of emerging themes was posted to the discussion forum by the primary researcher. Co-researchers were invited to confirm these themes, add new ones, and recommend revisions. Further analysis of the data was done using a constant comparative methodology (Glaser & Straus, 1967; Lincoln & Guba, 1985). Dominant thematic categories were created followed by associated sub-categories. This method involved reviewing and interpreting all documents: discussion forum printouts, miscellaneous notes, and journal sheets.

Themes by co-researcher. In preparation for the member check on-line discussions, a 14 x 11 inch chart was created for each co-researcher's responses, including the primary researcher's responses. A column for each of the eight research questions was created. Each co-researcher's responses were reviewed on average three times. Dominant themes, sub-themes, key words, key phrases, and noted patterns were recorded in the table based on the research question the co-researcher was responding to in the discussion forum. Once a table was completed for all five co-researchers, between 7-10 clarifying statements and/or questions were generated for each co-researcher. These clarifying statements were intended to summarize major thematic patterns elicited by each co-researcher's responses in the discussion forum and to verify the accuracy of the primary researcher's interpretations of these responses. During private on-line

synchronous chat discussions, co-researchers were continually invited to verify, change, add, or delete any of the findings.

Member checks. Following the 14-day on-line discussion forum period, the primary researcher e-mailed each participant individually to arrange a one-on-one discussion in a private chat room. These chat rooms are a part of the graduate program's web site and are accessible only to program students and faculty. Once a co-researcher and the primary researcher logged in to a private chat room, the primary researcher reviewed the purpose of the member check dialogue, and invited questions and any needed clarification about the member check process. The primary researcher typed the first clarifying statement, as prepared using the co-researcher theme chart. The coresearcher and primary researcher then dialogued about the statement until consensus about meaning occurred. The second clarifying statement was typed by the primary researcher and the same process occurred. This process was followed until each of the questions/statements was discussed. Once all clarifying statements were discussed, each co-researcher was invited to add statements and ask questions. The primary researcher invited the co-researchers to e-mail any additional ideas or questions at any time. All coresearchers were thanked for their participation, time, ideas, and the sharing of experiences.

Data preparation and collection. In ATLAS/ti, a hermeneutic unit is created for each project (Muhr & Friese, 2004). One unit was created for the current study. Next, the creation of *primary documents* occurs (Muhr & Friese, 2004). A total of 18 primary documents were created. These included one rich text document for each of the 14 days of the study and four rich text documents for each of the co-researcher member check

chat logs. Word files were converted into rich text files for each of the 18 primary documents. These documents contain all of the text data. In order to code the primary document text, the creation of codes was necessary. As recommended in the ATLAS/ti user manual, keeping codes succinct aids in the coding of primary text documents. To this end, all codes created were one word in length. A total of 60 codes were created. Words, phrases, sentences, paragraphs, and multiple paragraphs for all 18 primary documents were coded using the 60 codes. In many cases, more than one code was used to code the same segment of text. Each time a segment of text was coded, a *quotation* was formulated by ATLAS/ti (Muhr & Friese, 2004). A total of 1,275 quotations were generated. As a result, banks of quotations build for each code.

Using ATLAS/ti, 20 code families were created based on constant comparative methodology of emerging patterns and themes among codes. The ATLAS/ti manual (Muhr & Friese, 2004) describes code families as, a way to "sort codes into named sets or groups" (p. 202). Hereinafter, code families are referred to as 'theme units.' A list of theme units and linked codes appears in Appendix H. A theme unit for each of the eight research questions was necessary in order to generate thematic patterns related to the specific questions about reflection. These research questions begin the theory and model building process of the study. Using software query tools and functions allowed for the generation of reports and diagrams to illustrate various thematic and semantic relationships.

CHAPTER IV

RESULTS



At this moment in time the images stand still,

The next snapshot will diverge somewhat from the original

Results

Researcher's Journal Note

At some point, the text and its interpretations needs to stand still long enough that a sense of groundedness, while maintaining malleability, occurs. Not unlike a blade of grass on a windy day, the direction will change depending on the strength and direction of the wind and the location of the grass. Should future testing of the preliminary model occur, I must remain flexible and open to possibilities while at the same time knowledgeable about the theory and research surrounding reflective practice.

Introduction

This chapter discusses the results of the study in various phases. There are two main phases and these include: (1) preliminary thematic patterns following the 14-day discussion forum and individual member checks; and (2) thematic relationships generated from textual analysis using ATLAS/ti.

Phase 1: Preliminary Thematic Patterns

Following the first week of on-line discussion, the text was analyzed using constant comparative methodology. Five primary thematic categories were generated: (1) daily living; (2) professional development; (3) problem-solving tool; (4) ethics; and (5) interaction. Examples for each of these categories are provided in Table 1. Following the second week of on-line discussion, the text for the second week only was analyzed using constant comparative methodology. Three primary thematic categories were generated: (1) bridging personal and professional identities; (2) interventions, tools, and presenting issues; and (3) learning tools. Examples for each of these categories are provided in Table 2.

Thematic patterns for week 1 discussion forum. During the first seven days of the on-line discussion forum, five primary thematic categories emerged. Co-researchers explored what reflection means to them personally. This exploration involved personal examples drawn from a variety of life roles including student, counsellor, mother, spouse, and researcher.

Daily living theme. As co-researchers explored what reflection means to them, how it helps them, and how they use it, an image of it ebbing and flowing in and out of daily life became apparent. It is as though it is present as a type of entity unto itself that can be beckoned when needed. In fact, one co-researcher personified reflection referring to it as a "friend." In contrast, reflection is not always so controllable or present in a conscious way. For example, a discussion thread compared reflection to memories that generate on their own and to the state of dreaming. "I find dreams very meaningful and generally indicative of things going on in my life or something that I may not even be aware of...I believe our unconscious worlds are rich with meaning, symbols, metaphors, and are powerful ways to help us if we tune in to them."

One posting in particular started an ongoing discussion about the dichotomous nature of reflection. On the one hand it facilitates self exploration and can be used to help resolve life issues, and, on the other hand, it can be a hindrance to well-being. The next posting from one of the co-researchers captures this duality:

Reflection can be either purposeful or spontaneous. As a counsellor, I am definitely more purposeful and aware of reflection. However, I have moments where I reflect and it is not planned but I still come up with some useful insights, thoughts, and creative moments. Spontaneous reflection can also be detrimental

for me as well. For example, someone else mentioned that reflection can increase anxiety for them. I experience this too so sometimes my goal is to decrease reflection, distract myself, and just live in the moment.

This dichotomy is later characterized in the coding process using ATLAS/ti as a code termed "opposites."

Contextual factors are important considerations and influence the occurrence of reflection. Environmental conditions are an essential ingredient for reflection. Optimal reflecting environments differed for each co-researcher with some common conditions as well. Negative conditions were identified as physical states such as fatigue and hunger; emotional states such as anxiety, fear, and distrust; and environmental contexts such as distractions or "too much simultaneous stimuli," unconstructive feedback from others, and too many conflicting life demands. Positive conditions were identified as physical states such as well-being, relaxed, and rested; emotional states such as feeling safe and comfortable, supported and loved; and environmental contexts such as engaging in pleasurable activities (e.g., walking, connecting with nature or being outdoors, meditation, yoga, listening to music, painting, and writing), spiritual connections, and supportive networks of others.

Professional development theme. The following from one of the coresearchers highlights the continuous nature of professional development and the multiple elements involved.

Counsellor identity development is an ongoing process for me. It develops through training, theory, context, work experience, life experience, contact with clients and personal reflection. I am constantly reflecting on what fits for me as a

counsellor and what fits for my clients. The theory of counselling that seemed to fit twenty years ago is no longer a good fit with my clients or myself. Society has changed, I have changed and theory is continuing to evolve.

Problem-solving tool theme. This theme brings to light the purposefulness of reflection as an action-oriented tool, one that is used to resolve past, present, and future issues. Co-researchers provided many personal life, work, and educational examples of when they called upon a reflective mind set to weigh options, consider alternatives, negotiate with others, and plan for future goals. As one co-researcher stated, "It helps me plan for the future and think about preferred goals, preferred way of being in the world, preferred way of practicing the art of therapy." Another co-researcher discussed how it helps her maintain balance in life by "better understanding what I need to keep away from."

Not only is reflection used to resolve personal and professional challenges and barriers, it is an essential process for self identity development. This process facilitates the exploration of personhood, life roles, a preferred self or one's "genuine" self. One coresearcher discussed how it helps her monitor her strengths, interests, and weaknesses, especially helpful for career planning.

Ethics theme. Consideration of life and work situations that require closer examination is conducted in both an individual and private way as well as in a social and interactive way. Contextual factors influence the selection of private or social decision-making processes. Early on and throughout the forum, discussion about the process of ethical decision-making while engaged in the role of counsellor occurred. Linked to this process is the need for supportive supervision and developmental opportunities, both

personal and professional. The ability to work through an ethical situation requires a blending of many dimensions that evolve over time, these are summarized as follows:

- A gradual building of knowledge, awareness, and understanding about self- confidence, self-concept, and personal values, beliefs, worldview, biases, and orientation to counselling.
- 2. The use of learning tools such as case studies, courses in ethics and multiculturalism, and the use of ethical decision-making models.
- Brainstorming and consideration of alternatives with others such as peers, mentors, supervisors, instructors, focus groups, and in-person and on-line course dialogues.
- 4. The skill of self-monitoring facilitates knowledge about internal and external triggers, what needs to be resolved, and how this may be accomplished.
- The skill of ongoing assessment with clients of relevant interventions, the pacing and timing of interventions, and special consideration for vulnerable clients.

