

Fall 12-20-2013

Clients' Perceptions of Their Counseling Experiences for Trauma Related to Anesthesia Awareness (AA)

N. Arlene Magee
University of New Orleans, nagann@uno.edu

Follow this and additional works at: <https://scholarworks.uno.edu/td>



Part of the [Education Commons](#)

Recommended Citation

Magee, N. Arlene, "Clients' Perceptions of Their Counseling Experiences for Trauma Related to Anesthesia Awareness (AA)" (2013). *University of New Orleans Theses and Dissertations*. 1749.
<https://scholarworks.uno.edu/td/1749>

This Dissertation is protected by copyright and/or related rights. It has been brought to you by ScholarWorks@UNO with permission from the rights-holder(s). You are free to use this Dissertation in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Dissertation has been accepted for inclusion in University of New Orleans Theses and Dissertations by an authorized administrator of ScholarWorks@UNO. For more information, please contact scholarworks@uno.edu.

Clients' Perceptions of Their Counseling Experiences for Trauma Related to Anesthesia
Awareness (AA)

A Dissertation

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
Counselor Education

by

Arlene Magee

B.A., Southeastern Louisiana University, 2003
M.Ed., University of New Orleans, 2006

December, 2013

COPYRIGHT, Arlene Magee 2013

DEDICATION

I dedicate this dissertation to my son, Jonathan Cody Gann.

Thank you for sharing this journey called life with me.

I love you.

And

Abraham Szyller, my former therapist and mentor.

Thank you for the integration.

I wouldn't have done it without you!

And

Loyd Magee, my brother.

Thank you for teaching me how to “tell time,” tie my shoelaces, and so much more.

I still miss you.

ACKNOWLEDGEMENTS

I acknowledge the following exceptional faculty, my dissertation committee:

Dr. Barbara Herlihy, Chair

Thank you for your “real-ness”.

It is now a part of me.

Dr. Roxane Dufrene, Methodologist

Thank you for your attention to detail.

I use it *every day*.

Dr. Zarus Watson

Thank you for teaching me about myself and others.

I rely on it all the time.

Table of Contents

List of Tables	ix
Abstract	v
CHAPTER ONE	1
Introduction.....	Error! Bookmark not defined. 1
AA and Conflicting Findings.....	4
Drugs and Memory	6
Posttraumatic Stress Disorder	8
Conceptual Framework.....	9
Purpose of the Study	10
Assumptions.....	10
Rationale	11
Research Questions.....	11
Methodology.....	11
Implications.....	12
Limitations	13
Definition of Terms.....	14
Acceptance and Commitment Therapy (ACT).....	14
Acute Stress Disorder	14
Amnesic/Amnesia	14
Anesthesia.....	14
Anesthesia Awareness (AA).....	14
Barbiturate.....	15
Benzodiazepine	15
Client-Centered Therapy.....	15
Cognitive Behavioral Therapy (CBT)	15
Cognitive Therapy	15
Couple and Family Therapy.....	15
Creative Arts Therapy (CAT).....	16
Dialectical Behavioral Therapy (DBT).....	16
Dysphoria.....	16
Emotional ExposureTreatment	16
Eye Movement Desensitization and Reprocessing (EMDR).....	16
Explicit memory.....	16
Exposure Therapy	16
Gestalt Therapy	16
Group Interpersonal Therapy	16
Group Therapy	17
Hermeneutics	17
Hypnosis	17
Idiographic	17

Implicit memory.....	17
Interpretative Phenomenological Analysis (IPA):.....	17
Ketamine.....	17
Medicalization.....	17
Morphine.....	18
Multi-modal therapy.....	18
Multi-phase therapy.....	18
Multisystemic Therapy (MST).....	18
Opioid.....	18
Perception.....	18
Phenomenology.....	19
Posttraumatic Stress Disorder (PTSD).....	19
Premedication.....	19
Progressive Counting (PC).....	19
Propranolol.....	19
Psychodynamic Therapy.....	19
Psychoeducation.....	20
Psychological Trauma.....	20
Psychosocial Rehabilitation.....	20
Stress Inoculation Training (SIT).....	20
Scopolamine.....	20
Sensori-motor.....	20
Sequelae.....	21
Support Group.....	21
Supportive Counseling (SC).....	21
Symbolic Interactionism (SI).....	21
Systemic Psychotherapy.....	21
Transtheoretical therapy.....	21
Traumatic Event.....	21
Twilight Sleep.....	22
Virtual Reality Exposure Therapy.....	22
Organization of Remaining Chapters.....	22
CHAPTER TWO.....	24
LITERATURE REVIEW.....	24
Trauma and PTSD.....	24
Posttraumatic Stress Disorder (PTSD).....	26
Consequences of Trauma and PTSD.....	28
Trauma Related to Invasive Medical Procedures.....	30
Anesthesia Awareness (AA).....	33
Incidence of AA.....	34
The Effects of AA.....	39
Populations at Higher Risk for AA.....	45

Types of Surgeries at Higher Risk for AA.....	47
Causes of AA	49
Clients' Perceptions of Counseling.....	50
Counseling for Trauma	56
Counseling for PTSD.....	59
CHAPTER THREE	66
METHODOLOGY	66
Introduction.....	66
Qualitative Research	67
Retrospective Viewpoint.....	68
Phenomenological Inquiry	69
Heideggerian Philosophy	70
Interpretative Phenomenological Analysis	71
The Role of the Researcher.....	73
Research Questions.....	75
Data Collection Procedures.....	78
Permissions	80
Contacting Participants	81
Interviews.....	82
Data Collection	84
Ethical Considerations	86
Data Analysis	89
CHAPTER FOUR.....	92
RESULTS	92
Data Analysis Procedures	92
Participants' Demographic Information	93
Participants.....	94
Lucy	95
John Phillips.....	96
Shamus.....	97
K.L.	98
Ebi	98
Keistador	99
L.K.	100
Data Analysis and Reduction.....	101
Cluster #1— Factors that motivated the client to seek counseling.....	101
Cluster #2— Factors that affected client satisfaction/rapport.....	102
Cluster #3— Client's perception of the counselor.....	104
Cluster #4— Factors that affected the client's perception of the counselor ..	105
Cluster #5— Counseling outcome	106
Cluster #6— Responses that affected counseling.....	106

Cluster #7— Client’s perception of counselor-facilitated strategies and/or interventions.....	107
Cluster #8— Client comfort in counseling.....	108
Cluster #9— Changing perspectives of the client.....	109
Cluster #10— Factors that affected the choice of counselor.....	109
Cluster #11— Counselor factors that influenced the client to leave counseling.....	110
Cluster #12— Role of family and significant others.....	110
Cluster #13— Barriers to obtaining counseling.....	111
Cluster #14— Commitment to counseling.....	111
Findings by Research Question.....	112
Summary of Peer Review Procedure.....	119
Conclusion.....	120
CHAPTER FIVE.....	121
DISCUSSION.....	121
Philosophical Foundation.....	121
Purpose and Research Questions.....	121
Summary of Methods and Findings.....	122
Data collection.....	123
Data analysis.....	123
Findings.....	124
Limitations and Delimitations.....	137
Implications.....	138
Implications for counselors.....	138
Implications for Counselor Educators.....	139
Recommendations for Future Research.....	140
Personal Reflection.....	141
References.....	143
Appendix A.....	171
Interview Schedule.....	172
Appendix B.....	174
Recruitment Letter.....	175
Appendix C.....	177
Informed Consent.....	178
Appendix D.....	181
Demographic Data Collection Sheet.....	182
Appendix E.....	183
Peer Review Agreement.....	184
Appendix F.....	185
Institutional Review Board Letter of Approval 01/2010.....	186

Institutional Review Board Letter of Approval 10/2012	187
Institutional Review Board Letter of Approval 10/2010	188
VITA	189

List of Tables

1: Participant Demographics.....	95
2: Combined Analyses of Seven Participants: List of 14 Clusters	113
3: Combined Analyses of Seven Participants: Helpful and Hindering Therapeutic Effects	119

Abstract

Each year in the United States, approximately 81 million individuals receive surgeries in which .1% to .2% (20,000 to 40,000/20 million) experience Anesthesia Awareness (AA). More than 50% of the AA cases result in mental distress or Posttraumatic Stress Disorder (PTSD). Because the percentage of AA cases among surgeries makes it appear to be a rare occurrence, and because it has received rather limited research attention, I decided to undertake an interpretative phenomenological analysis to discover AA clients' perceptions of their counseling experience, and encourage development of therapeutic interventions to meet their needs.

The broad research question for my study was how do clients perceive their experience of counseling for trauma related to AA? The context was provided by a review of the literature which focused on trauma and PTSD, AA, clients' perceptions of counseling, counseling for trauma, and counseling for PTSD. Semi-structured interviews were used to collect data which then was coded to identify emerging themes which were then clustered. The clustered themes were used to answer the broad and specific research questions.

Based on the findings of my study, the theme of *relational factors of counselors* most often emerged as helpful to counseling (e.g., Rogerian- congruence, unconditional positive regard, accurate empathic understanding), whereas, the therapy process, external barriers, and PTSD symptoms most often emerged as hindering to counseling.

Implications for counselors and counselor educators include increased understanding and insight regarding AA survivors and the role of relationship when counseling this population

which may lead to more effective interventions and expanded professional roles to work with this population.

Key Words: Counseling; Trauma; PTSD; Anesthesia Awareness; Medical Trauma; Invasive Medical Procedures

INTRODUCTION

CHAPTER ONE

In this chapter an introduction to the proposed study, a statement of the purpose, and the background information are presented. Assumptions, rationale, research questions, implications for practice, limitations, and delimitations of the study are also discussed. Definitions of unique key terms conclude this chapter.

Introduction

According to the National Center for Health Statistics (NCHS), as many as 46 million inpatient surgical procedures (NCHS, 2008) and at least 34.7 million outpatient surgical procedures (NCHS, 2009) are performed annually in the United States. Some patients experienced Anesthesia Awareness (AA) during these surgeries and developed emotional, behavioral, and psychological symptoms as a result.

Researchers have presented conflicting accounts of the incidence of AA. The most conservative results put the incidence of AA at .0068% (Pollard et al., 2007), but higher rates of .10% to .18 % were also reported (Sandin et al., 2000). In one study, Osterman et al. (2001) estimated that AA occurred in as many as .2% to .7% of surgeries. Generally, .1% to .2% (20,000 to 40,000/20 million annually) was reported to be the estimated rate at which surgical procedures performed under general anesthesia in the United States resulted in AA (Blusse, 2008; Sebel, 2009). However, high-risk populations and particular surgery types (Davidson et al., 2005; Domino et al., 1999, Kent, 2010; Lopez et al., 2007) had more AA events, which make it difficult to estimate the actual cases of AA that occur.

Of patients in the AA cases reported, an estimated .44 % (Lenmarken et al., 2002) to 56.3% (Osterman et al., 2001) later met DSM-IV criteria for Posttraumatic Stress Disorder (PTSD). Many of these individuals suffered from enduring symptoms such as flashbacks, extreme mental distress, impairment of social life, and panic (Lenmarken & Sydsjo, 2007; Mathews & Wang, 2007). Other cases involved similar but mild to transient symptoms that resolved relatively quickly. Some patients may have had symptoms without conscious recall while others may have denied symptoms or experienced late onset of symptoms (Lenmarken & Sydsjo). For patients, some of the consequences of not recognizing and dealing with symptoms of psychological trauma from AA were devastating. For example, they included severe symptoms of flashbacks, panic, fear, anxiety, difficulty concentrating, irritation, insecurity, sleep disturbances, impairment of social life, and nightmares that lasted up to eight years (Lenmarken et al., 2002). Therefore, it is important for counselors to understand the unique perceptions of this population regarding their counseling experiences so that appropriate interventions may be developed to address their needs. Specifically, counselors need to know what clients who received counseling for trauma related to AA perceive as helpful or hindering in their counseling experience.

Background

Although medical professionals attempt to eliminate pain during surgical procedures, they are not always able to do so. When they do not eliminate pain, Anesthesia Awareness (AA) occurs. What some medical professionals refer to as “unintended Anesthesia Awareness”

(Rankin et al., 2008) has been a problem for physicians since surgery using anesthesia was first demonstrated to the public in 1845.

Horace Wells, a dentist, failed to stop pain during the first public demonstration of anesthesia on a person who was undergoing surgery. Wells told one of his students to take a deep breath of nitrous oxide before he began extracting a tooth. After the breath, when Wells began the extraction, the patient howled with pain and Wells' career was ruined (Carranza, 1989). Fortunately, a dentist named William Morton was at Wells' failed demonstration. Within two years, Morton and a professor of surgery at the Massachusetts General Hospital, Dr. John Collins Warren, successfully demonstrated the painless removal of a tumor from the neck of a patient by using anesthesia. Subsequently, experimentation with anesthesia during surgery burgeoned, with Massachusetts General Hospital accounting for 132 surgeries using anesthesia in 1848 (Keys, 1954).

Experiments using different anesthetics during medical procedures continued to fail on occasion. For example, 60 years later, attempts to eliminate awareness during obstetrical procedures met with considerable failure but continued to be used by many physicians despite their reservations (Caton, 1995). Twilight sleep originally was induced by a mixture of opioids and morphine; Dr. Minas S. Gregory of Bellevue Hospital asserted that the anesthetic did not stop the pain, but only stopped the patient from remembering it (*NY Times*, 1915). There was a large public movement against twilight sleep because it harmed women's babies but, later, the "cocktail" improved somewhat when it was changed to scopolamine and morphine. Many

physicians continued to resist using the anesthetic, but others acquiesced because patients who were pleased at not remembering their pain demanded its use (Caton, 1995).

In 1961, Meyer and Blacher reported on a “traumatic neurosis” experienced by patients who were conscious during surgery. The researchers described patients in expressionless, frozen states that resulted from partial awareness and paralysis. As a consequence of this report, studies of AA increased. Recent research on AA has focused on its causes and prevention (e.g., Avidan et al., 2008; Domino et al., 1999; O’Connor, 2001), its incidence (e.g., Lopez et al., 2007; Orser et al., 2008; Sandin et al., 2000; Sigalovsky, 2003), and its psychological sequelae, including Posttraumatic Stress Disorder (PTSD) (e.g., Lennmarken & Sydsjo, 2007; Lennmarken et al., 2002; Mathews & Wang, 2007; Osterman & van der Kolk, 1998).

AA and Conflicting Findings

Researchers have been in disagreement regarding several aspects of AA, especially its incidence, and they have suggested possible reasons for their lack of consensus. First, the number of cases of AA may have been under-reported because patients experienced embarrassment, or feared they would be dismissed (Rankin et al., 2008). Next, underestimating of AA may have been related to delayed memories and late onset of symptoms (Lennmarken et al., 2002; Lennmarken & Sydsjo, 2007; Sebel et al., 2004). Some patients may have had difficulty putting their experience into words or found their stories changing over time, whereas the traumatic memories of other patients may have been more sensori-motor or affective, but without conscious recall (Ballard et al., 2006; Osterman & van der Kolk, 1998). Finally,

participant bias may have affected incidence rates as patients with more severe symptoms either under- or over-reported in the studies in which they participated (Lennmarken & Sydsjo, 2007).

Problems related to conducting research on AA may have been a factor in conflicting findings on the frequency with which AA occurs. For example, because AA happens in a small percentage of surgeries performed, some studies required very large samples or extended periods to complete (Iselin-Chaves et al., 2006; Lopez et al., 2007; O'Connor et al., 2001). Methodology may have affected the incidence rates that were reported because participants were not asked direct questions about awareness (Lennmarken & Sydsjo, 2007). Last, timing of some studies may have resulted in lower incidence rates because of delayed memory or late onset of symptoms (Sandin et al., 2000).

Reaching a consensus on the definition of AA has been problematic. The American Society of Anesthesiologists' Advisory (ASA, 2006) defined Anesthesia Awareness as a patient becoming conscious during a medical procedure performed under general anesthesia. The ASA definition included recall of the event, limited it to explicit or conscious memory, but did not include implicit memory or the time before inducement or emergence from anesthesia. Some scholars have asserted that the role of implicit memory must be considered. Implicit memory has been defined as the experience of effects, usually without conscious recall, of a causative event (Schott et al., 2005) and was thought to be a fundamental contributor to the development of PTSD (Kirkorian & Layton, 1998). Wang (2001) stated that although amnesic drugs eliminated explicit memory, implicit memory could still lead to psychological difficulties. This finding was supported by other studies (Kerssens et al., 2003; Russell, 1986).

Because what constitutes AA is still being argued, nomenclature that is more precise may be needed. Schwender et al. (1995) suggested three stages of Anesthesia Awareness: 1) conscious with explicit recall, 2) conscious without explicit recall, and 3) subconscious awareness without explicit recall, and possible implicit recall. A fourth stage, unconscious with implicit recall, also has been recommended as there was evidence of unconscious information processing during anesthesia (Deepröse et al., 2004).

Complexity in types and amounts of AA led Schwender et al. (1995) to explicate the following stages of AA events and memory: (1) conscious awareness with explicit recall of severe pain; (2) conscious awareness with explicit recall without report of pain; (3) conscious awareness without explicit recall but possible implicit recall; (4) subconscious awareness with possible implicit recall; and (5) no awareness. Although these stages were helpful in conceptualizing the AA experience, the focus was on pain and not on other trauma symptoms such as terror or intense fear of death. More research is needed to produce a clearer picture of the various stages, types, and severity of AA symptomology.

Drugs and Memory

One often-overlooked factor that may have contributed to the inconclusiveness of the research on AA is the effect of the amnesic drugs that were used in surgeries. Early research on the amnesic properties of drugs used as surgical premedication began sometime around 1960 (Ghoneim, 1997), and focused on commonly administered drugs such as benzodiazepines or barbiturates followed by sedatives such as morphine or ketamine. Contemporary research on amnesic drugs has moved from the operating room into the arena of mental health care. Henry

(2007), in a study on PTSD and the drug propranolol, claimed the drug's ability to interfere with the consolidation of emotional memories might make it an effective pharmacological treatment to prevent PTSD. Although their work was exploratory, the researchers raised ethical concerns about the potential for this drug to be abused by pharmaceutical companies and individuals who may over-medicalize traumatic memories (Henry).

Over-medicalization of traumatic memories, as argued by Henry (2007), became a bio-ethical issue because of the ease with which drugs such as propranolol disrupted encoding in the brain. Encoding of traumatic events was described as occurring through the release of endogenous stress hormones, such as adrenaline, shortly after a traumatic event. Henry, in his criticism of the President's Council of Bioethics' monograph, *Beyond Therapy: Biotechnology and the Pursuit of Happiness* (2003) argued that "memorynumbing" could have deleterious effects on personal identity and responsibility. Recent research on AA has been concerned with exploring the differences between explicit and implicit memory (Ghoneim, 2001; Sigalovsky, 2003). Explicit memory has been described as involving conscious recollection of an event, and implicit memory as experiencing the influence of an event without conscious recall (Ghoneim). Wang (2001) suggested that the use of amnesic drugs might cause patients to lose explicit memory of a traumatic event but still experience negative effects because the memory is implicit. Intentional disruption of the encoding of the memories of AA may be another potential area for ethical concern regarding patient care and professional accountability.

Posttraumatic Stress Disorder

Posttraumatic Stress Disorder (PTSD) has been described as the development of characteristic symptoms following exposure to an experience of extreme fear, helplessness or horror; and avoidance, numbing and increased arousal have been identified as its primary symptoms (*DSM-IV-TR, 2000; 4th ed., text rev.*) Approximately half of the people who experienced AA were found to have developed PTSD (Lenmarken et al., 2002).

Understanding of PTSD developed over a 100-year period of social upheaval, wars, natural disasters, and accidents involving large numbers of people. Early research involved debates over the psychological and organic causes of traumatic disorders. Eventually, researchers agreed that any person, even one considered normal, could develop trauma symptoms if the psychological stress were high enough (Kinzie & Goetz, 1996).

Meyers and Blacher (1961) began to connect PTSD with anesthesia events in the early 1960s as they identified patients' symptoms of anxiety, irritability, and repetitive nightmares as having been caused by medical procedures performed under general anesthesia. Since then, psychological trauma has been a topic of research on AA (e.g., Lenmarken & Sydsjo, 2007; Mathews & Wang, 2007; Osterman & van der Kolk, 1998; Rankin et al., 2008). Researchers now understand that AA can have adverse effects and can cause a lifetime of problems that range from avoidance and anxiety to debilitating PTSD (Sigalovsky, 2003).

Not every person who experiences AA is traumatized; some patients who experience AA are only mildly affected (Mathews & Wang, 2007) or report no problems at all (Sandin et al., 2000). Because there are problems unique to AA, the possibility of awareness must be

considered when patients present with PTSD following surgery (Osterman & van der Kolk, 1998). Sensitization and conditioned emotional responses may cause and maintain symptoms of PTSD (Kirkorian & Layton, 1998), and traumatized patients may feel distressed, unsafe, terrified, and abandoned (Osterman & van der Kolk, 1998).

Conceptual Framework

This exploratory research examined individuals' perceptions of their experience of counseling for trauma related to AA. Specifically, I explored what individuals perceive was helpful and hindering in their counseling process; their expectations and beliefs about counseling; their feelings and thoughts about their counseling experiences; and their feelings and thoughts about their counseling outcomes.

The conceptual framework for this study is situated within the philosophy of Martin Heidegger (1889-1976) (Byrne, 2001), who saw consciousness as a part of the world, and presuppositions as inseparable from the world (Lavery, 2003). Heidegger believed people were always interpreting meaning, whether or not they were aware of doing so (Conroy, 2003). Dowling (2004) explained that individuals would seek understanding when presuppositions are disrupted and new or different knowledge would result from their attempts to understand the disruptive experiences. Within this philosophical context, a traumatic experience such as AA will have meaning to the people who experience it, and their counseling experiences may help them arrive at new or different understandings that may be helpful in ameliorating symptoms of PTSD. In the same context, counseling experiences will have a particular meaning to the people

who have them, and people may arrive at new or different understandings about counseling or themselves that are also helpful in resolving PTSD symptomology.

Purpose of the Study

The purpose of this phenomenological study was to explore individuals' perceptions of their experience of counseling for trauma related to AA. I hoped the results would provide unique information about counseling this population and help counseling professionals develop more efficacious therapeutic interventions by gaining increased knowledge about individuals' accounts of what helped and hindered their counseling for trauma related to AA.

Assumptions

As discussed by Lopez and Willis (2004), I assumed that people's realities are affected by the world in which they live that cannot be separated from them; thus, their choices are defined by the conditions of their lives. I also assumed that people may seek counseling when they have a problem, feel pain or discomfort; or need help changing, obtaining, or letting go of something. I presumed that many who experience AA without conscious memory of the causative event will still seek help to deal with its negative effects. In agreement with Dowling (2004), I also presumed language to be the link that makes understanding possible and shapes all situations and experiences; past, present, and future. A postulate of this research was that presuppositions or expert knowledge that the researcher brings to a study will contribute to a meaningful undertaking (Lopez & Willis, 2004). I assumed that clients have thoughts, feelings, and/or beliefs about what was helpful or hindering in their counseling for trauma related to AA.

Finally, as an underlying assumption of this research, I presumed that access to the privileged processes of clients will be helpful to counselors and clients.

Rationale

The rationale for this study is based on the understanding that exploring individuals' perceptions of their experiences of counseling for trauma related to AA facilitates identification of the ways they need help dealing with the experience. Discovering the therapeutic needs of individuals who have experienced trauma related to AA will help counselors understand the distinct ways individuals have been affected by their awareness experience, increase counselor empathy, and possibly help counselors develop interventions that are more efficacious.

Research Questions

The main research question for this phenomenological study was: "How do clients perceive their experience of counseling for trauma related to AA?" More specific research questions designed to answer this broad question included: 1) "Are there experiences indicating that clients' therapy processes have been helped or hindered?" ; 2) "If so, what factors do clients perceive were helpful in their counseling for trauma related to AA?"; 3) "If so, what factors do clients perceive were hindering in their counseling for trauma related to AA?"; 4) "What are the therapeutic effects for clients regarding helpful and hindering factors in their counseling for trauma related to AA?".

Methodology

Interpretative Phenomenological Analysis (IPA) was used to explore meaning (Brocki & Wearden, 2005) and deepen the understanding of subjective experiences (Polkinghorne, 2006).