In the words of a co-researcher,

Without reflection, it is hard to imagine that we would be able to empathize with our clients, and empathy is paramount to counsellor education. It also allows us to put things together for which there may not be a crystal clear connection – and make sense of some of the thoughts and feelings that belong to both us and our clients.

Interaction theme. Interaction as a theme contains multiple meanings.

First, it represents interacting with others in various life roles. Next, a strong theme of interaction patterns between past and present experiences was discussed by all coresearchers. As one co-researcher stated, "Digging up other times in my life when I had experienced the phenomenon, how I handled it and what the outcomes were." This back and forth movement between past experiences in a present day context becomes a trigger for reflection. In other words, evaluation of past problem solving facilitates the decision making process of how to resolve a present issue. Interaction also refers to helping others explore facets of their life. For example, a co-researcher indicated that "Reflection also means assisting my peers explore their values and beliefs and how this may impact their counselling."

Thematic patterns for week 2 discussion forum. During the second seven days of the on-line discussion forum, three primary thematic categories emerged. Discussion turned toward professional practice considerations, the role of counsellor, and counselling tools.

Bridging personal and professional identities theme. Co-researchers reflected on their various life roles such as co-worker, counsellor, intern, mother, partner, and student. This theme merges with the interaction theme. Relationships with others in various life settings triggers thought and emotion about events such as relational ruptures and one's role in these situations. These internally generated triggers tend to generate a need for resolution. Co-researchers also discussed the need to reflect on relational experiences in their counselling practice such as their work with clients and peers.

Overall, co-researchers believe that the sharing and discussion of personal life examples

facilitates professional growth. Development as a counsellor requires awareness and skill enhancement as an individual. A challenge seems to be how this is accomplished. "I have also noticed that I am integrating what I have learned from my course work and reflecting more on how I may apply it at work." Experiences from various personal and professional life roles integrate and generate identity development.

Interventions, tools, and presenting issues theme. Co-researchers shared their views about how reflection can be used as a counselling intervention strategy. "I think one of the roles of the counsellor may be to help bring reflection into awareness when it is not as well as to assist the client with healthy modes of reflection." Discussions about presenting concerns such as trauma and stress evoked some thought provoking ideas about the role of cognition and emotion when biophysiological reactions occur. According to one co-researcher,

Further, through this process [a traumatic event], memory and feelings about an event are sometimes stored in a manner not accessible through verbal means.

Also, an individual can react in the present to a previous event physically, emotionally, and cognitively without the purposeful goal of reflecting about it. Is this reflection? I guess it depends how it is defined. I think this is a type of reflective process.

This post highlights the dichotomous nature of reflective processes in that it is both an intentional intervention strategy and one that more naturally or spontaneously occurs. On the one hand a word, image, story during counselling can trigger a reflective process such as recollection of a past experience during the present moment. This reflective process is less purposeful or "forced" as some co-researchers commented. On the other hand, a

specific counsellor question or exercise can elicit a reflective action on the part of a client.

Reflection becomes a type of emotional and cognitive mapping of past, present, and future-oriented experiences.

Co-researchers stressed the importance of client-counsellor collaboration on the use of reflection as an intervention technique and ethical considerations such as informed consent. Counsellor training and supervision is essential for ongoing development of the "purposeful" and "guided" use of reflection as a strategy to help clients link past and present experiences through the use of memories, emotions, and sensory stimuli such as smells, touch, sound, and taste. Other dialogue about client presenting challenges emphasized the importance of a safe environment.

A sub-theme of a "container" or the ability to contain reflection is woven throughout the discussion forum. This need to contain occurs on a personal level for the co-researchers and at a professional level. In terms of personal containment, there seems to be a need to not reflect when health and well-being are compromised, when there is an unsafe environment, and when there is a risk of increased stress. Within the counselling realm, there is a moral and ethical need to not bring undo harm, stress, or risk of further emotional injury to clients. One co-researcher provided an example from her work facilitating foster parent workshops about grief and loss. She goes on to describe her use of reflection:

One of the activities that I asked them to do to assist reflection was to draw a picture that symbolized their feelings of grief and sadness. After that, we discussed containment and bringing the picture out for reflection in a time and place that they chose. I asked the participants to visualize where they would keep

their pictures for later reflection. The exercise went well and it was interesting to note the different difficulties people had. Many people had difficulty with the unstructured nature of symbolizing feelings through drawings and so needed extra reassurance and examples. Again, it reminded me of how individuals differ in their comfort with and their preferences for different methods of reflection.

In order to perceive the need to contain within the counselling context, counsellors require skills and sensitivity. Co-researchers stress the need for ongoing training, development, personal growth, supervision, and an understanding of reflection. What is less clear is how counsellors come to understand their personal meaning of reflection, theoretical models related to reflection, and reflection as a counselling intervention.

Learning tools theme. Discussions about learning included tools for practice and methods to enhance self-awareness as an individual and counsellor. As a student-counsellor, "it [reflection] helps us learn our boundaries in a constructive way – rather than suddenly encountering something incredibly uncomfortable in a counselling session...." Tools tended to group into three areas. These included writing tools, visual tools, and sensory tools. Writing tools included journal notes (or "thought logs"), letters, on-line discussion posts, stories, pro/con list, and chat logs. Visual tools included photographs, movies, an object with personal meaning, a nature scene, and a mental image. Sensory tools included music and aromas. Representing a type of reflection loop these learning tools also serve as reflection triggers. More specific learning tools such as training workshops, volunteer training, and workplace training, development, case studies (especially ethical case studies), ethical decision making models, team work such as peer

interviews, courses in counselling theory, and supervision also cluster within this theme category.

Phase 2: Thematic Relationships

The second phase of text analysis involved generating groundedness and density associated with thematic units. The software designers define *groundedness* as "the number of quotations to which each code is linked" (Muhr & Friese, 2004, p. 22). The larger the number of linked quotations, the stronger the evidence that the code is a theoretically grounded concept. They define *density* as the number of codes connected to other codes. These connections represent thematic and semantic relationships among concepts. When a code has large numbers of other codes connected to it, it can be interpreted as a high degree of theoretical density (Muhr & Friese, 2004). This type of *connectivity* or density of *code neighbors* is evidenced when *code families* (hereinafter referred to as "thematic units") are created. In the current study, 60 codes were combined due to thematic relatedness to create 20 code families or thematic units. Appendix H outlines the 20 thematic units and associated codes.

Thematic units. The 20 thematic units (Appendix H) were developed as the result of three activities: (1) thematic relatedness of codes based on number of linked codes, number of quotations linked to each code (Table 3), and other ways of linking data using ATLAS/ti data connection formulas; (2) themes generated during Phase 1 of discourse analysis; and (3) constant comparative review of all code words used to code all ATLAS/ti primary documents. During this phase of the analysis, the main thematic categories of *counsellor identity*, *personal identity*, and *bridging of counsellor and personal identities* emerged. The overlap in themes or codes between *counsellor* and

personal identities is substantial. For example, the code or theme of 'ethics' is unique to discussions about counselling. Codes or themes such as 'family,' and 'hobbies,' are unique to discussions about personal life.

thematic units is assigned a value related to groundedness (number of quotations linked to a code) and density (number of codes related to other codes). Figure 3 depicts these values in a way that illustrates volume of groundedness and density for each thematic unit. Groundedness is represented by the large circle and density is represented by the small circle. As represented in the two circles, the larger the colored segment, the larger the groundedness or density. Thematic units with the largest degree of both groundedness and density are (a) Bridging of personal and professional identities, (b) Triggers to reflection or knowing what gets you reflecting, and (c) Personal examples or experiences. Recognizing personal, work, and client interactions that generate a need for reflection seems to be a precursor to reflection. Use of personal work and life examples helped coresearchers describe their experiences of reflection, when it was necessary, and why they found it useful or less useful.

Thematic networks for research questions. Instead of generating a figure of thematic connectivity for each thematic unit, networks were formulated for the eight research questions. Figure 2 provides an example of these networks of theme connectivity. In this way, meaning and interpretation geared specifically to questions about reflection augment the development of a reflective practice model and an increased understanding of reflection as a unique construct. As defined by ATLAS/ti, nodes or code words that are blue represent density and those that are red represent (some appear in

orange/pink hues) represent groundedness. Table 4 summarizes grounded themes and the density of themes for each research question.

CHAPTER V
DISCUSSION - SYNTHESIS AND IMPLICATIONS



Bringing clarity from the current vantage point,

In the background is another view yet to be explored

Discussion: Synthesis and Implications

Researcher's Journal Note

Each phase of research seems to both clarify and ignite new questions or vantage points. Qualitative hermeneutics both thickens meaning and generates fluidity of meaning. The creation of a model that may be a useful personal and professional development and practice tool for counsellors needs to have both clear objectives and flexibility; flexible because each counsellor is unique. This surely mirrors the art of counselling in many ways. I am becoming increasingly cognizant of how important it is to blend personal and professional learning, practice, and theory.