The research is conducted through an empathic hermeneutics of trying to understand participants' point of view, and a questioning hermeneutics of asking critical questions to make sense of what participants are saying (Smith et al., 2009). Participants are viewed as experts on their own experiences, and the researcher's role is to reduce the complexity of experiential data through case-by-case and cross-case analysis (Chapman & Smith, 2002). This makes IPA solidly idiographic, or focused on insights about how participants make sense of their world (Smith, 2004, 2008). This qualitative methodology is designed to explore people's experiential worlds (Wertz, 2005) and make sense of phenomena from the meanings people ascribe to them (Denzin & Lincoln, 1994). IPA is an appropriate methodology to explore how clients perceive their counseling experiences for trauma related to AA.

Implications

I sought to explore the range of helpful and hindering aspects of counseling for trauma related to AA. Implications for practice are increased counselor understanding of significant therapeutic challenges, leading to more efficacious interventions, and awareness of events that might help or hinder the counseling process for this unique population. Specifically, counselors can learn what this population perceives as helpful or harmful regarding treatment approaches, goals, and outcomes. Helpful or hindering aspects of client in-session experiences (e.g., thoughts, feelings, and reactions that clients have about themselves and their counseling process) can be used to help counselors guide the counseling process more effectively. Finally, access to client perceptions of helpful or hindering therapist behaviors can help counselors build

relationships with clients and reflect on their own behaviors and reactions with this distinctive population (e.g., monitor assumptions or self-disclosure).

Limitations

Some limitations of this study were related to criticisms of IPA as well as Heideggerian philosophy. For instance, an assumption of an interpretive phenomenological study is that knowledge cannot be separated from interpretation so findings are not considered “true.” Instead, my perspectives as the researcher and the perspectives of the participants must converge in the interpretation. My bias, due to the shared experience of AA, may have affected the interpretation of the data. Participant bias also may have occurred because some of the sample was chosen from databases created by websites dedicated to raising awareness of AA. Also, the research involved self-selected participants who are a subset of all individuals who have experienced AA, and they may have under- or over-represented certain aspects of the phenomena being studied. A final limitation was participants may have felt uncomfortable and revealed less negative information about how they perceive their counseling experiences because I am a counselor.

Some of the potential limitations of this study could also be viewed as strengths of the study. It is possible that participants may have felt more comfortable and revealed more information about how they perceive their counseling experiences related to AA because I am a counselor and share the experience of AA. I may have had more insight or intuitive awareness regarding questions to ask participants because I share the experience of AA. Because of the

relatively large base of potential participants, there is more likelihood of obtaining truly representative findings.

Definition of Terms

Key terms in this study are defined as follows:

Acceptance and Commitment Therapy (ACT): A treatment designed to decrease avoidance and increase coping with unwanted thoughts, emotions, and memories. It focuses on increasing acceptance of, or willingness to experience, traumatic events (Batten & Hayes, 2005).

Acute Stress Disorder: Three characteristic symptoms (e.g., numbing, reduction in awareness of surroundings, derealization, depersonalization, and/or dissociative amnesia) that begin within four weeks of exposure to a traumatic experience and last from 2 days to 4 weeks with avoidance, numbing and increased arousal as its primary symptoms (*DSM-IV-TR, 2000; 4th ed., text rev.*)

Amnesic/Amnesia: Of or relating to amnesia/loss of memory (Medical Merriam-Webster Dictionary Online, 2008). Drugs causing amnesia include benzodiazepines, barbiturates, opioids, morphine, ketamine, scopolamine, and propranolol.

Anesthesia: Derivative of barbituric acid administered for rendering a patient insensitive to pain, such as morphine or ketamine (Kihlstrom et al., 1998).

Anesthesia Awareness (AA): Postoperative recall of events that occurred during general anesthesia (Bergman et al., 2002); direct recall of surgery or a medical procedure (*Joint Commission on Accreditation of Healthcare Organizations, 2004*).

Barbiturate: A drug used as a sedative, hypnotic, and antispasmodic (Medical Merriam-Webster Dictionary Online, 2008); used to relieve pre-operative anxiety (Kihlstrom et al., 1998).

Benzodiazepine: Group of aromatic lipophilic amines used as tranquilizers (Medical Merriam-Webster Dictionary Online, 2008), used to relieve pre-operative anxiety (Kihlstrom et al., 1998), as an analgesic (Ballard et al., 2006), and used as an amnesic premedication (PA-PSRS Patient Safety Advisory, 2005).

Client-Centered Therapy: A non-directive therapy in which the therapist provides accurate empathy, congruence or transparency, and unconditional positive regard with the understanding that the client has a natural tendency toward growth, healing, and self-actualization (Harvard Mental Health Letter, 2006).

Cognitive Behavioral Therapy (CBT): CBT, at its core, is a therapy designed to change clients' thoughts and feelings in order to change their behavior (Hayes, 2008).

Cognitive Therapy: A therapy designed to help clients examine interpretations of events, identify erroneous or unhelpful cognitions, evaluate the evidence for and against their cognitions, and develop more realistic or useful cognitions (Foa et al., 2009).

Couple and Family Therapy: A therapy that is based on a systemic theory of human behavior and interaction that views emotional difficulties as arising from within the milieu of the family system. The focus is on altering interactions and behaviors of family members (Everette, 1990).

Creative Arts Therapy (CAT): Approaches include psychodrama, art, music, dance movement, poetry, puppetry, drama (Dushman & Sutherland, 1997) and play therapy (Grubbs, 1994).

Dialectical Behavioral Therapy (DBT): A treatment guided by behavior theory, the biosocial theory of Borderline Personality Disorder, and the theory of dialectics. Emphasis is placed on the function of behavior and the context in which behavior occurs (Wagner et al., 2007). DBT focuses on skills and behaviors such as mindfulness and distress management (Lovellette, 2005).

Dysphoria: A state of feeling unwell or unhappy (Medical Merriam-Webster Dictionary Online, 2008).

Emotional Exposure treatment: A new treatment that involves detecting avoidance of a range of emotion-related stimuli and facilitating exposure techniques tailored to patients' avoidances to resolve trauma (Lumley et al., 2008).

Eye Movement Desensitization and Reprocessing (EMDR): A multi-stage therapy designed to desensitize clients and reprocess their traumatic memories (Foa, 2009).

Explicit memory: Conscious remembering, often by intentional retrieval (Schott et al., 2005).

Exposure Therapy: A therapy in which the client has extended contact with events or stimuli that are presumed to elicit anxiety (Berry et al., 2009).

Gestalt Therapy: A therapy designed to increase self-awareness of emotions, perceptions, and behaviors in the immediate present to better recognize and satisfy current needs (Medical Merriam-Webster Dictionary Online, 2008).

Group Interpersonal Therapy: A time-limited and structured psychotherapy designed to decrease identified symptoms and improve *interpersonal* functioning by improving communication and other *interpersonal* skills (Mufson et al., 2004).

Group Therapy: Therapy groups with specific goals or a range of problems and goals (Montgomery, 2002).

Hermeneutics: Interpretive phenomenology, also called hermeneutics, was developed by Heidegger as a philosophical methodology to uncover the meaning of being for humans (Dowling, 2004).

Hypnosis: The context in which an altered state of brain functional organization through interpersonal and cultural cues may produce non-ordinary alterations in subjective experience, volition and physiology (Gruzelier, 2000).

Idiographic: Focused on insights about how participants make sense of their world (Smith, 2004, 2008).

Implicit memory: Experiencing of influences on current behavior without intentional remembering, and sometimes without conscious remembering (Schott et al., 2005).

Interpretative Phenomenological Analysis (IPA): Introduced by Smith as a phenomenological approach to qualitative research; IPA's focus is on how people construct meaning in their social and personal worlds (Smith, 2008), and it contains an aspect of Symbolic Interactionism.

Ketamine: A general anesthetic administered intravenously and intramuscularly (Medical Merriam-Webster Dictionary Online, 2008); used as an amnestic premedication (PA-PSRS Patient Safety Advisory, 2005).

Medicalization: Application of diagnostic labels to various unpleasant or undesirable feelings or behaviors that fall within the range of human experiences (Chodoff, 2002).

Morphine: A crystalline narcotic that is the principal alkaloid of opium and is used as an analgesic and sedative (Medical Merriam-Webster Dictionary Online, 2008), used to induce general anesthesia by intravenous injection (Kihlstrom et al., 1998).

Multi-modal therapy: An approach that consists of many techniques from behavior modification, elements of social learning theory, general systems theory, and group communications theory. It contains many techniques from different therapies of various theoretical orientations, recognizes that many techniques and methods may be effective for reasons other than intended which may help clients to develop more coping responses (Martin-Causey & Hinkle, 1995).

Multi-phase therapy: Stage oriented treatment (e.g., three stage treatment of trauma consists of treatment alliance and safety, processing of traumatic material, and life consolidation and restructuring (Courtois, 2008).

Multisystemic Therapy (MST): A home-based model of therapy that addresses the multi-determined nature of serious clinical problems, integrates evidence-based interventions, and views the family as key to effective behavior change (Swenson et al., 2010).

Opioid: A drug that possesses some properties characteristic of opiates, but not derived from opium (Medical Merriam-Webster Dictionary Online, 2008), used to provide sedation and analgesia (Ballard et al., 2006).

Perception: According to Edmund Husserl (1859/1938), perception is the “comprehending act” (Sheehan & Palmer, 1997, p.113); the primary source of knowledge (Moustakas, 1994).

Phenomenology: Developed by Edmund Husserl, it aims to describe and understand subjective and objective lived experience through dialogue (Ballard et al., 2006), an empirical form of inquiry that is grounded in experience (Shank, 1995), and falls under the umbrella of qualitative research (Wertz, 2005).

Posttraumatic Stress Disorder (PTSD): Characteristic symptoms following an experience of exposure to extreme fear, helplessness or horror (American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.); its primary symptoms are avoidance, numbing and increased arousal.

Premedication: Drugs used to induce a relaxed state prior to the administration of anesthesia (Medical Merriam-Webster Dictionary Online, 2008).

Progressive Counting (PC): Trauma therapy in which a client imagines going through a trauma memory while a therapist counts out loud from 1 to 100. It appears to offer psychological distance, reduce disclosure of details, protect against overload, and help the client tolerate the work (Greenwald & Schmitt, 2010).

Propranolol: A beta-blocker usually used to treat hypertension, cardiac arrhythmias, angina pectoris, and migraine headache (Medical Merriam-Webster Dictionary); reduces consolidation of emotional memory (Henry, 2007).

Psychodynamic Therapy: A therapy that is based on the following premises: the relationships and circumstances of early life have an effect on humans, human behavior results from unconscious as well as conscious or rational motives, and the act of talking about

problems can help people find ways to solve them or at least bear them (Harvard Mental Health Letter, 2010).

Psychoeducation: Consists of theoretical and practical approaches designed to increase understanding and coping with various problems or situations, the main goals of this therapy are the enhancement of adherence, improvement of management skills, and development of strategies for effective coping (Colom & Vieta, 2004).

Psychological Trauma: The unique individual experience of a traumatic event or enduring traumatic condition that causes a person to feel emotionally, cognitively, or physically overwhelmed (Giller, 1999).

Psychosocial Rehabilitation: A treatment in which social and vocational skill training, peer support, vocational services, and consumer-community resource development are combined to reduce functional impairments and promote empowerment, hope, choice, recovery, and competency (Boettcher et al., 2008).

Stress Inoculation Training (SIT): A therapy that includes any of the following: education, muscle relaxation training, breathing retraining, role playing, covert modeling, guided self-dialogue, thought stopping, assertion training and exposure (Foa et al., 2009).

Scopolamine: An alkaloid found in solanaceous plants used chiefly to prevent nausea in motion sickness (Medical Merriam-Webster Dictionary Online, 2008), used as an amnestic premedication (PA-PSRS Patient Safety Advisory, 2005).

Sensori-motor: Comprising both sensory and motor aspects of bodily activity (Medical Merriam-Webster Dictionary Online, 2008).

Sequelae: A negative aftereffect (Medical Merriam-Webster Dictionary Online, 2008).

Support Group: A group for people with common experiences and concerns that provides emotional and moral support (Medical Merriam-Webster Dictionary Online, 2008).

Supportive Counseling (SC): Any form of treatment intended to relieve symptoms or help the patient live with them rather than attempt to change character structure.

MedicalDictionary@thefreedictionary.com Online, 2008).

Symbolic Interactionism (SI): Introduced by Blumer (SI; Blumer, 1900-1987), it is a major sociological perspective, based on the human mind's capacity to respond subjectively and create meaning through a process of interacting, interpreting symbols, and filtering (Rank & LeCroy, 1983).

Systemic Psychotherapy: A therapy that includes the three key practices of containment, curiosity, and consultation within a system of relationships and experiences, and focuses on the meanings clients attribute to them (Reynolds, 2007).

Transtheoretical therapy: A therapy that is based on a theoretical model that describes stages and processes of intentional behavior change. Actions are identified that will modify clients' thoughts and behaviors, and the timing of interventions in relation to clients' stages of change are considered (Simpson, 2009). The therapy increases self-efficacy and motivation to change.

Traumatic Event: Exposure to a stressful event that overwhelms a person's ability to cope, and leaves one fearing death, serious injury, or threat to the physical integrity of oneself or another person (*DSM-IV-TR, 2000; 4th ed., text rev.*)

Twilight Sleep: A state intended to dull awareness and memory of pain, which is produced by injection of morphine and scopolamine and formerly used in childbirth (Medical Merriam-Webster Dictionary Online, 2008).

Virtual Reality Exposure Therapy: Use of computer-generated technologies to create environments containing a wide range of trauma cues in a customized fashion to facilitate activation of fear memory and modulate emotional engagement to treat a variety of anxiety disorders, including trauma and phobias (Reger & Gahm, 2008).

Organization of Remaining Chapters

In this chapter, I introduced the research study and stated its purpose. I also provided the background, assumptions, and rationale for the research. In addition, I presented the research questions and the implications for practice. Finally, I discussed the study's limitations and strengths. In whole, I have presented the context for the study.

Chapter two contains a review of the literature on trauma and PTSD that includes their consequences, and trauma related to invasive medical procedures. Also contained in chapter two is a review of AA, including its occurrence, its effects, the populations at higher risk of experiencing AA, and the types of surgeries that are at higher risk of the occurrence of AA. Lastly, chapter two includes a review of the literature on clients' perceptions of counseling experiences and counseling for trauma and PTSD.

Chapter three contains an overview of the methodology, and the purpose of the study. A detailed discussion of the study's methodology is provided, including its philosophical

assumptions, epistemological bases, and research design. The role of the researcher is clarified, the research questions are reiterated, participant selection is described, data collection is delineated, and ethical considerations are discussed. Finally, a presentation of data analysis methodology is included. Chapter four includes data analysis procedures, participants' demographic information, introductions to the participants, a description of data analysis and reduction, a presentation of findings by research question, and a summary of the peer review process. Chapter five includes a discussion of the philosophical foundation, the purpose of the research study and its research questions, a summary of the methods and findings including data collection, data analysis, and findings. Chapter five also contains a presentation of the limitations and delimitations of the study, implications for counselors and counselor educators, recommendations for future research, and the researcher's personal reflection.

CHAPTER TWO

LITERATURE REVIEW

In this chapter, a general discussion of trauma and Posttraumatic Stress Disorder (PTSD) is presented to establish a base for understanding the experience of psychological traumas that originate in invasive medical procedures, and for understanding the experience of Anesthesia Awareness (AA) and clients' perceptions of their counseling experiences for trauma related to AA. In section one a discussion of trauma and PTSD is presented, including their consequences, with an extensive review of the literature on psychological traumas that originate in invasive medical procedures. This information is provided as groundwork for an in-depth discussion of Anesthesia Awareness (AA) and counseling for trauma related to AA. In section two the literature on the history, incidence, and effects of AA is presented. Section two also includes a discussion of the types of surgeries that are at higher risk of AA, and how AA occurs. In section three, the literature on clients' perceptions of their counseling experiences is discussed. In section four, counseling for trauma and PTSD are described. Altogether, the context for counseling for trauma related to AA is established.

Trauma and PTSD

How to define trauma has long been debated, and there has been no agreement as to whether its conceptualization should be broad or narrow. The American Psychiatric Association (APA) has defined a traumatic event as exposure to a stressor that overwhelms a person's ability to cope and leaves one fearing death, serious injury, or threat to the physical integrity of oneself

or another person (*DSM-IV-TR*, 2000/4th ed., text rev.) Some possible sources of trauma included in the *DSM-IV-TR* are combat, sexual assault, and natural disaster (Weathers & Keane, 2007). Other, more commonly cited traumatic events include sudden or tragic death of a loved one, serious accident, disaster, witnessing death or serious injury to another, threatened with a weapon, mugging, or robbery (Johnson et al., 2009). Giller (1999) argued that the individual's subjective experience determines whether an event is or is not traumatic for an individual. She claimed that trauma has no distinct boundaries, but instead occurs along a continuum. She contended that one of the problems with the *DSM* Criterion A (exposure to a stressor) for trauma is that it depends on frequency (e.g., infrequent, therefore more traumatic), whereas traumatic experiences are more commonplace. Weathers and Keane (2007) stated that although the conceptualization of trauma has remained stable over time, some of the criterion language of the *DSM* has been unclear. They contended that the development of the stressor Criterion (A) and ongoing debates about broad versus narrow conceptualizations of what constitute traumatic events remain problematic.

Although an extensive amount of research on trauma can be found in the literature, few studies were found on the prevalence. In the Netherlands, a random national sample of 1,087 adults 18 to 80 years of age revealed an 80.7% lifetime prevalence of trauma (de Vries & Olf, 2009). Similar results were reported by Frans et al. (2004), who found that 80.8% of 1,824 randomly selected European men and women had experienced at least one traumatic event in their lifetimes. By contrast, Perkonig et al. (2000) found 26% trauma rates for women and 17% trauma rates for men among a sample of 3,021 individuals 14 to 24 years of age in Germany. In

the United States, Ozer and Weiss (2004) reviewed trauma in the literature and concluded that approximately one-half of adults had experienced a traumatic event. Other researchers reported a 67% lifetime prevalence for at least one traumatic event for 937 college students (Bernat et al., 1998), and 62% of 108 publicly funded mental health providers had previous exposure to potentially traumatic events (Hanson et al., 2002). Individuals of different ethnic and racial heritage reported greater levels of early traumatic distress in a study of 269 English speaking and 91 non-English speaking survivors of injury at two United States trauma centers.

In summary, the definition of trauma has been debated, and its conceptualization continues to evolve as researchers learn more about it. Exposure to a stressor that overwhelms a person's ability to cope or an individual's subjective experience may determine that an event is traumatic. Finally, the prevalence of trauma in the general population has ranged between 62% and 80.8%, and individuals of various ethnic and racial heritages have had higher levels of traumatic stress than have Whites.

Posttraumatic Stress Disorder (PTSD)

As with trauma, the definition and conceptualization of PTSD have continued to evolve as clinicians and researchers learn more about it. PTSD is a complex disorder in which a person's memory, emotional responses, intellectual processes, and nervous system have all been disrupted by one or more traumatic experiences. The six criteria that define PTSD are exposure to a stressor, intrusive recollection, avoidance of traumatic stimuli and/or emotional freezing or flattening, increased psychological and/or physiological tension, symptom duration of more than

one month, and clinically significant suffering or impairment (*DSM-IV-TR, 2000; 4th ed., text rev.*)

In a call for an expanded diagnosis, van der Kolk and Courtois (2005) proposed a description of the long-term effects of childhood trauma that PTSD criteria do not capture. They recommended the diagnostic term *disorders of extreme stress, not otherwise specified* (DESNOS). They contended that co-morbid conditions such as substance abuse and affective, anxiety, dissociative, and somatoform disorders were complex trauma symptoms that PTSD criteria do not capture. The clinical implication of the lack of comprehensiveness in the criteria, they advised, is that clinicians run the risk of not helping, or possibly even harming, clients (van der Kolk & Courtois, 2005).

Another area of disagreement regarding the diagnosis of PTSD involves its etiology. Rosen et al. (2008) claimed that because Criterion A (exposure to a stressor) events were neither necessary nor sufficient to produce PTSD, the diagnosis has no specific etiology. According to Rosen et al., this lack of etiology is problematic because combinations of other disorders (e.g., symptoms of major depression and specific phobia) match those of PTSD.

Extensive research on PTSD began after it first appeared as a diagnosis in the DSM-III in 1980. The prevalence rates of PTSD reported in the literature varied; however, generally, it appeared that women experience PTSD more often than do men. Frans et al. (2004) found 5.6% lifetime PTSD prevalence in European adults, and reported a 1:2 male to female ratio of PTSD despite the fact that men reported more trauma exposure. In the United States, the lifetime PTSD prevalence was reported to average .08% to .09%, with women having more than two times the

risk of developing PTSD after a traumatic event than men, except in war environments (Johnson et al., 2009). A significantly higher rate, 3.6% of adults aged 18 to 54 (5.2 million people in the United States), was expected to develop PTSD in any given year (The National Alliance of Mental Illness, 2010).

With respect to specific populations, the prevalence of PTSD in the general population of older adults in the United States has not been reported, but there is evidence that older age may be protective against PTSD (Michaels et al., 1999). Kilpatrick et al. (2003) reported incidence rates among adolescents of 3.7% for boys and 6.3% for girls within a six-month period. Finally, Santos (2008) discovered that Asian injury survivors had significantly higher symptoms of PTSD than did Whites among a group of ethnically and racially diverse participants.

In summary, the definition of PTSD has continued to evolve, and objections have been raised about the accuracy of the DSM-IV-TR definition. The literature suggested that PTSD occurs in .09% to .36% of people in the general population. It also appears that females have a 2:1 ratio of PTSD over males, even among adolescents, and that Asians have significantly more symptoms of PTSD than do Whites.

Consequences of Trauma and PTSD

Individual responses to trauma vary widely, ranging from brief disruption of functioning to chronic and debilitating PTSD. The early stage of trauma, according to van der Kolk et al. (2005), has the following symptoms: difficulty regulating affect and impulses, problems with memory and attention, distorted self-perception, problems with interpersonal relations, somatization of symptoms, and difficulty with systems of meaning. Powerful negative and

varied posttraumatic emotions of fear, shame, guilt, anger, and sadness occur in response to different types of trauma (e.g., sexual assault, physical assault, transportation accident, and illness/injury) (Amstadter & Vernon, 2008). Physiological arousal, posttraumatic dissociation, and intervention thoughts (e.g., thoughts about how to have intervened to stop a traumatic experience) are all components of a trauma experience, and intense emotions of anger, guilt, and shame contribute to the variability of PTSD (Dyb et al., 2008).

Early iterations of the DSM clustered the symptoms of PTSD into three categories (re-experiencing, avoidance, and arousal) that result from exposure to a traumatic event, but researchers (Elklit & Shevlin, 2007; King et al., 1998; McDonald et al., 2009) argued that this model did not sufficiently identify its symptoms. In 1998, King et al. suggested a model that added to the DSM-III a fourth factor, *emotional numbing*. More recently, McDonald et al. (2009) conducted a meta-analysis and concluded that research findings generally supported a four-factor structure of PTSD. Elklit and Shevlin (2007) also supported a four-factor model of PTSD, and recommended adding *dysphoria* with the features of re-experiencing, avoidance, and arousal.

Symptoms of PTSD, according to the current DSM-IV-TR, include intense fear, helplessness, or horror. They also include persistent re-experiencing of a traumatic event by recurrent and intrusive recollections, dreams, or flashbacks, and intense psychological distress and physiological reactivity at exposure to cues that resemble the event (*DSM-IV-TR (2000); 4th ed., text rev.*)

In summary, researchers have explored different types of trauma exposure that result in varying risks for PTSD and associated symptoms. Individuals' responses to trauma differ widely, ranging from brief disruption of functioning to chronic and debilitating PTSD. Most researchers' findings support a four-factor model of PTSD. From the broad research on different types of trauma, the focus of this review will now narrow to psychological traumas that originated in invasive medical procedures.

Trauma Related to Invasive Medical Procedures

Research interest in trauma related to invasive medical procedures developed primarily in the mid-1990s, and a resurgence of interest occurred in the mid to late 2000s. Numerous studies were conducted on children, adolescents, and adults in relation to procedures that occurred in intensive care units (ICU) and during surgical events. However, no articles were found that reported ethnicity, race, or older adults related to psychological trauma from invasive medical procedures. Relevant research findings on trauma related to invasive medical procedures are included in the discussion that follows.