Introduction

The key outcome of this study is the development of a preliminary Reflection Cycle Model. Figure 4 depicts this model. It builds on an earlier model (Figure 1) drafted during the first phase of the study. Consideration of this model in relation to research literature, computer-mediated learning experiences, and counsellor education highlights important considerations for the training of counsellors and their practice. These practice implications generate potential next steps for further study of reflective practice. New counsellor learning tools to help them develop ongoing methods for personal and professional self-identity development are needed. In turn, this type of practical application and development of self-awareness for counsellors builds essential counselling skills, such as reflective practice interventions.

Preliminary Reflection Cycle Model

This model includes four key Dimensions (Triggers, Mediators, Actions, and Outcomes). Even though it is predicted that change occurs as one progresses through each

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dimension, a set order is not necessary for a change to occur. Instead, because of the fluid nature of reflection, a change can occur during any of the four dimensions. Moreover, involvement in one of the dimensions may lead to involvement in another dimension.

Further discussion and exploration of this model links theory, practice, and research.

Dimension 1: Triggers

For the process of reflection to be set in motion, some type of trigger is necessary. This trigger may be an internal memory or external discussion of a past experience, present experience, or consideration of a future event. These triggers may be generated by internal thoughts and feelings or they may be generated through externally-oriented experiences such as conversations or on-line dialogue with others, and the reading of text. These conversations or interactions may happen in workplace settings, at home, or during on-line school activities.

Boud et al.'s (1985a, 1985b) model of reflection starts with a return to or recollection of an experience. Reflective learning, according to Boyd and Fales (1983) is triggered by an experience followed by an exploration of the concerning issue. How the reflective learning process unfolds, however, is less clear in these models. For Clandinin and Connelly (2000), narrative inquiry involves directional interactions that are *inward* and *outward*, *backward* and *forward*. *Inward* movement involves internal conditions such as feelings, hopes, aesthetic reactions, and moral dispositions. *Outward* movement involves existential or environmental conditions. *Backward* and *forward* motions involve temporality or past, present, and future. Personal reflection is akin to a personal narrative inquiry about some facet of life.

Like a stone that drops into a pool of still water, Dimension 1 Triggers interrupt or arouse our stillness of being. This initial phase of reflection communicates to our minds and bodies that something is different, perhaps new, and perhaps uncomfortable. As self-concept develops across the life span, some form of learning is underway. Paying attention to these triggers provides useful information about us. But what it tells us is often confusing. In some cases it is tempting to ignore these messages if they go against what we perceive to be 'reality' (Bills, 1981). A brief discussion of self-concept development will clarify the importance of noticing triggers. In a circular way, self knowledge is a prerequisite to knowing when the still water has been set in motion.

"The self-concept, like other concepts, is a set of rules for processing information; this particular set has a central regulatory function governing all information-processing and of monitoring sensory input" (Lynch, 1981). These *rules* include inborn survival tendencies, ongoing acquisition of language and meaning, defense coping mechanisms, and social evaluations by others. Various settings such as home, school, clubs, work, and neighborhoods, play a role in validating these rules, evaluating them, and changing them. The attainment of social acceptance "results in increasingly more dramatic shifts in empathic self-judgment, and a search for different and often more complex self-concept rules" for achieving social acceptance and independence (Erikson, 1968, cited in Lynch, 1981, p. 126).

In the present study, a similar dynamic between a private and public self was discussed by co-researchers. When a life experience (past or present) or emotional reaction was triggered by another student's post, a decision was made to either reflect in private or aloud in the discussion forum. Mediating factors facilitated this decision. As

Jerry and Bryson (2003) point out, distance learning environments provide the opportunity to experiment with the development of a *professional identity*. To some extent, past experiences with the processing of internal and external triggers guide how incongruence among rules are further processed. For example, a distance learner encouraged throughout life to be openly expressive may be more inclined to communicate self awareness and growth experiences online than a learner who is just beginning to explore the self and/or explore it openly with others.

Clients, too, are at various stages of self-awareness and willingness to share their public and private selves with counsellors. This understanding on the parts of counsellors is essential to practice. Depending on the stage, interventions and counselling styles will vary. The following summarizes some key points related to Dimension 1 Triggers:

- Internal and external triggering events provide opportunities for self exploration, for change, and for self concept development.
- Triggers operate like activating agents of feelings and thoughts held in memory.
- 3. Triggers or activating agents may generate the need to decide on a rule-bound behaviour or an *implicit belief* about one's relationship with the world (Canfield, 1990). This tacit knowledge can be questioned or it can be implemented in the absence of change or questions.
- 4. Dimension 1 events generate discrepancies among self-concept, self-beliefs, and the presentation of a persona to others.

5. Triggers evoke the desire to *make meaning* (Bray, Lee, Smith & Yorks, 2000; Mezirow, 1991) or draw connections so that knowledge and understanding might be attained.

Dimension 2: Mediators

Once a trigger has been activated, it does not exist in isolation or get processed in the absence of other factors. On the contrary, there tends to be one or more factors influencing what happens next with the trigger and these are called 'Mediators.' Mediators facilitate the decision-making process of the type of Dimension 3 Actions that occur. Based on the current study, environmental factors are highly influential to both personal modes of reflection and reflective practice. In order for personal or professional reflective processing to occur, individuals require a sense of safety. Moreover, if other basic needs have not been met or if physical well-being is lacking, reflective processing is challenged. Since reflection can be an emotionally laden process, a type of readiness to engage in this process is necessary. This has critical implications to counselling and the timing of reflective practice with clients. The personal value or meaningfulness that one attaches to a trigger has the potential to mediate the next steps or action taken. Closer consideration of mediating factors highlights the influence and interaction of internal factors such as "emotional readiness" and external factors such as "environmental contexts."

Internal and external mediators. As Bruner and Kalmar (1998) discuss, the self is largely constructed "in an environment of its own making" and it becomes a product of "self-generated meaning making shaped to fit our growing conceptions of our Selves" (p. 309). They highlight that events are coded and filtered based on our perceptions of the

world. Self-construction is both interpretive and hermeneutic in nature and yet, at the same time, these interpretive self-lenses impose certain conceptual structures and potential barriers to meaning making (Bruner & Kalmar, 1998). In their analysis of the narrative construction of the self, they consider some nine domains that guide the development of *selfhood*. In many ways these domains act as mediators to self development. One such domain is *agency*. They describe agency as ranging from hesitation to expressions of intention and a need to weigh alternatives in *private consciousness*. Another domain they discuss is *commitment* to an "intended or actual line of action" (p. 311). Their third domain, *resources*, closely echoes the Dimension 2 Mediator of "Available resources and time." They differentiate between external resources such as "social legitimacy" and "information" and internal resources such as "patience" and "persuasiveness." In short, they posit that "cues about selfhood" (similar to triggers) are "mediated by some deeper, simpler system for processing cues about Selfhood" (p. 313).

Therefore, it appears that reflective processing of a trigger event bears elements of intentionality and self-directedness. A certain "readiness" to reflect is needed. If the timing or environment is not adequate, it seems as though the moment may be lost. Perhaps a commitment to continue the process at a later date links to an individual's desire to learn about the self. Moustakas (1969) writes about the *readiness to be* and says the following about what this could mean:

Readiness is simply this: the commitment, involvement, and presence of real persons, facing real problems and living through the pain and the joy of real learning. Readiness means meeting life as it emerges in all its ranges of depth and

intensity. It is not some abstract capacity that suddenly appears as motivation for learning and achievement....Rather, it is the willingness of the person to immerse himself in experience, to steep himself in the world, and to let unknown directions emerge (p. 38).

Moustakas' writing resonates with the present study because of the belief that an incorporation of real life examples into the learning process invites individuals to participate in metacognitive, deeper levels of learning that may not occur otherwise. As well, learning, thus, becomes personally meaningful. These opportunities to incorporate personal experiences into the learning process are particularly significant for counselling students who are striving to develop both a professional identity (including a personal counselling theory) and a heightened awareness of self. What becomes a challenge for online and classroom learners is the timing or the sense of readiness to embark on this identity journey of discovery, experimentation, introspection, and illumination. This journey is enriched when it is shared with others, and, as Moustakas states, "[g]enuine learning always involves dialogue and encounter" (p. 43).

Learning environments. Reflection, a form of self-learning, tends to occur when certain conditions are present. Co-researchers explored both their work and personal lives and provided personal examples of the absence of reflection and its presence.

Accordingly, there seems to be two types of reflection. The first type is characteristic of a problem-solving tool and as evidenced in the literature (e.g., Boyd & Fales, 1983; Dewey, 1910/1997; Schön, 1982). This type of reflective processing has a certain immediacy or need for resolution. The second type of reflection is akin to deeper level processing of information. Perhaps this is what Bruning et al. (1999) mean when they differentiate

problem-solving from reflective activity intended to better understand the nature of a problem.

For deeper level processing of information to occur, it appears from the current study that the mind and body need to be in a relaxed state. The link to distance learning environments and optimal reflective processing environments is an important consideration. In Hara et al.'s (2000) study of online discussion in an applied educational psychology course, they found that structured learning activities fostered "in-depth cognitive and social contributions" (p. 140). Could it be that some level of structure and planfulness decreased the stress that is often associated with new environments? Similarly, in the current study, co-researchers reported that learning tools such as journals, lists, case conference meetings, and course discussions about client cases/scenarios facilitates higher order learning. They note that specific tools help them pull together personal examples, theory, and practical working knowledge. If distance learning environments are to facilitate personal reflection and the sharing of personal growth experiences with peers, the learning environment needs to foster a sense of safety, trust, openness, respect, and collegiality. Reflecting aloud so to speak takes courage and confidence in one's learning environment. Responses from others become a mirror or a way for us to learn from others (Irving & Williams, 1995). The more learning becomes personally meaningful, the greater the impact on the learner and the greater the connections between personal, theoretical, and professional experiences. In fact, Andrusyszyn and Davie (1995) found that when they analyzed ten reflective papers to study the role and effects of reflection in educational CMC courses, meaningful personal context was a powerful reflection tool. In comparison, co-researchers in the current study

used personal examples or context to explore what reflection means to them, how they use it, and how it helps them. Personal stories ranged from past experiences to consideration of future goals.

Dimension 3: Actions

A theoretically dense theme in the current study as well as in the literature is action. Once the co-researchers in this study experience a trigger, some type of action occurs, even if it is a conscious decision to set aside the trigger and take no action (for example, pending changes in mediating factors). What co-researchers described as being most helpful to processing a trigger is exploration or problem-solving with others. This, they highlighted, facilitates a process of generating alternatives. Thus, this idea seems to suggest that having personal choice is important to problem-solving or decision-making. Even though each co-researcher is a student of counselling and enrolled in the same graduate program where personal reflection is encouraged, each co-researcher described personal preferences in terms of types of personal reflection tools and methods. Again, this is important to keep in mind when working with clients.

Self-directed learning. Critical theories of adult learning such as Mezirow's Transformation Theory consider the ways in which people act upon and negotiate individual and social meanings. If we consider Dimension 2 mediators such as values, feelings, and intent, or what Mezirow (1991, 1997) terms *frames of reference*, we come to understand how these mediators can be powerful influences on how people think, feel, and act. Self-directed action represents the learner's movement toward considering new points of view, new ways of feeling and acting. During the action dimension, people often realize new connections between thoughts and feelings or past and present that can lead to

increased self-awareness. In fact, some researchers (e.g., Andrusyszyn & Davie, 1997) view reflection as a *deliberate cognitive activity* with an *intention* of connecting thoughts, feelings, and experiences.

Self-directed learning whether conducted in a classroom, via asynchronous discussion boards, or a combination of both, entails learning from and with others. Coresearchers in the current study describe their distance education experience as one where various forms of interactions with others (e.g., peer support, research participant, and course discussions) help them generate alternatives, counselling resources, client intervention strategies, and self-knowledge. They commented on how the reduction of potential barriers to self reflection such as competing external stimuli (e.g., a classroom with various conversations and questions distract personal processing of thoughts) helps in the development of personally meaningful and useful approaches to reflection. Coresearchers indicated a need to feel safe in order to reflect in their personal, professional, and learning environments. Moreover, reflection to them involves some form of activity such as using personal tools (e.g., talking with others, listening to music, going for a walk, and writing in a journal), thinking about alternatives, or waiting to process the trigger at a later time when the environment is more conducive to reflection.

Meaning making. Attempts to make sense of the world seem to be a core reason for reflection. According to Mezirow (2000), Transformation Theory has a "crucial mode of making meaning: becoming critically aware of one's own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation" (p. 4). Moreover, this awareness or mode of learning can involve words, symbols, feelings, color, texture, and motion (Mezirow, 2000). In other words, meaning

making is not limited to text; instead, as co-researchers in the present study urged, they process triggers in various ways that work for them. During Dimension 3 Actions, it is likely that some form of *transformative* learning is taking place, and, as Mezirow (2000), postures, transformative learning, "especially when it involves subjective reframing, is often an intensely threatening emotional experience in which we have to become aware of both the assumptions undergirding our ideas and those supporting our emotional responses to the need to change" (p. 6). During these moments, the trigger may be set aside with no action taken, or it may continue to be processed in ways that are personally helpful.

It is important to note that meaning making is typically not a linear process, but, instead, it is more like an "open process" that is both intentional and unexpected (Bray et al., 2000). New experiences are integrated into existing experience schemas, individuals seek validation of their experiences, and people participate in collaborative discussions about similar and different experiences (Bray et al., 2000). This form of collaborative action facilitates the generation of alternative perspectives, resources, and ideas. The capacity for personal growth through the exchange of discourse is possible under certain "conditions," according to Mezirow (1991). These conditions are similar in some respects to Dimension 2 Mediators. For example, four of the six conditions include "freedom from coercion," "openness to alternative perspectives," "a desire to be critically reflective...," and "equal opportunity for participation" (pp. 77-78). As Dimension 2 outlines, a "sense of safety," "emotional readiness," and an "environmental context" suited to reflective thought facilitate the processing of meaning.

Dimension 4: Outcomes

Following the selection of a Dimension 3 Action, an outcome occurs; however, it is important to note that an Outcome can occur at any time during the reflection cycle. Outcomes range in nature from resolution of a specific personal or professional issue to feeling more relaxed. In other words, Outcomes are either directional, goal-oriented or they are less clear and more circular in nature. Reflection is rarely a linear process and, as a result, Outcomes are frequently evidenced by changes in existing knowledge, awareness, and states of being.

Co-researcher discourse emphasized that triggers can start a process of ongoing reflection whereby one trigger leads to others. For example, a present external trigger of a job offer out of province may produce an internal past-oriented trigger about past experiences related to moving. Simultaneously, these two triggers (past- and presentoriented) may identify a new issue that needs to be resolved or processed – that of feelings and thoughts related to the experience of moving throughout the life span. What is important about this example is the interplay between past and present and how they influence each other during the fourth dimension. While resolution of the moving issue was close, in that a decision was almost made, new issues arose. In fact, unresolved triggers may negatively impact personal life or perhaps even professional practice. Added to this is the element of working with clients who experience one or more triggers during counselling. Interventions to help them manage and process these in ways that are not overwhelming are important ethical practice considerations. Therefore, it is important for counsellors to process or resolve personal triggers so that self care is a regular part of professional practice. The well-being of counsellors translates to energy, focus, and commitment in the counselling context. Knowledge, skills, and awareness about reflective processing on the parts of counsellors helps inform their work with clients who also use reflection to process feelings, thoughts, and past and present experiences.

Self-identity development. Based on the present study, a key outcome of reflection is an increase in self-awareness. If an outcome of reflection is some element of self change, it stands to reason that the more we engage in reflective learning, the better we become at it. People do not necessarily naturally or consciously reflect even though some approaches to counselling pose that our bodies and unconscious minds continue to process unresolved issues. Increased self-awareness has the capacity to impact many facets of life including self-identity development. Self-identity development is a form of learning, the integration of new knowledge, and the acting out of this new knowledge in daily living. Clandinin and Connelly (2000) discuss how Dewey viewed education, experience, and life as being inextricably intertwined. As they note, Dewey emphasized that the study of education is akin to the study of life. Learning from others' experiences of their own self, their sense of being, and their experiences of growth stress the importance of respecting the individual's unique growth process (Moustakas, 1956). Self knowledge and awareness arises from our interactions in the world, our experiences and conversations with others, and the time we spend with ourselves. These interactions provide helpful mirrors of our own actions and valuable self-learning tools (Irving & Williams, 1995).

Professional identity development. Whelan (1999) postures that the stories we live by in our personal lives translate to our roles as practitioners in the field. Why is this such a critical connection? Who we are as individuals is shaped by critical moments, our interactions in the world, and our experiences. This does not cease to be the second we

are in a counselling context. Co-researchers commented on how their orientation to counselling has changed over the years in tandem with changes to them as individuals. Through reflection and open dialogue, co-researchers have been able to make these connections between their personal and professional identities. Co-researchers in the present study, all distance learners in the same graduate counselling program, shared their views about some of the challenges involved in developing a "counsellor" identity. These challenges included the volume of psychological literature and theories, time, commitment and energy, and the complexity involved in bridging personal and professional components of the self. What tend to facilitate the process of counsellor identity development is a combination of self-directed reflection and the sharing of personal experiences and resources with peers and instructors (online and in person).

Goals as experiences. In the fourth dimension, goals have a dual nature. On the one hand, achievement of a goal is the completion of a specific task, and, on the other hand, a new goal might be created in the form of a mental image prior to actual execution of the new goal. Bogdan (2000) refers to the creation of new goals as "goal scripting by mental rehearsal" (p. 57). According to Bogdan, *imagination* is a "core ability" that facilitates the generation of alternatives. Postmodern approaches to change value the guiding principle that students and clients are "active agents, who, individually and collectively, co-constitute the meaning of their experiential world" (Neimeyer, 1993, p. 222). As the result of reflective processing of experiences, perceptions, feelings, and schemas related to these experiences may change. Reflection has the capacity to generate questions about core beliefs and values, even core representations of the self.