In 1995, Shopper presented retrospective case studies on the negative influence of seemingly painless medical procedures on child development in the areas of body image, identity formation, and presentation of symptoms. He asserted that the lasting and frequently far-reaching developmental impact of medical trauma had been neglected or minimized. By contrast, Ben-Amitay et al. (2006) explored posttraumatic anxiety in children admitted for elective surgery and concluded that minor symptoms of anxiety lasted only for one month and then subsided. Ben-Amitay et al. suggested that their findings might indicate a simple planned

surgery may not be a traumatic event. However, numerous researchers have found that medical trauma, especially trauma induced through invasive medical procedures, has had a profound adverse effect on children's well-being and development (Bronner et al., 2008; Dyb et al., 2008; Menage, 1999; Merritt & Ornstein, 1994; Shopper, 1995; Solter, 2007). In one study, PTSD reactions were significantly related to intense emotional responses, physiological arousal and dissociation, with intervention thoughts accounting for 48% of the variance in adolescent PTSD (Dyb et al., 2008). In another study, the traumatic effects of post-pediatric intensive care unit (PICU) children's experience with invasive procedures did not decline over time (Rennick et al., 2002). Rennick et al. claimed that younger children whose surgeries included higher degrees of invasiveness might be most at risk for continued fearfulness, and may remain significantly traumatized at six months post-PICU hospitalization.

Women were vulnerable to trauma from invasive medical procedures, especially during obstetric and gynecological procedures. For example, one in three (33%) of 499 women had a traumatic birthing experience, and 28 (5.6%) met DSM-IV criteria for acute stress disorder (Gamble & Creedy, 2005). Gamble and Creedy asserted that PTSD after childbirth was poorly recognized, and they recommended a serious review of invasive obstetric interventions. Of 40 women from the United States, United Kingdom, Australia, and New Zealand who experienced birth trauma, 32 (80%) had PTSD but had not sought treatment, and eight (20%) had PTSD and sought treatment (Beck, 2004). Loss of control was traumatic and a significant predictor of PTSD in this study in which some women said their traumatic birth experience felt like being raped.

In a case of PTSD that resulted from AA during an emergency cesarean section, a patient described being unable to breathe, and the feeling of a “metal blade that felt like a knife ... jammed down my throat” (Aaen, 2010., p. 1). She described the experience of feeling an arm pushed into her vagina and becoming confused and thinking she was experiencing rape. She recounted the drugs causing her to forget she was giving birth, and blacking out in terror before waking up and again feeling the torture. She said she experienced nightmares and uncontrollable flashbacks for months afterward, and sought psychological help that included exposure therapy to resolve her symptoms of trauma (Aaen, 2010).

Surgical Intensive Care Unit (SICU) patients who underwent coronary artery bypass grafts confirmed that intubation and inability to talk were the most stressful experiences before and during the procedure (Pennock et al., 1994). Twenty-five percent of medical, surgical, and trauma patients who were in the Intensive Care Unit (ICU) reported severe posttraumatic symptoms (Myhren et al., 2010). One year following the ICU treatment, patients’ mean level of posttraumatic stress symptoms was high, and one of four was above case level. The strongest predictors for traumatic symptoms were memory of pain, lack of control, and inability to express needs (Myhren et al.). Among ICU patients who experienced mechanical ventilation for at least 48 hours, 35% had clinically significant posttraumatic symptoms and those with traumatic memories of intubation and treatment experiences were more likely to report posttraumatic stress disorder (Shaw et al., 2001). Shaw et al. concluded that the sequelae of traumatic medical experiences were often unrecognized. Other ICU experiences from the patients’ point of view

indicated that pain, nose or mouth tubes, restraint by tubes, and inability to sleep were the most significant stressors (Novaes et al., 1999).

In summary, a resurgence of research interest in trauma related to invasive medical procedures occurred in the mid to late 2000s. Numerous studies were conducted on children, adolescents, and adults. PTSD reactions were significantly related to intense emotional responses, physiological arousal and dissociation, and intervention thoughts. Intubation and inability to talk were the most stressful ICU events. Results of these studies indicate that significant or repeated invasive medical procedures have the potential to create aversive, chronic, and possibly debilitating symptoms of PTSD. It seems logical that patients who experience AA may develop symptoms of PTSD commensurate to the anxiety, powerlessness, pain, and horror of being awake during surgery. In this section, trauma and PTSD, including the consequences of PTSD and psychological traumas that originate in invasive medical procedures, have been discussed. An in-depth discussion of AA follows.

Anesthesia Awareness (AA)

Although literature on AA dates back to 1950, the phenomenon has received more attention since 2000. Global research interest in AA has resulted in articles from China, Britain, Thailand, Finland, Germany, Spain, Australia, South Africa, and the United States. Relevant research is reviewed in the following discussion.

AA, in its simplest definition, is postoperative recall of events that occurred during general anesthesia (Bergman et al., 2002; Orser et al., 2008). The American Society of Anesthesiologists' definition limits recall to explicit memory that does not include times of

anesthesia induction and arousal (ASA, 2006). The Joint Commission on Accreditation of Healthcare Organizations (JCAHO, 2004) limits recall to a patient's direct awareness of surgery or a procedure performed under anesthesia.

Whatever the definition of AA that has been proposed, the literal meaning of awareness as a conscious and subjective experience was clarified in a study by Kerssens et al. (2003). They found that, of 37 (66%) patients with an unequivocal response to a hand-squeeze command during surgery, only nine (25%) reported conscious recall after surgery (Kerssens et al., 2003). These results suggest that people are usually aware of more than they remember during surgery; thus, reliance on conscious recall may cause underestimation of instances of awareness.

Incidence of AA

The literature is inconclusive regarding the incidence of AA, and problems exist that have made it difficult to obtain a concise picture. Both under- and over-reporting seem to occur. For example, selection of participants by advertisement may appeal to patients who have some lingering medical problem or interest in their medical condition, which may result in over-reporting, or advertisements may not attract patients who will not respond due to trauma avoidance, leading to under-reporting (Samuelsson et al., 2007).

It is difficult to guarantee that amnesia rather than lack of awareness is occurring (Anderson et al., 2004). For example, in one study 10 of 11 patients were unable to recall command events (e.g., hand squeezes) that they performed while fully aware during two balanced inductions of anesthesia (Russell, 1995). Other researchers have reported a similar problem with memory and anesthesia (Adams et al., 1998; Barr et al., 2001; Kerssens et al.,

2003; Sandin et al., 2000). Sandin et al. (2000) considered the timing of interviews as a possible factor for underestimation because of delayed memory and late onset of symptoms with AA. Better job performance by personnel who knew research was taking place, referred to as a Hawthorne effect, was also reported as a possible source of fewer recognized cases of AA (Rungreungvanich et al., 2007). Under-reporting may be caused by the particular wording of important interview questions (Sebel et al., 2004), and patient resistance to reporting AA due to PTSD symptomology of trauma avoidance (Osterman & van der Kolk, 1998). Finally, under-reporting of AA may be the result of the use of drugs (e.g., scopolamine, benzodiazepine) administered to prevent memories of events that occurred during surgery (ASA, 2006).

Over-reporting among children was considered possible because of their easy suggestibility and confabulating (Huang et al, 2005). Kent (2010) proposed patient confusion and miscommunication as possible sources of overestimation. According to Kent, AA events that occurred under regional and monitored anesthesia care (MAC) were mistakenly reported by patients as events that occurred under general anesthesia. However, MAC and general anesthesia occur along a continuum. The ASA (2008) issued a statement that recognizes as a general anesthetic if a patient loses consciousness and the ability to respond purposefully. Based on the ASA's statement, Kent's claim is questionable because he did not indicate how many patients in his review of closed claims remained alert and how many lost consciousness. Overestimating may also have occurred as patients who sought financial compensation were disproportionately represented in research based on closed case claims (Samuelsson et al., 2007).

Finally, patients' knowledge that they were participating in research on awareness may have increased their incidence of reporting AA (Sebel et al., 2004).

Low incidences of AA were found in the analysis of a database for 10,811 patients interviewed on the first day post-surgery; only 12 (.011%) episodes of awareness were identified (Myles et al., 2000). Similarly, only ten (.04%) cases of definite awareness, and nine (.03%) cases of possible awareness were found among 2,612 patients interviewed on the same day they were in the post-anesthesia care unit (PACU) (Ranta et al., 2002). A weakness of these studies is that patient interviews took place soon after surgery and delayed onset cases were omitted.

A small-scale study of 138 anesthetized patients using nitrous oxide with neuromuscular blockage resulted in no accounts of awareness (Agarwal & Sikh, 1977). The small sample may have led to no reported instances of AA. In a study of 126,078 general anesthetized cases involving spinal anesthesia in 20 hospitals in Thailand, outcomes showed AA recall of 0.038% in 1000 cases of general anesthetics, and .08% among female, cardiac, obstetric, and lower abdominal surgery patients (Rungreungvanich et al., 2007). Two possible weaknesses of this research study were that anesthesia personnel were part of the study, and interviews were conducted within 24 hours of the surgeries. In a large-scale study, 177,468 patients were interviewed 48 hours after surgery (Pollard et al., 2007); only six patients reported instances of recall, an incidence rate of .0068%. The lack of robust data and the researcher's elimination of a crucial question from the modified interview made the validity of the data questionable. Also, Sebel et al. (2007) contended that the Pollard et al. study might have confounded dreaming with awareness in patients. Finally, outpatient surgery resulted in .07% incidence of AA among 1,500

surgeries, compared to .13% incidence among 2,343 inpatient surgeries (Wennervirta et al., 2002).

A high occurrence of .2% was found in a study of 1,000 and 3,415 anesthetized adults who were interviewed between 20 and 36 hours postoperatively (Liu et al., 1991). Jordening and Peterson (1991) found that awareness with recall was 1.0% or 39 of 3,921 cases when researchers interviewed patients in PACU on postoperative day 7 and day 30. In another study, Errando et al. (2008) maintained that exclusion of emergency patients would result in incidence rates between .8%, and .6% for elective surgery. In 2009, Sebel et al. interviewed 297,957 participants and reported an incidence rate of 1:863 (.12%). Sandin et al. (2000) interviewed 11,785 patients before they left the post anesthesia care unit (PACU), then again 1-3 days and 7-14 days post-operative. They reported AA rates of .18% with neuromuscular blocking drugs and .10% without the drugs. Conducting interviews after patients left the PACU resulted in six additional cases of awareness, making the total number of cases 17 (Sandin et al). In 2004, Sebel et al. conducted 19,575 interviews and found 25 (.13%) awareness cases and 46 (.24%) possible awareness cases at follow up one week after reported awareness. Researchers at academic medical centers in China interviewed 1,101 patients who received general anesthesia with muscle relaxation on the first and fourth day after surgery (Xu et al., 2009). They reported 46 cases (.41%) of definite awareness and 47 additional cases (.41%) of possible awareness. The researchers concluded that the incidence of AA in China was approximately two to three times higher than in Western countries.

The pediatric anesthesia AA incidence rate reported by Davidson et al. (2005) was .8%, whereas Lopez et al. (2007) reported a 1.2% incidence rate, or 2.7% if possible cases of AA were included. Among cardiac patients, AA occurrence was .5% or 5 patients among 929 who were interviewed, and as high as 2.3% (21 patients) if possible recall were included. Four hundred ten children age 6 to 16 were interviewed within 36 hours of general anesthesia for surgery, and one month later 293 were interviewed again. Five cases (1.2%) of confirmed awareness were found, but when the six cases of possible awareness were added the rate rose to 2.7% (Lopez, et al., 2007).

Overall, variations in the reported prevalence rate of AA have been attributed to: failure to remember events that happened during surgery, timing of the interview (related to delayed memory and late onset of symptoms), patient under-reporting, heightened awareness of anesthesia personnel leading to reduction of human and technical error during studies, small sample size, large numbers of participants required, and high-risk patients and surgeries. Further complicating the ability to obtain clear and concise accounts of AA incidence, the ASA's Practice Advisory (2006) sanctioned the use of benzodiazepines or scopolamine to prevent awareness *after* patients unexpectedly become conscious during surgery.

In studies that revealed an estimated 20,000 to 40,000/20 million cases of AA in the United States annually (Blusse, 2008; Sebel, 2004), high-risk cases were not considered. In addition, the estimates appeared to include inpatient surgeries only. Including outpatient surgeries increases the prevalence. No study was found that attempted to calculate the possible cases of AA based on both inpatient and outpatient surgeries performed under anesthesia.

The incidence of AA appears to have been under-reported. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) recognized this trend in its 2004 Sentinel Event, stating that Anesthesia Awareness is under-treated and under-recognized in healthcare organizations. AA prevalence rates reported in the literature ranged from .0068% to .41%; however, .1% to .2% (20,000 to 40,000/20 million cases per year) was most frequently estimated.