Goals within the Reflection Cycle model are less rigid than goals defined as end points on a continuum. Nevertheless, goal-directed behaviour is an essential consideration for both counsellors and clients. A key differentiation between a means-ends analysis orientation to goal attainment and a more fluid orientation to goals is a commitment to flexibility and diversity. Within both learning and counselling environments, the present study illustrated that Dimension 4 Outcomes are more apt to occur in the presence of a respectful, open, and safe environment. Equality of voice and participation, diversity of views, and adult learning principles were important considerations for the co-researchers' decisions to share their personal reflections with others online. Personal and professional outcomes tended to reach fruition for them through a combination of internal resources such as self-determination and hope and external resources such as support and resources from others.

Summary

This discussion section outlined the four Dimensions of the model, namely,
Triggers, Mediators, Actions, and Outcomes. These were discussed in relation to adult
learning theory and counsellor identity development. The process of reflection is fluid and
it may not occur in order of the dimensions presented in the model; instead, change can
occur at any time provided there is a triggering event. Personal and professional identities
evolve over time. As this study illustrates, the development of self is a complex
interaction of self-awareness, relational dynamics, metacognition, and behaviour.

Openness to introspection, discussion, change, and diversity are essential components of
the overall self development process. These components are especially important within
the counselling context as they help guide reflective practice for counsellors. Reflective

practice informs both the self development for counsellors, it provides an ethical third eye to work with clients, and it fosters enhanced working knowledge of how reflection can be used as a counselling intervention.

Implications

Reflective practice for counselling students and practitioners is one of those skills and intervention tools assumed to be well understood. As this study demonstrated, reflective practice does not necessarily occur naturally, even though it is an essential counsellor skill. There is an absence of reflection learning resources and application tools in the counselling field. Using reflective skills for personal development as students of counselling will not only foster a better understanding of the construct, but such personal development will guide, in more informed ways, the use of reflection with clients.

Furthermore, this study highlighted those elements of computer-mediated learning that facilitates reflection. In turn, these key elements have been translated into a preliminary Reflection Cycle Model.

The Link Between Computer-Mediated Learning and Reflection

The study of reflective practice within the framework of distance education generated many valuable insights about this construct. Co-researchers stressed that online learning fostered reflection, self knowledge and identity development, and collaborative learning. There are aspects unique to distance learning that seem to foster reflection.

Some of these include a suspension of time and place that often interfere with reflective processing of information. Sorensen's (2004) recent research about collaborative learning in *online communities* highlights the interactive quality between self and other. She discusses how common interests, the "elasticity of time and context" (p. 245), and

scaffolding of dialogue contribute to "the reflective nature of the online environment" (p. 242). Another aspect of the distance environment that stimulates reflection relates to a type of *scaffolding* of information that occurs (Sorensen, 2004). The generation of ideas, concepts, and meaning through asynchronous discussion forums provides many opportunities for learners to link the information in personally meaningful ways, post personally relevant questions, and receive feedback from peers and instructors.

Convergent and divergent thinking helps learners combine information in new ways and encourages deeper level processing of information (Harasim, 1990).

If meaning-making is a process akin to construction and deconstruction of knowledge scaffolds, learners have opportunities to both build scaffolds of discussion threads and deconstruct meaning through communication of their interpretations (Harasim, 1990). "Successful knowledge building is assumed to be characterized by reflective thinking skills and deep embedding of ideas in larger conceptual structures, as well as in the practices of the knowledge building community" (Sorensen, 2004, p. 248). The act of re-reading typed text is less reactive than responding immediately to verbal discourse. In other words, text provides learners the time and interpretive or meaningmaking space to formulate answers, ask questions, problem-solve, and be with themselves to notice their reactions, feelings, thoughts. O'Connor (2002) points to the role of deconstruction in identifying power structures in language, compelling people to identify personal and cultural assumptions. In fact, this skill is critical to counsellor training and practice. Pedersen (2000) encourages counsellors to be mindful of the tacit rules contained in language; this language includes counsellors' internal self dialogue and external conversations with clients. The ability to monitor this *internal dialogue* through

ongoing practice is an invaluable counselling tool (Pedersen, 2000). "Long term understanding requires both active engagement as well as active construction of meaning, which the online environment should support and encourage" (Harasim, 1990, p. 53). What is less clear in the literature, however, is how this "long term active engagement" or how the information is further processed once an 'aha' moment occurs. Reflection cycle processes and tools could help counselling students with the following learning tasks:

- 1. Key moments of insight are not lost in the learning process; instead,
 "[m]etacognitive skill requires the opportunity to make explicit to oneself
 the aspects of an activity that are usually tacit—for example, expressing
 the thinking processes by which a decision or conclusion is reached, or the
 strategy for accomplishing some task" (Harasim, 1990, p. 49).
- 2. Words, examples, resources that trigger emotional and/or cognitive reactions can be furthered processed for self-awareness and discovery.
- Gaps between practice, theory, and personal development do not remain disconnected.
- 4. Personal counselling theories and orientation to client change (and self change) continues to evolve.
- Ongoing practice of reflection facilitates a more in-depth understanding about the interactive and reciprocal nature of personal and professional identities.
- 6. Self knowledge and awareness combined with reflective practice has the potential to bolster ethical practice, decision-making, and action.

7. Empowering adult learners to combine autonomous and collaborative critical thinking skills and active, purposeful learning (Harasim, 1990; Knowles, 1980; Mason & Kaye, 1990). "Information is processed, weighed, reorganized, and structured in this process, both by each individual and also by the group" (Harasim, 1990, p. 45).

Counsellor Education and Training Tools

From what we now know about the benefits of distance learning to the act of reflection, it is important to translate that into implications for counsellor training and development.

Since reflective practice is largely *action*-oriented, it stands to reason that it is less likely to become an integrated part of professional practice if specific learning and development tools are not available. The *act* of reflecting like any learning process requires prior understanding of what the process looks like, how it might be executed, and potential outcomes. Take for example counselling interventions. In order for a counsellor to perform a given intervention, its theoretical underpinnings need to be understood, a rationale for its use is essential (especially for ethical practice), and potential clients outcomes need to be known in order to assess its usage with a given client. The same practice principles apply to the use of reflection. In the current study, for example, coresearchers commented how this was their first focused discussion about reflection and that they are more apt to apply it to both their personal and professional lives following participation in the study. Whenever counsellors learn a new counselling intervention, the following learning principles and strategies apply:

- Exploration of philosophical and theoretical constructs through study of the pertinent literature and discussion with others.
- 2. The sharing of diverse views and the communication of personal experiences are cornerstones to adult learning.
- 3. Case studies, clinical personal examples, and empirical research studies that investigate intervention efficacy contribute to the process of rationale development prior to the application of a given intervention.
- 4. Supervised practice of the intervention and ongoing assessment of its efficacy.
- Self-analysis to evaluate how the intervention fits within the framework of a personal theory of counselling.

Potential Next Steps

Testing the preliminary Reflection Cycle Model. First of all, the proposed preliminary model could be further tested. A similar study with more co-researchers would further develop the dimensions involved in reflection. A reflective process questionnaire could be developed to pose questions to counselling students geared to the current draft model. Or, a qualitative, narrative study could be conducted whereby graduate counselling students test the model themselves or in a focus group using personal and professional personal narratives.

Applying the model: Counsellor reflective practice facilitation guide. Investigators of reflective practice (e.g., Schön, 1982) argue that reflection is critical to professional development. Reflection facilitates self-analysis and development of tacit knowledge, beliefs, and values. When counsellors co-construct meaning with clients, counsellors

bring with them their own life histories, perceptions, and practice orientation (Haley, 2002).

What may be helpful to counsellors who volunteer to test the model is the use of a draft Counsellor Reflective Practice Facilitation Guide. This guide could be used by graduate students for a period of six months to one year of their graduate studies. This guide book could include personal and professional questions and exercises, reflective practice resources, case study scenarios and questions, journal note pages, and exercises that help them use personal and professional experiences to process triggering events.

This guide should also include theoretical and research background about reflection as a construct. Instructional guidelines about use of the Reflection Cycle Model would include examples and real-life scenarios to facilitate the learning process. This guide could be tested in both classroom-based and on-line learning environments. A workbook geared to intervention tools and approaches to counselling that use reflective practice approaches may also be a helpful practice tool for counsellors in the field as well as counselling students.

Summary

The study of reflection using online research methodology and co-researchers involved in distance learning brought to light aspects of online inquiry that facilitates reflection. There are certain characteristics of online learning that are very conducive to reflective processing of information such as internal and external triggers. Translating these characteristics into other modes or learning tools such the preliminary Reflection Cycle Model has the potential to generate practical learning tools for counsellors. In fact, it is possible that these learning tools could even generate intervention tools to be used

when working with clients. Additional testing of the Reflection Cycle Model as well as the development of practical learning and development resources for counsellors are potential next steps in the study of reflection.

CHAPTER VI SUMMARY AND CONCLUDING REMARKS



Collective voices reflect in solitude until signs, symbols and objects in the sand chart a revised course for another team of explorers

Summary and Concluding Remarks

Researcher's Journal Note

Now that this juncture in the research journey has come to a temporary close, the next path in the journey may be somewhat easier to navigate. However, even with compass and map in hand, I will still want to experience new sights and sounds and meet others along the way. The study of lived experiences offers a colorful tapestry of connections, insights, and questions.