The Effects of AA

The first case presentation of AA was a report concerning a patient who stated he had no severe psychological trauma after awakening paralyzed and in severe pain during surgery (Winterbottom, 1950). A decade later, research appeared that described patients who awakened from anesthesia during cardiac surgery and suffered from a “traumatic neurosis” (Meyer & Blacher, 1961). Meyer and Blacher attributed the symptoms of repetitive nightmares, general anxiety, irritability, and a preoccupation with death to patients’ profound helplessness and belief that something had gone wrong.

Moerman et al. (1993) interviewed people who experienced AA to learn about its aftereffects. In their study, 18 (70%) participants claimed to have experienced aftereffects of sleep problems, nightmares, flashbacks, and anxiety during the day. In another early study on AA, 11 of 45 former surgery patients reported having anxiety and nightmares, and three met criteria for PTSD that required treatment (Schwender et al., 1998). Consequences these patients discussed were re-experiencing the event, numbing of responsiveness, increased arousal,

loneliness, and lack of confidence in future life. They also disclosed their fear of future surgeries (Schwender et al.).

In the first study to identify PTSD as a complication of AA, 16 post-awareness subjects had significantly greater PTSD symptom severity than controls (Osterman et al., 2001). None of the controls and 9 of 16 (56.3%) subjects met diagnostic criteria for PTSD. The subjects described significantly more postoperative distress; the most common problems were feeling unsafe and helpless, followed by feeling abandoned by the doctors and nurses, terror, and inability to communicate. One subject recounted having recurring thoughts, “days later ... horrifying images and terror ... rose from the depths of my being ... I was once again in the grips of horror” (Osterman et al., p. 203).

Cadamy and Bong (2003) presented the case of a 54-year-old man who experienced AA from throat pressure during surgery. He complained of persistent and intrusive recall of the events, and described being unable to breathe as a nurse clamped his throat in her hand; he became anxious and distressed before losing consciousness. He said his symptoms slowly improved, although he feared going to sleep for some time. He also expressed extreme apprehension about possible future surgery (Cadamy & Bong, 2003).

A study on the long-term effects of AA was conducted involving nine cases, in which two participants denied any adverse sequelae, three experienced transient but diminishing symptoms of PTSD, and four remained severely disabled due to psychiatric or psychological symptoms (Lennmarken et al., 2002). Of the four who experienced severe problems, two sought professional psychiatric help. All of the four who had severe sequelae were able to recall the

traumatic event in detail, with no diminishment of their memories. The participants met criteria for PTSD of fear and helplessness (Criterion A2), and re-experiencing the event (Criterion B). Three participants were unwilling to have another operation, and the fourth was hesitant (Criterion C, avoidance). All four patients experienced symptoms of flashbacks, panic, fear, anxiety, difficulty concentrating, irritation, insecurity, sleep disturbances, and nightmares (Criterion D, increased psychological and/or physiological tension). For all four patients, impairment of their social lives (Criterion F, clinically significant suffering or impairment) had continued for at least two years (Criterion E, lasting for more than one month). The three patients with transient symptoms of PTSD reported less detailed, but still clear recall of the AA event, and only occasional feelings of anxiety or difficulty sleeping (Lennmarken et al., 2002).

The first of two case reports on AA by Salomons et al. (2004) described a patient whose interview took place 13 years after her laminectomy. She did not reveal her AA experience immediately after the surgery, but later came forward and discussed having awakened several times during the surgical procedure. She told researchers that she experienced pain in her back and leg at night that felt like the pain she felt during AA. She was awakened by pain that appeared to be triggered by a state of consciousness which resembled a mild anesthetic after she entered a light sleep aided by sleep medication. She experienced vivid memories of the “clinking” sounds she heard in the operating room during her AA experience, and for many years could not eat using metal utensils. She also experienced long-term mental and psychological problems, and at the time of the interview, she was suffering from diagnosed PTSD. She

received Cognitive Behavioral Therapy (CBT) that eventually resolved her nocturnal re-experiencing of back and leg pain, and improved her sleep (Salomons et al., 2004).

The second case report presented by Salomons et al. (2004), involved a woman who was awake for most of her intubation, surgery, and extubation. She had multiple symptoms of PTSD, but returned to work at a hospital several weeks after the AA event. She described seeing a nurse wearing a blue scrub suit at work and suddenly experiencing severe substernal chest pain, feeling trapped, and wanting to run out of the elevator that she occupied. She recounted experiencing depersonalization and derealization along with intense pressure in her sternum, and the pain stopping when she left the elevator. Since that event, she said she tried to avoid elevators and scrub suits, but there were other incidents when she saw scrub suits and had similar responses. When interviewed, she was suffering from PTSD. Treatment using CBT reduced but did not eliminate the pain in her sternum. Salomons et al. concluded that fear conditioning contributed to re-activation of pain in both case reports.

In another case, a 60-year-old male experienced AA during a gastric bypass and cholecystectomy that was at high-risk for awareness because of a complex medical history which included myocardial infarction, coronary angioplasty, insulin-dependent diabetes, and chronic back pain that was managed with Oxycontin™, Neurontin, and cyclobenzaprine (Rampersad & Mulroy, 2005). He experienced AA in spite of the use of a Bispectral Index® monitor intended to detect awareness during his surgery. Upon awakening, he had vivid, painful recollection of the “unimaginable” pain and feelings of people “tearing at me.” He said he wished he were dead and tried to communicate his suffering (Rampersad & Mulroy, p. 2).

Three case studies involved women who awakened in surgery; one during removal of her eye, one during a cesarean section and again four years later during a second surgery, and one during draining of an abscess in her jaw (Mathews & Wang, 2007). All three patients reported feeling extreme pain, paralysis, and helplessness, and they feared or wished for death during their AA experience. Eight years later the first patient had PTSD symptoms of easy startle response, flashbacks, triggers, temper flare-ups, mood instability, fatigue, inability to cope with overwhelming situations, sleeping for only short periods before waking, and inability to sleep in a reclining position. The second patient continued to experience flashbacks, phobic avoidance, and depression longer than ten years later despite having received Cognitive Behavioral Therapy. The third patient took antidepressant medication and received professional psychological intervention after her AA experience to treat nightmares, panic attacks, flashbacks, suicidal feelings, withdrawing, and avoiding contact with unfamiliar people. After six months of therapy, she had a significant reduction of symptoms, but continued to have flashbacks or nightmares every couple of weeks (Matthews & Wang).

Late psychological symptoms were examined among 79 former AA patients who were interviewed by telephone (Samuelsson, 2007). Of these, 15 (.33%) individuals had late psychological symptoms of anxiety, chronic fear, nightmares, flashbacks, indifference, loneliness, and lack of confidence in future life. Of these, six reported symptoms that lasted for longer than two months, one had a diagnosis of PTSD and eight claimed to have had delayed (1 day to 2 years) understanding of awareness. Thirty-one patients denied experiencing late symptoms, and the 15 remaining patients maintained they had some late symptoms of

nightmares, anxiety, and flashbacks. Late symptoms were reported to have lasted approximately two months in nine patients, and for years in six patients. Nightmares and flashbacks were the most persistent symptoms that were reported to have lasted for years in four of those six patients. The final two patients experienced more severe problems and sought psychiatric care.

Blusse (2008) reported two cases involving boys who had AA experiences that consisted of nothing more than mild pain. An upset 12-year-old boy cried in the recovery room as he told the recovery staff that he had been awake during the incision, and an eight-year-old boy told staff in the recovery room that he had been awake during intubation. Both boys denied negative results from their experiences (Blusse).

In a multicenter trial of 2,463 patients in Australia, median follow-up time was 5.3 years for five of seven confirmed awareness patients (.71%) who fulfilled PTSD criteria when interviewed (Leslie et al., 2010). The median onset of symptoms was 14 days, with a range of 7 to 243 days after surgery. The median duration of symptoms was 4.7 years, with a range of 4.4 to 5.6 years. Two of the five AA patients developed PTSD, and both of the AA patients who did not develop PTSD reported psychological symptoms within 30 days of surgery (Leslie et al., 2010).

Seven cases of true awareness were examined in a study on AA that was nested within a larger study on children's behavioral change following surgery (Davidson et al., 2005). Children were first interviewed within 24 hours after surgery; if a child answered yes to a question that indicated awareness, follow up interviews were conducted on the 3rd and 30th days following

surgery. No child reported distress, and no significant difference was noticed between the aware and non-aware children (Davidson et al.).

Finally, 22 patients in interviews administered on postoperative days 7 and 30 confirmed that they still experienced fear of having surgery or admitting to a hospital, and had sleep difficulty, anxiety, and nightmares (Errando et al., 2008).

Overall, the consequences of AA described in the literature ranged from no symptoms at all, to transient symptoms, to long-term PTSD. Children appeared to have fewer symptoms; however, the ability of young children to comprehend AA and relate symptoms to its occurrence was not addressed in the literature. If the memory of awareness were psychologically repressed or blocked by strong anesthetics, the child or parents may attribute trauma symptoms to other developmental or personality issues. The literature indicated that adults and children tend to avoid reporting AA, and late onset of symptoms is relatively common. Because children of different ages are at various stages of development and are at higher risk of AA in emergencies, more research is needed to determine the effects of AA on children. PTSD was a frequent complication, with some participants meeting all of the diagnostic criteria. Less severe symptoms (e.g., nightmares) appeared to diminish over time without professional intervention, whereas more severe symptoms (e.g., panic attacks) remained in some form for as long as ten years even though therapeutic interventions had occurred.

Populations at Higher Risk for AA

Although any individual who undergoes general anesthesia for a medical procedure is at risk for AA, some populations are more at risk. Children (aged 6 to 16 years) who underwent

general anesthesia were evaluated and found to be at higher risk for AA (Lopez et al., 2007). A semi-structured in-depth interview that was adapted to children's cognitive abilities was administered to 410 children within 36 hours after elective or emergency surgery. One month later, 293 of these patients were interviewed again. The incidence of awareness was 1.2% for confirmed cases, and increased to 2.7% when possible cases were included. Lopez et al. concluded that the application of an interview adapted to the cognitive abilities of children seemed to enhance detection of awareness in this population. An investigation on AA under general anesthesia was nested within another study on the behavior changes of children (5 to 12 years of age) after surgery, and seven cases (.8%) of true awareness were found (Davidson et al., 2005). The researchers posited that awareness might have occurred in children because of the larger concentrations of volatile anesthetic children required to achieve anesthesia. Lastly, children who experienced multiple manipulations of their airways (e.g., intubation) were eight times more likely to develop awareness (Lopez et al., 2007). The authors of this study noted that, because a small sample was used, the findings could not be attributed exclusively to anesthesia-related factors.

Women were found to be at greater risk of AA than were men. In two analyses of the databases of Closed Claims for malpractice that, together, spanned more than 40 years, more patients were women (Domino et al., 1999; Kent, 2010). Domino et al. (1999) found that the relative frequency of a recall claim was increased by the use of anesthesia opioids, anesthesia muscle relaxants, and gynecological surgical procedures when compared to other general anesthesia claims. Even so, the increased relative frequency of recall was not independently

associated with an obstetric or gynecological procedure. The researchers were unsure why female gender was associated with three times higher rate of recall claim than other types of claims. They suggested higher rates may have been related to females being more likely to file a claim for recall, light-anesthetic techniques (especially during cesarean section), and women awakening more quickly from some anesthesia (Domino et al.). In another review of the literature, this time from 1950 to 2005, women were still over-represented relative to men in the reported cases of AA (Ghoneim et al., 2009).

Altogether, the populations that were at greater risk for AA included children and women. The AA incidence range for children was 1.2% to 2.7%, and those who experienced multiple intubations were eight times more likely to experience AA. Women were found to have three times higher rates of recall in general surgeries than were men, and the reason for this is still unclear. No study was found that attempted to calculate the possible cases of AA based on populations at higher risk during surgery under general anesthesia.

Types of Surgeries at Higher Risk for AA

Some surgeries are more highly associated with AA. The American Society of Anesthesiologists (ASA) (2009) stated that cardiac, cesarean, trauma, and emergency surgeries have higher incidences of awareness than most other general surgeries. For the most part, increased risk of AA in cardiac surgeries was confirmed in the literature (Domino et al., 1999; Rungreungvanich et al., 2007; Sebel et al., 2004). In particular, fast-track cardiac anesthesia, which allowed early extubation after surgery and utilized short-acting anesthetic and sedative agents, had an incidence rate of .3% (ASA, 2006). In another examination of the incidence of

AA in cardiac surgery, .3% was the lowest incidence of awareness (Dowd et al., 1998). In conflict with these findings, after completing a survey of 929 cardiac surgery patients, Ranta et al. (2002) claimed that cardiac surgery does not carry increased risk of awareness. This researcher also examined the effects of benzodiazepines in the study and concluded that benzodiazepines given during anesthesia are effective in decreasing the incidence of recalled awareness. However, Ranta et al. made no mention of the incidence of AA without the use of benzodiazepines to stop patients from remembering what they may have consciously experienced during surgery.

Increased risk of AA for general anesthesia cesarean section examined in 13 hospitals revealed two cases of AA (incidence .26%), and three cases of possible awareness (Paech et al., 2008). The researchers concluded that AA remained a significant complication of obstetric general anesthesia, and suggested that physiological changes (e.g., high cardiac output of pregnancy), concern about neonatal drug exposure before delivery, the effect of volatile anesthetic agent on uterine tone, and the hemodynamic effects of anesthetic agents in emergency birthing situations are possible factors for AA (Paech et al.). In addition, women undergoing obstetric procedures are commonly recognized to be at higher risk of AA (Chin & Yeo, 2004; Dauderer & Schwender, 2000; Errando et al., 2008; Matthews & Wang, 2007).

Trauma and emergency surgery patients may have conditions that cause instability and reduced anesthetic requirement (e.g., hypotension, hypothermia, alcohol intoxication) (Bogetz & Katz, 1984). Bogetz and Katz found a “considerable” (4 of 51, or 11%) rate of awareness during surgery among trauma patients who were interviewed. Domino et al. (1999) found that the

incidence of AA during major trauma was greater than .8%. Other researchers' findings supported the increased incidence of AA in emergency surgery as well (Errando et al., 2008; Hardman & Aitkenhead, 2005; Osborne et al., 2005; Sebel et al., 2004).

Patients who were less fit for surgery were discovered to be at higher risk of AA when ASA physical status was compared in 25 cases of AA (Sebel et al., 2004). The ASA physical status classifies the physical fitness of a patient before surgery; it ranges from a normal, healthy patient (I) to a brain dead patient whose organs are being removed for transplantation (V) (ASA, 2009). In these 25 cases, increased ASA physical status was associated with awareness for ASA status III-V (less fitness) when compared to ASA status I-II (more fitness) (Sebel et al., 2004).

In summary, certain populations and types of surgeries are at higher risk for AA. Cardiac, obstetric, and emergency surgery patients and patients who have hypotension, hypothermia, alcohol intoxication, and an ASA physical status of less fit (III-V) are at higher risk. No study was found that attempted to calculate the possible cases of AA based on high risk surgeries performed under anesthesia.

Causes of AA

AA has various causes. Ghoneim et al. (2009) found that light anesthesia was the most common cause of AA. Bergman et al. (2002) reviewed 8,372 incidents in the Anesthetic Incident Monitoring Study and reported that AA was mainly due to drug error that resulted in paralysis of an awake patient, failure of delivery of volatile anesthetic, or inadequate administration of a hypnotic. Of these, a central nervous system depth of anesthesia monitor might have prevented 42 incidents, and 32 incidents might have been prevented by an improved

drug administration system (Bergman et al.) Inappropriately light anesthesia (Xu et al., 2009) and anesthetic techniques using anesthesia opioid, anesthesia muscle relaxants, and no volatile anesthetic (Domino et al., 1999) were other causes of AA. Deficiencies in labeling and vigilance were common causes for awake paralysis, and more instances of AA in women were due to nitrous – narcotic – relaxant techniques (Domino et al.). Use of inhaled nitrous oxide resulted in .44% AA, whereas etomidate plus fentanyl resulted in .07% AA (Russell, 1986). In a closed claim analysis, Kent (2010) found that light anesthesia and anesthetic delivery problems were two of the main causes of awareness. Finally, equipment malfunction or misuse was reported as another cause of AA (ASA, 2009).

In summary, human error and mechanical failure seem to be the primary causes of AA with inappropriately light anesthesia as the reason most often recognized. This section provided contextualization for the study of PTSD and AA through a discussion of trauma and PTSD; a review of the literature on psychological traumas that originated in invasive medical procedures; a review of the literature on the history, incidence, and effects of AA; a discussion of the types of surgeries at higher risk of AA; and a description of how AA occurs. Contextualization for AA counseling will continue in the following discussions on clients' perceptions of their counseling experiences and counseling for PTSD.

Clients' Perceptions of Counseling

For counselors, being informed about the potential range and types of client experience can lead to a greater understanding of clients and better interventions (Elliott, 2008). In particular, privileged aspects of client in-session experiences (e.g., thoughts, feelings, and

reactions that clients have about their therapy) can be used to help counselors work more effectively with clients. For example, Elliott's meta-synthesis of the first 40 years of research on helpful client experiences of therapy revealed that the two most common helpful aspects of therapy as perceived by clients were relational: facilitative therapist characteristics (e.g., accepting and warm) and client self-expression (e.g., expressing feelings). Paulson et al. (2001) found three broad themes that were hindering aspects of the counseling experience: client factors (e.g., clients not stating their needs), structural and external barriers (e.g., scheduling, frequency, and regularity), and counselor variables (e.g., negative counselor behaviors, insufficient direction, and lack of responsiveness).

Broadly speaking, a review of the literature from 1985 to 2010 indicated that counselor qualities and interventions related to the Rogerian tradition and core counseling skills were frequently reported as most helpful. Clients perceived as helpful those counselors who were facilitative (Elliott, 1989; Elliott & James, 1989; Grafanaki & McLeod, 1995; Jinks, 1999; Lilliengren & Werbart, 2005; Paulson et al., 1999), intervening (Paulson et al., 1999), and solution seeking (Lewellyn et al., 1988). For example, researchers found that clients recognized when counselors allowed clients to express themselves (Elliott & James, 1989; Elliott & Shapiro, 1988; Lilliengren & Werbart, 2005), and clients valued being listened to (Clarke et al., 2004; Paulson et al., 1999; Singer, 2005) and "given space" (Jinks, 1999) to work in therapy. Clients were helped by counselor characteristics of empathy (Grafanaki & McLeod, 1995; Jinks, 1999; Lietaer & Neirinck, 1986; Timulak, 2003) involvement (Booth & Cushway, 1997; Elliott & Shapiro, 1988, Grafanaki & McLeod, 1995), impartiality, sincerity, and caring (Jinks, 1999).

Clients were further helped when counselors took action to reinforce their changes (Lietaer & Neirinck, 1986; Paulson et al., 1999), reassure them (Knox et al., 1997; Lewellyn et al., 1988), and got involved in their counseling process (Booth & Cushway, 1997; Elliott & Shapiro, 1988). Clients most often said facilitative therapist characteristics were helpful.

Three interventions that clients perceived as beneficial were confronting or positive challenges (Jinks, 1999; Lietaer & Neirinck, 1986; Wilcox-Matthew et al., 1997), facilitating insight (Grafanaki & McLeod, 1995; Jinks, 1999; Knox et al., 1997; Paulson et al., 1999), and encouraging therapeutic work outside of sessions (Elliott, 1989; Elliott & James, 1989). However, Levitt et al. (2006) reported that confronting was helpful only when clients were manipulative or avoided difficult material, and homework was helpful only if clients were emotionally and conceptually ready.

Clients also recognized core counseling techniques as useful; these techniques included listening, probing, reflecting (Jinks, 1999), clarification (Booth & Cushway, 1997; Elliott, 1985; Elliott & Shapiro, 1988; Grafanaki & McLeod, 1995; Paulson et al., 1999) and focusing attention (Elliott, 1985). However, Lilliengren and Werbart (2005) found that clients valued techniques less than their own process of talking, expressing, and reflecting. In a study by Paulson et al. (1999), clients indicated that counselor self-disclosure helped to normalize their experiences and provided reassurance as they discussed important personal issues. Clients saw their therapists as more real, as more equal in the relationship, and as role models to follow when counselor self-disclosure was of a non-immediate nature and appropriate (Paulson et al.). In addition, self-disclosure appeared to be more positive when the content dealt with therapists' feelings and not

details of their lives (Curtis et al., 2004). Clients also perceived as helpful those counselors who were engaged in the problem solving process in therapy. Clients also valued counselors' efforts to generate new perspectives, make suggestions that work, and offer solutions (Jinks, 1999; Singer, 2005).

Clients reported benefiting from being able to explain or talk with their therapists about anything without embarrassment (Jinks, 1999; Paulson et al., 1999). They disclosed that a benefit of counseling was feeling better when they were with their counselors (Timulak & Lietaer, 2001) and when they were able to "vent" about what was troubling them (Elliott, 1989; Jinks, 1999). Clients reported that therapeutic experiences were better with counselors who did not use jargon (Manthei, 2007). Obtaining personal insight was also a positive experience in therapy (Booth & Cushway, 1997; Timulak & Lietaer, 2001). In addition, gaining knowledge and resolving problems in supportive relationships that facilitated self-understanding were also helpful aspects of counseling (Curtis et al., 2004; Paulson et al., 1999).

Clients were able to identify helpful aspects in the interpersonal dynamics of their relationships with their therapists. Frequently, clients stated that being in a supportive relationship was beneficial (Curtis et al., 2004; Elliott, 1989; Elliott & James, 1989; Wilcox-Matthew, 1997), and they valued trust (Fine, 2000; Jinks, 1999; Singer, 2005) and understanding (Elliott & Shapiro, 1988) in their therapeutic relationships. Among the interpersonal aspects of therapy, clients most often identified therapists' feelings and attitudes, and their own self-expression as most helpful (Curtis et al., 2004; Elliott & James, 1989; Fine, 2000).

Clients also experienced aspects of their counseling as hindering; however, the literature review indicated that clients were less likely to disclose this to the therapist (Grafanaki & McLeod, 1995). Fundamental issues such as being oriented to what counseling is about, and scheduling, frequency and regularity of sessions were all sources of problems for clients when their needs were overlooked (Paulson et al., 2001). Curtis et al. (2004) reported that from clients' perspectives abruptly ended sessions, charges for missed sessions, increased fees, cancelled appointments, and unavailability by phone had a negative impact on therapy. Paulson et al. found that external barriers, such as difficulty with insurance companies, were hindering factors in counseling.

Wilcox-Matthew (1997) found that when clients' behaviors were incongruent (e.g., not expressing what they were really feeling) they perceived their therapy was negatively impacted. Lewellyn et al. (1988) found that unwanted thoughts had a similar effect. Negative feelings, reactions, and influences on the therapy or therapeutic relationship with the counselor (Knox et al., 1997) also hindered clients' experience of therapy. Clients cited their own inhibitions (Dale et al., 1998), feelings of being criticized (Grafanaki & McLeod, 1995), and concerns about vulnerability (Clarke et al., 2004) as unhelpful aspects of therapy. Paulson et al. (2001) reported that uncertain expectations and lack of connection had an adverse effect on clients' counseling process. Grafanaki and McLeod (1985) found that disagreeing with the counselor, being stuck in the past, and feeling cold and distant from the counselor were unhelpful. Clients tended to become unhappy with counseling if they thought their progress was not rapid enough (Singer, 2005) or if they were mismatched with their counselor (Lilliengren & Werbart, 2005).

Clients were clear about counselors' behaviors that were hindering to therapy. They reported that therapist misdirection, which consisted of interrupting or interfering with disclosure and exploration, inhibited their therapeutic progress (Elliott, 1985). In addition, Grafanaki and colleagues (1985) reported that therapy was obstructed when counselors gave conclusions, had different interests to pursue, and repeatedly returned to the same topics. Finally, Singer (2005) discovered that therapy was hindered when clients doubted their counselors' understanding and ability.

In summary, counselors who are informed about the potential range and types of client experience may have a better understanding, which may lead to interventions that are more effective. In particular, knowing the thoughts, feelings, and reactions clients have about their therapy may help counselors be more effective. It appears that encouraging client self-expression and counselor warmth and acceptance are the most commonly identified helpful aspects of therapy for clients. Clients also appear to value being listened to. Clients are reluctant to disclose negative aspects of their therapy process; however, unhelpful aspects such as not stating their needs, unanticipated or frequently changed appointments, and counselors' failure to respond appropriately appear to be problematic for them. The interventions clients perceive as most beneficial are positive confronting, facilitating insight, and encouraging therapeutic work outside of sessions. Clients also value counselors' efforts to generate new perspectives, make workable suggestions, and offer solutions.