Limitations and Considerations

Literature (e.g., Mann & Stewart, 2000) about conducting research in online CMC environments debates how participant privacy can both enhance communication and impede it. Because participants typically do not meet one another, some researchers posit that this encourages a certain type of freedom of expression devoid of bias. On the other hand, this type of "privacy" may have the effect of creating an "aura of suspicion" (Smith, 1997, cited in Mann & Stewart, 2000, p. 74). From a phenomenological perspective, the sharing of personal stories on the parts of co-researchers calls for trust and research credibility. In fact, Mann and Stewart (2000) state that "issues of anonymity and authenticity remain the core methodological stumbling block for researchers using online methods" (p. 75). In the present study, the sharing of personal examples was important, and, as a result, so was a sense of trust and openness on the parts of co-researchers. The nature of the study and its research questions shaped the research design and participant selection. The fact that all co-researchers were in the same graduate program and the fact that they were versed in CMC (including Discussion Forum formats) facilitated the building of trust and comfort to participate early on in the study. However, this may not

have been the case if the co-researchers were from different programs, not all involved in online learning, or perhaps unfamiliar with online communication. When research participants are unfamiliar with CMC, it is important to provide sufficient instructions, invitations for questions and concerns in advance of the actual CMC. As well, it is important to consider the research questions and online interview or focus group format to determine in advance the relevance of participants taking time to get to know one another. This consideration also impacts whether CMC is synchronous, asynchronous, or a combination of both.

Consideration of sample size depends on the desired volume of data and the research format. Online questionnaires where *N* is typically larger than less structured online interviews and discussion groups represent differing sample size models. In the present study, the sample size was originally intended as twenty co-researchers; however, the sample size of five generated sufficient qualitative data for analysis. It is unknown how a larger sample size might have changed the research outcomes. It could be that the purposive sampling of students from the same program regardless of sample size would have generated similar themes. Purposive sampling to some extent lessens the heterogeneity of the co-researchers and perhaps biases the outcomes in some ways. For example, in this study it could be that only students interested in reflection participated, or perhaps students participated because they enjoy online communication.

The experiences of the primary researcher with CMC are also of special consideration when conducting online research. In fact, Flick (1998, cited in Mann & Stewart, 2000) states that "[t]o a much greater degree than in standardized interviews, the 'communicative competencies' and the perceived social personal characteristics of the

researcher are salient issues" (p. 82). The philosophical paradigm of the present study was designed to incorporate principles such as collaboration, flexibility, freedom of expression, and equality. With this in mind, the role of 'co-researcher' was engendered. However, since this was the first time any of the co-researchers had participated in a study as a 'co-researcher,' a description of the role of co-researcher was needed. Coresearchers sought clarification of the CMC format and the roles of the primary rsearcher and co-researchers. As a result, an overview of these roles and format was posted in the Discussion Forum. The primary researcher, also a distance learner in the same program as the co-researchers, was well versed with CMC and the facilitation of open dialogue in a trusting online environment. This is likely, in part, due to specific counselling training skills intended to foster open ended questioning, reflection of meaning and affect, and collaborative inquiry. Lastly, qualitative studies intended to cultivate exploratory conversations and disclosures of self discovery are set in motion by the primary researcher's willingness and commitment to also self disclosure, share, and question in respectful and non-judgmental ways.

Summary

This qualitative study explored the construct of *reflection*. Over a two-week period, five co-researchers, distance counselling graduate students, shared their knowledge, ideas, and experiences in response to eight research questions posted in a Discussion Forum. Eight themes were generated. Using discourse analysis software, Atlas/ti, the Discussion Forum text was further analyzed for thematic relationships. The software was also used to generate groundedness and density for key themes and research questions. Constant comparative methodology of all data led to the creation of a

preliminary Reflection Cycle Model. The model contains four Dimensions. These

Dimensions (Triggers, Mediators, Actions, and Outcomes) are intended to be fluid versus
following a distinct order. To start the reflection cycle, a Dimension 1 Trigger is needed.

From there, however, the process may progress to any other dimension with some form of
change occurring at any time. The model requires further testing. Potential outcomes of
further testing might include the development of a counsellor Reflection Facilitation
Guide and a Client Reflection Facilitation Guide.

Concluding Remarks

In light of this study, it appears that identity development as well as working knowledge of counselling theories and interventions is no small task. Commitment, energy, time, and patience on the parts of students seem fundamental to this overall development. Learning environments that embrace adult learning principles and that provide a balance of self-directed learning and instructional learning seem to foster a sense of both autonomy and collaboration. When learners feel empowered and learn in ways that are personally meaningful, this seems to open the door for metacognition. Before this door to the self is shared with others, a sense of safety, community, and understanding is needed. This learning environment and approach to growth that works for counselling students, when translated to the counselling context with clients, has the potential to foster similar outcomes. These outcomes include enhanced self-awareness, improved interactions with others, decision-making that honors one's beliefs and values, and the development of self based on lived experiences and meaning making. Additional learning tools to engender these outcomes for both clients and counsellors are needed.

Tools that are flexible and that provide opportunities for learners to make meaning of their own lives become not only practical, but also empowering.

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Appendix A

RESEARCH QUESTIONS

REFLECTIVE PRACTICE AND PROCESS IN DISTANCE EDUCATION

- 1. What does 'reflection' mean to individual graduate students?
- 2. What learning processes do students use based on their personal meaning of 'reflection'?
- 3. What is the role of distance education in the development of a personal meaning of 'reflection' and the personal experimentation of this meaning?
- 4. How do personal meanings of reflection, personal learning processes, and computer-mediated communication contribute to the development of a personal orientation to counselling?
- 5. How is the practice of counselling influenced by students' learning experiences in a distance education program?
- 6. Additional research questions may be generated following participant involvement in the study.

Appendix B

RECRUITMENT NOTICE

Dear Campus Alberta Applied Psychology Graduate Students,

RE: Invitation to Participate in a Research Study about Reflective Process and Practice

As students of an evolving online learning environment, your perspectives are important. Counsellor training at a distance is unique to Canada and to countries around the world. As counsellors, students, volunteers, and researchers, online and face-to-face interactions with clients, peers, faculty, supervisors, and community members are some of the ways we learn about ourselves. Part of how we learn about ourselves and the world around us is through reflecting on our experiences. Distance learning provides opportunities to interact with many different people and engage in many learning activities. The literature speaks to how reflective processes can translate into how individuals practice in the field or even how they develop a personal orientation to counselling. As well, it is thought that reflection contributes to how people develop across the life span. What is reflection? How does it happen? What does it mean to you? How is it helpful? Unique to our learning and growing experiences is the mode of e-learning and the ways in which it facilitates reflective processes. As distance education continues to develop, we need to understand more about these questions. Exploring these questions in concert with those living the experience of distance education would be accomplished through a confidential discussion forum over a two-week period starting in January, 2004. The sharing of experiences, questions, ideas, philosophies, and personal growth stories would help not only explore the questions at hand but may even contribute to developing a model relevant for reflective practice at a distance. Study participants would receive \$20. Participant confidentiality will be maintained throughout the study. All electronic, paper, and related documents will be stored in a secure, locked, confidential filing cabinet and destroyed on or before December 31, 2004.

If you are interested in participating in this study or have any questions about it, please e-mail Debbie Grove at her internal CAAP e-mail address (debbieg@abcounsellored.net) or her external e-mail address (degrove@execulink.com) by February 15, 2004.

Sincerely,

Debbie Grove Dr. Paul Jerry Primary Researcher Supervisor

Appendix C Establishing Study Credibility

REFLECTIVE PRACTICE AND PROCESS IN DISTANCE EDUCATION

Criterion	Term	Method
Truth value	Internal Validity or Credibility	Prolonged engagement Persistent observation Referential adequacy Peer debriefing Member checks Use of referential material Reflexive journal
Applicability	External Validity or Transferability	Thick description and use of quotes Purposive sampling Reflexive journal Use of data analysis software Cross-checking data
Consistency	Reliability or Dependability	Dependability audit Reflexive journal Use of data analysis software
Neutrality	Objectivity or Confirmability	Confirmability audit Reflexive journal Explication of theoretical constructs Selection and use of data analysis software

Adapted from Erlandson, Harris, Skipper, & Allen, 1993 and Lincoln & Guba, 1985.

Appendix D

INFORMED CONSENT FORM

Research Study Title: REFLECTIVE PRACTICE AND PROCESS IN DISTANCE EDUCATION

Researcher:
Debbie Grove,
Graduate Student

Campus Alberta Applied Psychology:

Counselling Initiative Telephone: (519)-932-0247

E-mail: dgrove@execulink.com

Supervisor:

Dr. Paul Jerry, Assistant Professor

Department of Applied

Psychology

Athabasca University Telephone: (403)-528-1451

E-mail: paulj@athabascau.ca

Research Purpose:

The purpose of this research is to explore how graduate students in a distance education counselling program conceptualize reflection, how they enact reflective processes, and how these conceptualizations and processes facilitate counsellor identity development and an orientation to counselling.

When participating, you will be asked to discuss your views, experiences, ideas, beliefs, values, and meanings about reflective processes and practices as a student and as a counsellor. As well, you will be asked to share your personal learning and growth experiences, ideas, and techniques. All of this discussion will take place in a confidential on-line discussion forum where the primary researcher, you, and other co-researchers participating in this study login to a secure discussion forum with a user name and password.

As a co-researcher, you are being asked to be involved in the following ways:

- 1. To complete a demographic sheet.
- 2. To post daily to a confidential discussion forum over a two-week (14 consecutive days) period.
- 3. To join the researcher in a private chat room once at the end of the two-week study for verification of personal themes and ideas.

Your involvement as a co-researcher in this study is voluntary and this means that you:

- May verify your transcriptions and representations of your experiences at least once to ensure their accuracy.
- May opt out of answering any question(s) at any point in time.
- Can withdraw from the study at any time either before or after consent of

participation. The information that you have shared with me prior to your withdrawal will be used only with your permission. If you decline this permission, I will destroy all written materials of conversations and destroy all verbatim transcripts.

I may use anonymous excerpts when presenting the research. Accounts in the study will not include your name; rather, you will be identified by a fictitious name, which will be assigned at my discretion. The information that you share will be used for research and educational purposes only and may be presented at professional conferences and through published works.

As a co-researcher of this study, you will have a chance to ask any questions concerning this study. These questions will be answered to your satisfaction prior to beginning and throughout your involvement in the study.

There are no known risks to individuals participating in this study and it will not affect your standing as a counselling student.

All paper documents will be stored in a locked filing cabinet throughout the duration of the study. All paper documents will be destroyed (shredded and discarded) at the end of the study. All electronic data will be stored on a secure computer throughout the duration of the study. All electronic data will be permanently deleted at the end of the study.

I,	certify that I have read (or have been read)	
(print name)		
•	m. I agree to participate in this research and	
have a copy of this form to keep.		
	(Co-researcher's signature)	
	(Date)	
	(Researcher's signature)	

Adapted from Wong-Wylie (2003).

Appendix E

RESEARCH INSTRUMENT 1:

DEMOGRAPHIC SHEET

Demographic Sheet

REFLECTIVE PRACTICE AND PROCESS IN DISTANCE EDUCATION

Participant Code	
General Information:	
Age: Gender:	
First Language:	
Other Languages Spoken:	
Place of Birth:	
Current Place of Residence:	
Educational Background:	
Month/Year Started in the Campus Alberta Graduate Program:	
Specialization Area (e.g. counselling school career art theran	w).

Appendix F

RESEARCH INSTRUMENT 2:

INITIAL QUESTIONS POSTED IN THE DISCUSSION FORUM

- 1. What does *reflection* mean to you?
- 2. What comes to mind when you think about *reflection*?
- 3. What gets you reflecting?
- 4. How do you reflect?
- 5. How does reflection help you? If at all.
- 6. How does counsellor training and education facilitate reflection?
- 7. What are some personal examples of reflection?
- 8. How does computer-mediated learning facilitate reflection for you? If at all.

Appendix G

RESEARCH INSTRUMENT 3:

PRIMARY RESEARCHER DAILY REFLEXIVE JOURNAL

Date:	Emerging Themes, Patterns, Words, Phrases	Points for Clarification, Info Seeking	Ideas for Posts, Questions for Next Day's Discussion	Researcher's Feelings, Attitude, Thoughts
Entry #:		J		
Entry #:				
Total Entries =				

Adapted from: Erlandson, D. A., Harris, E. L., Skipper, B. L., & Allen, S. D. (1993). *Doing naturalistic inquiry*. Newbury Park, CA: Sage.

Appendix H

Thematic Units and Associated Codes in

Alphabetical Order by Thematic Unit Name

Thematic Unit Name	Codes Linked to the Thematic Unit
Bridging Personal and Professional	action, alternatives, analyze, balance, beliefs, body, bridge, change, CMC, counsel, danger, develop, diversity, environment, genuine, goal, growth, health, identity, interact, journal, learnloop, learntools, life, liferoles, meaning, selfaware, solve, spirit, support, survival, time, tools, values
Counselling Outcomes	action, alternatives, change, danger, ethics, evaluation, survival
Counsellor Self	action, bridge, change, counsel, develop, emotion, environment, ethics, genuine, growth, health, interact, learntools, life, pastpresent, solve, time, tools
Ethics	action, counsel, develop, ethics, interact, learntools, RQ6training, RQ8CMC, solve
Learning	bridge, change, counsel, develop, environment, interact, learntools, RQ3how, RQ6training, RQ8CMC, solve
Life	balance, body, danger, family, health, hobbies, life, liferoles, mood, spirit, time
Personal	beliefs, genuine, identity, memories, personal, personalexamples, stories, values
Personal	action, alternatives, change, danger, develop, goal, growth, meaning,
Outcomes/Actions	opposites, resolve, selfaware, solve, support, survival
Personal Self	change, develop, emotion, environment, genuine, growth, health, life, opposites, pastpresent, RQ7examples, time
Practice	action, change, counsel, ethics, interact, learntools, RQ3how, RQ5help, RQ6training, RQ7examples, RQ8CMC, tools
Process	Develop, interact, learntools, RQ1mind, RQ2trigger, RQ4mean, RQ6training, RQ8CMC, tools
Research Question 1 Mind	action, analyze beliefs, body, bridge, change, CMC, counsel, danger, develop, diversity, dream, emotion, environment, ethics, goal, growth, health, interact, journal, learntools, life, meaning, memories, mood, opposites, pastpresent, personal, selfaware, solve, symbol, tools, values
Research Question 2 Trigger	action, alternatives, balance, beliefs, body, bridge, change, counsel, CMC, creativity, develop, emotion, environment, ethics, family, genuine, goal, growth, health, identity, interact, learntools, liferoles, meaning, memories, pastpresent, personal, personalexample, resolve, RQ2trigger, selfaware, solve, spirit, symbol, time, tools, values
Research Question 3 How	action, analyze, body, bridge, change, CMC, counsel, creativity, danger, develop, dream, emotion, environment, family, goal, growth, health, hobbies, interact, learntools, life, liferoles, memories, mood, opposites, pastpresent, personalexample, solve, spirit, stories, supervision, support, symbol, time

Appendix H (continued)

Code Families and Associated Codes in

Alphabetical Order by Code Family Name

Code Family Name	Codes Linked to the Code Family
Research Question 4a Mean	action, alternatives, analyze, beliefs, bridge, CMC, counsel, creativity,
Mean	danger, diversity, dream, emotion, environment, family, growth, hobbies, interact, learntools, meaning, opposites, personal, personalexample,
	selfaware, solve, stories, supervision, symbol, time, tools, values
Research Question 5a	action, balance, beliefs, bridge, CMC, counsel, develop, emotion, family,
Help	goal, growth, interact, learntools, life, liferoles, opposites, pastpresent,
	personalexample, selfaware, solve, time, tools, vlaues
Research Question 6a	analyze, beliefs, bridge, CMC, counsel, develop, environment, evaluation,
Counsellor Training	genuine, identity, interact, journal, learntools, meaning, opposites,
and Education	pastpresent, personal, selfaware, supervision, symbol, values
Research Question 7	analyze, balance, beliefs, body, change, CMC, creativity, danger, diversity,
Personal Examples	emotion, environment, ethics, family, genuine, goal, growth, health, hobbies,
	identity, journal, learntools, life, liferoles, memories, mood, opposites,
	pastpresent, personal, personalexample, selfaware, solve, spirit, supervision,
	survival, symbol, time, tools, values
Research Question 8	action, alternatives, beliefs, bridge, change, CMC, counsel, creativity,
CMC	develop, diversity, emotion, environment, ethics, genuine, goal, growth,
	identity, interact, learntools, meaning, mood, opposites, pastpresent, personal,
	personalexample, selfaware, stories, supervision, support, time, values
Tools	bridge, interact, learntools, life, pastpresent, RQ6training, RQ7examples,
	RQ8CMC, tools

Table 1 $\label{table 1}$ Themes and Related Examples from Week 1 of Discussion Forum

Thematic Category	Examples
Daily Living	Balance; mind-body-spirit connections; identify
	positive and negative influences; explore life roles;
	assess environmental conditions that impact
	reflective states; survival such as rest, health, fitness
	and assessing for threat.
Professional Development	The need to experiment, build confidence, and
	enhance awareness of emotions and relationships
	with others; being an active agent in one's own
	learning; integration of existing and new knowledge.
Problem-Solving Tool	Draw connections between past-present
	experiences; plan for future goals; examine
	alternatives; evaluate coping strategies and problem
	solving skills; self-assess performance.
Ethics	Ongoing exploration of values, beliefs, worldview;
	monitor for anxiety; self-care; reduction in bias,
	prejudice, oppression.
Interaction	Mentors; feedback; brainstorm and collaborate; skill
	building, e.g., respectfully challenge.

Table 2 $\label{eq:continuous}$ Themes and Related Examples from Week 2 of Discussion Forum

Thematic Category	Examples
Bridging Personal and	Discovery of how our various selves share approaches,
Professional Identities	goals, outcomes; identity development through
	integration of work life, home life, school life, and
	community life; requires effort and commitment;
	integration of values, beliefs, interests; critical
	thinking skills.
Interventions and Tools	Establishing the therapeutic setting; use of letters;
	narrative therapy; homework between sessions;
	journal; brainstorming on flipchart; relaxation and
	guided imagery; life-role maps.
Presenting Issues	Some client presenting concerns suited to reflective
	practice, e.g., relational, career, grief and loss,
	identity issues, acculturation.
Learning Tools	a) Self-directed learning methods: purposeful planning of
	goals; creative ways to novel information; b) specific
	courses: multicultural counselling, counselling theories,
	professional ethics; c) specific tools within courses: role
	play exercises, case studies, group exercises, on-line
	discussion forums, peer chats.

Table 3

Number of Codes and Quotations Linked to Each Theme Unit

Theme Unit	Number of Codes	Number of Quotes
Bridging personal and professional	34	832
Counselling outcomes	7	100
Counsellor self	18	604
Ethics	9	211
Learning	11	308
Life	11	319
Personal	8	198
Personal outcomes/actions	14	290
Personal self	12	505
Practice	12	263
Process	9	208
Research question 1: what comes to mind	33	834
Research question 2: what gets you reflecting	36	1001
Research question 3: how do you reflect	34	875
Research question 4: what does reflection mean	30	846
Research question 5: how does reflection help	23	750
Research question 6: counsellor training/educati	on 21	665
Research question 7: personal examples	38	1019
Research question 8: computer-mediated learning	ag 31	928
Tools	9	284

Table 4
Grounded Themes and Themes with Density for 8 Research Questions

Research Question	Grounded Themes	Themes with Density
What comes to mind	past-present, environment,	meaning, action
	personal, self-awareness	
What triggers reflection	time, self-awareness,	action
	environment, past-present	
How do you reflect	time, past-present, environment	action, life
What does it mean	time, self-awareness, personal,	action
	environment	
How does it help you	time, past-present, self-awareness	life, action
Role of training/education	personal, self-awareness,	
	past-present, environment	
Personal examples	personal, self-awareness, time,	life
	environment, past-present	
How does CMC help	time, self-awareness, past-present,	action
	environment, personal	

Figure Captions

Figure 1. First draft: Model of counsellor personal and professional reflection process in a distance learning environment.

Figure 2. Thematic network of related codes and code families for research question 4:

What does reflection mean to you?

Figure 3. Groundedness represented by volume of quotations and density represented by volume of connected codes for each thematic unit.

Figure 4. Preliminary Reflection Cycle Model.

Model of Counsellor Personal and Professional Reflection Process in a Distance Learning Environment

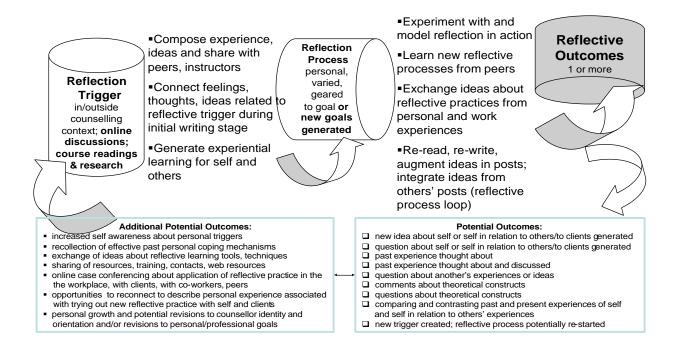


Figure 1. First draft: Model of counsellor personal and professional reflection process in a distance learning environment.

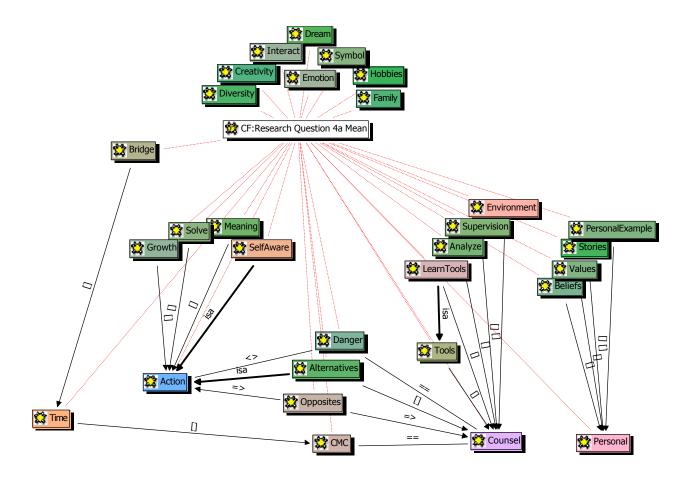


Figure 2. Thematic network of related codes and code families for research question 4: What does reflection mean to you?

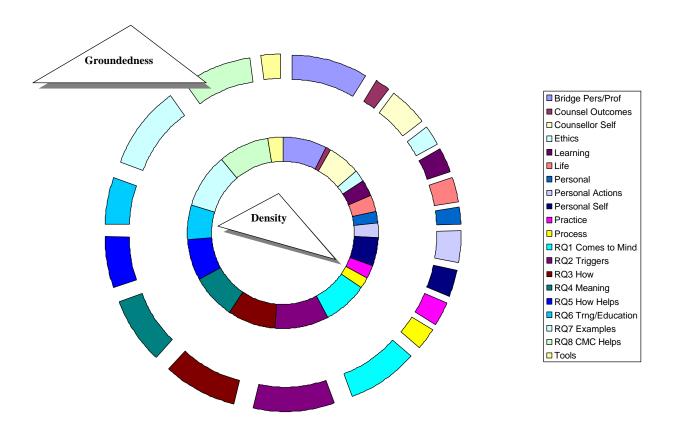


Figure 3. Groundedness represented by volume of quotations and density represented by volume of connected codes for each thematic unit.

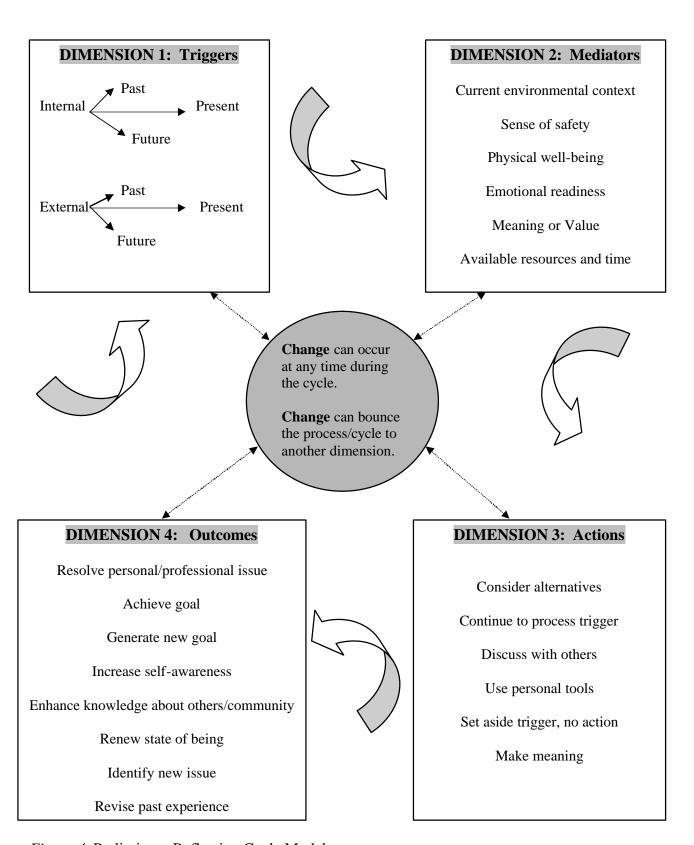
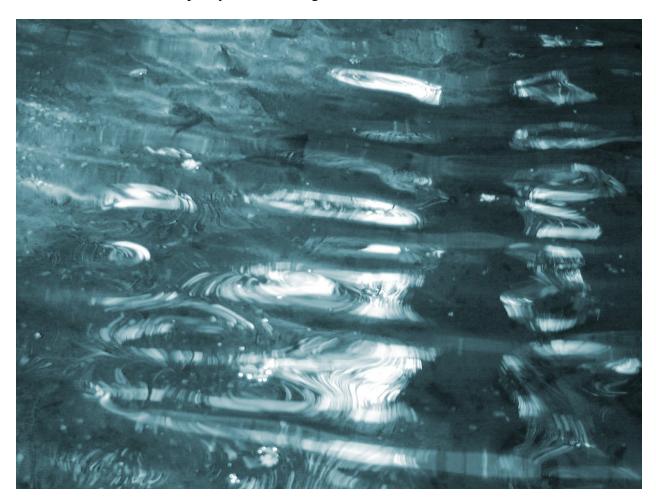


Figure 4. Preliminary Reflection Cycle Model.

EPILOGUE:

The Capacity to Weave Digital and Natural Worlds



Epilogue: The Capacity to Weave Digital and Natural Worlds

Technology provides many unique opportunities and devices to help people explore who they are and the world around them. Not unlike memories, the suspension of time and space characteristic of the digital universe opens a door to endless exploration. Exploration unfettered by barriers such as time, linear thinking, or means-ends analyses.

This is not to say that human interaction can be replaced, it cannot. However, what I do suggest is closer consideration of unique opportunities for adult learners to broaden the devices they consider facilitative of new learning.

A creative approach to learning has the potential to engage learners in not only topics of study and research, but to also express the self as an integral element of the topic at hand. I believe a paradigm shift toward life learning has the potential to reduce barriers to learning that have historically been present. If technology bears a transformative capacity to traverse barriers such as age, gender, culture, and ability, then so too do educational and cultural systems. The integration of digital reflective practice tools in counsellor education has the potential to foster life long, transformative learning in personally meaningful ways.