Counseling for Trauma

Counseling for trauma has been found to address symptoms such as internalizing and externalizing behavior problems, depression, and anxiety, and it has been used to prevent the development of PTSD (Silverman et al., 2008). A discussion of current trauma treatments follows.

It appears that Cognitive Behavioral Therapy (CBT) received the most support in the literature for treating trauma (Bryant et al., 1998; Gatz et al., 2008; Rhudy et al., 2010; Silverman et al., 2008). Results of one study indicated that CBT reduced physiological and subjective reactions to nightmare imagery following traumatic experiences (Rhudy et al., 2010). Gatz et al. (2007) reported that women who received CBT interventions remained in treatment longer and showed greater improvement on posttraumatic stress symptoms and coping skills. A study by Bryant et al. (1998) was the first to demonstrate the efficacy of CBT in preventing chronic PTSD, and successful treatment of Acute Stress Disorder (ASD) with CBT. Bryant et al. claimed that CBT reduced more intrusive, avoidance, and depressive symptomatology than Supportive Counseling (SC).

A study that combined CBT with hypnosis indicated a greater reduction in re-experiencing symptoms than a control treatment with CBT alone (Bryant et al., 2005). Kwan (2006) found that a four-phase model of hypnosis with no other treatment was effective in eliminating symptoms of complex trauma.

Among the exposure therapies, Emotional Exposure treatment was found to result in moderate to large positive effects on stress symptoms and unresolved trauma with patients who

had experienced pain from Fibromyalgia (Lumley et al., 2008). Progressive Counting (PC), a recently developed trauma resolution procedure that includes brief exposure, performed well in group and individual treatment single session open trials (Greenwald & Schmitt, 2010); however, the researchers advised that more studies were needed on the efficacy of PC.

Regarding group approaches to trauma treatment, Silverman et al. (2008) suggested that School-Based CBT appeared to be effective in treating trauma symptoms in children and adolescents. For adults, Psychoeducation Group Therapy was found to reduce the level of trauma symptomatology compared to a control group without Psychoeducation (Nisbet Wallis, 2002). Standard Group Therapy, Standard Group Therapy with Stress Inoculation Training (SIT), and Support Group Therapy were considered by Silverman et al. (2008) to need more evidence of their efficacy.

Eye Movement Desensitization and Reprocessing (EMDR) was considered by Silverman et al. (2008) to be potentially efficacious for treating children and adolescents who had been exposed to traumatic events. Rost et al. (2009) claimed that EMDR effectively reduced trauma symptoms in adults who had experienced workplace violence. Research on an EMDR-Integrative Group showed statistically significant reduction of symptoms in children who had been traumatized, with girls having been more vulnerable to traumatic stress than boys (Adúriz et al., 2009).

Evidence suggests that Systemic approaches to therapy are effective in treating symptoms of trauma. Reynolds (2007) presented a case on Systemic Psychotherapy in which trauma symptoms had been effectively reduced for an adult survivor of childhood trauma. In another

study, Multisystemic Therapy (MST) was found by Swenson and colleagues (2010) to have reduced more youth mental health symptoms, parent maltreatment and psychiatric distress, and youth out-of-home placements when compared to Enhanced Outpatient Treatment (EOT).

Several researchers have studied the effectiveness of Family Therapy in treating trauma. A case study was presented on Family Therapy with Trauma-Focused CBT that demonstrated its effectiveness in reducing the trauma symptoms of three family members (Kerig et al., 2010). Lester et al. (2008) performed a national survey and concluded that more stringent studies were needed because only anecdotal reports were received by clinicians regarding the efficacy of structural, strategic, and systemic approaches. Lastly, Silverman et al. (2008) suggested that Family Therapy may be effective in treating trauma in children and adolescents. Clearly, more rigorous research is needed to determine the effectiveness of Family Therapy in treating trauma.

Regarding internet-based trauma therapy, participants in a study on internet therapy improved significantly more than those in a wait list control condition with respect to trauma-related symptoms and general psychopathology (Lange et al., 2003). Benight et al. (2008) reviewed the literature and concluded that early evidence for the efficacy of web-based interventions was encouraging, but further research was needed to address its limitations (e.g., when probing or discussion is needed).

Creative Arts Therapy (CAT) was found to be effective treating trauma in children and adolescents. Group art therapy that was based on existential-humanistic, Gestalt, client-centered and abuse-focused principles resulted in significant improvement of anxiety and depression when compared to control groups (Pretorius & Pfeifer, 2010). In addition, participants in a

structured group for adjudicated youth that utilized CBT and art demonstrated statistically significant reductions in trauma symptoms, depression, rule-breaking behaviors, aggressive behaviors, and other mental health problems (Raider et al., 2008).

In summary, counseling can ameliorate symptoms of trauma and may prevent the development of PTSD. Cognitive Behavioral Therapy (CBT) received the most support for treatment of trauma. Other therapies that were reported as effective were Hypnosis, Emotional Exposure Treatment, Psychoeducation Group Therapy, Eye Movement Desensitization and Reprocessing (EMDR) with adults, Systemic Psychotherapy, and Multisystemic Therapy. EMDR for the treatment of trauma in children and adolescents was found to be potentially effective. Progressive Counting (PC) was a promising treatment that needed to be researched more. Other treatments that needed more research, but had evidence of success in reducing trauma symptoms, included Standard Group Therapy, Standard Group Therapy with Stress Inoculation Training (SIT), and Support Group Therapy.

Counseling for PTSD

Many treatments for PTSD have received considerable support for their effectiveness. However, because of the heterogeneity of patients with multifaceted trauma presentations, it is doubtful that one treatment will be more effective than others for the majority seeking treatment for PTSD (Wagner et al., 2007). A discussion of current PTSD treatments and adjuncts to treatment follows.

One case report suggested that Acceptance and Commitment Therapy (ACT) could be used to treat PTSD symptoms (Batten & Hayes, 2005). Although Dialectical Behavioral

Therapy (DBT) has not been suggested as a primary treatment for PTSD; Wagner et al. (2007) presented two complex case studies in which it was used. One involved a woman who had difficulty staying present long enough to incorporate exposure therapy for intrusive memories of childhood abuse, and the other described a woman who experienced strong reactivity when talking about rape memories. DBT strategies were successfully utilized, leading Wagner et al. to conclude that DBT may be helpful with complex presentations of PTSD. Psychosocial Rehabilitation, a component of PTSD recovery, was considered useful for the relief of psychiatric sequelae and psychosocial functioning, but not for severely traumatized patients with complex psychiatric problems (Möhlen et al., 2005).

Several researchers have presented evidence for the effectiveness of imaginal and *in vivo* exposure therapy (Brady et al., 2001; Hagenaar et al., 2010; Powers et al., 2010; Stapleton, 2007; Taylor, 2003). Hagenaar and colleagues (2010) found significant reductions of negative trauma-related cognitions and reductions in distress in a study on mixed traumas with this therapy, and Stapleton (2007) reported positive results from exposure therapy in a study on battered women.

Cognitive Behavioral Therapy (CBT) for adults has been shown to be effective (Guenther & Frank, 2006; McDonagh et al., 2005; van Emmerik et al., 2008); however, CBT is contraindicated for PTSD treatment with sexual and non-sexual assault survivors until a period of sustained monitoring and support has taken place (Foa, 2009). McDonagh et al. (2005) reported that CBT had a significantly greater dropout rate than present-centered therapy and wait-list, but it was associated with sustained symptom reduction in their study of female sexual abuse survivors. Stress Inoculation Training (SIT) was effective in helping resolve PTSD in

emergency gynecological patients' PTSD symptoms (Trzepace & Luiselli, 2004). Additionally, SIT was superior to the wait-list control group for state and trait anxiety in a study of 96 female assault victims (Foa et al., 1999). Intensive Cognitive Therapy was found by Ehlers et al. (2010) to be a promising alternative to weekly treatment; they suggested that it warrants further evaluation in randomized trials.

Eye Movement Desensitization and Reprocessing (EMDR) frequently was recommended to treat PTSD (Hamblen et al., 2009; Högberg, et al., 2007; Rothbaum et al., 2005; Stapleton, 2007). Researchers have found that EMDR is successful in reducing PTSD symptoms in children (Adúriz et al., 2009; Ahmad et al., 2007; Zaghrout-Hodali et al., 2008). Ahmad et al. (2007) found that EMDR post-treatment scores for a group of 6 to 16 year old children diagnosed with PTSD were significantly lower than the wait-list control group, indicating the effectiveness of this treatment. Researchers have recently raised questions about the mechanism of EMDR's action, and it is possible that its effectiveness is related more to exposure than to eye movements (Hamblen et al., 2009).

Group Therapy has been suggested as a treatment for PTSD (Classen et al., 2001; Smith & Kelly, 2008). A study of adult childhood sexual abuse survivors who were assigned to present-focused and trauma-focused groups and a wait-list control group revealed that those who received group therapy had a significant reduction in trauma symptoms of dissociation, being vindictive, and being nonassertive, and a 50% reduction in revictimization (Classen et al., 2001). Group Interpersonal Psychotherapy was significantly more effective than a wait list in reducing PTSD symptoms for minority women in family planning and gynecology clinics (Krupnick et

al., 2008). However, this treatment was found not to be effective after physical trauma, and is thought to increase morbidity and dropout in vulnerable patients or those who have depressive anxiety (Holmes et al., 2007).

Ponniah and Hollon (2009) performed a review of randomized controlled trials on psychological treatments for acute stress disorder (ASD). They concluded that Psychodynamic Therapy may be an efficacious treatment for PTSD. Sachsse et al. (2006) found that women with complex PTSD and BPD had significant and stable improvements with psychodynamic treatment. Symptoms of dissociation, intrusion, avoidance, distress, and self-mutilating behaviors were improved, and number and length of hospitalizations were reduced (Sachsse et al., 2006). However, Saltzman (2010) reviewed the literature and concluded that the body of rigorous research on psychodynamic therapy is rather thin.

Creative Arts Therapy (CAT) for Children showed great potential to access nonverbal processes with children who experienced PTSD (Lyshak-Stelzer et al., 2007). Play therapy was found to be an effective treatment for the children of battered women (Frick-Helms, 1997). Incarcerated juveniles reported representing trauma through art as the most important parts of their therapy because they were able to link their trauma experience and their criminal acting-out (McMackin et al., 2002).

New technological approaches have been developed to facilitate effective delivery of therapy. Virtual Reality has been used to facilitate exposure therapy, especially with combat trauma (Gerardi et al., 2008; Reger & Gahm, 2008; Wood et al., 2009). Another treatment approach was use of the internet for patients who fear the stigma of individual counseling or

have limited mobility. A study of 22 individuals diagnosed with PTSD who received therapist-assisted online CBT therapy resulted in 69.2% clinically significant improvement post-assessment and 77% improvement at follow-up assessment on PTSD severity ratings and related PTSD symptomatology (Klein et al., 2010). Videoconferencing has shown promise for individuals who do not have easy access to therapy because of disability or location. For example, Hamblen et al. (2009) reported that veterans with PTSD responded to telehealth interventions in a manner similar to traditional therapy. Lastly, multi-modal, transtheoretical (Courtois, 2008) and multi-phase (Marshall & Suh, 2003) approaches may address the multiplicity of problems and issues presented by Complex Trauma patients.

Adjuncts to therapy have improved PTSD treatment outcomes. Hypnosis may be a promising treatment for PTSD, but almost no systematic studies have been conducted on the efficacy of hypnosis for posttraumatic disorders (Cardeña, 2000). According to Cardeña, hypnosis has several benefits. It can easily be integrated into therapies commonly used to treat traumatized clients; a number of individuals with PTSD have shown high hypnotizability in various studies; hypnosis can be used for symptoms associated with PTSD and, hypnosis may help modulate and integrate memories of trauma. Kwan (2006) reported a case in which hypnosis was successfully used to treat a female who was diagnosed with PTSD. Complications related to the use of hypnosis in the treatment of PTSD include exaggerated confidence in memories retrieved (false memories), and possible legal complications if hypnosis is used when a crime is involved (Foa, 2009). Psychoeducation was found to produce greater relief of symptoms among earthquake survivors than in a medication-only control group (Oflaz & Aydin,

2008). Couple and Family Therapy for Adults is contraindicated as the sole PTSD treatment for children, according to Foa (2009), however, the National Center for Posttraumatic Stress Disorders FactSheet (United States Department of Veterans Affairs, n.d.) recommends this therapy to help families deal with PTSD.

In summary, therapies that appear to be effective in the treatment of PTSD include Imaginal and *in vivo* exposure therapy, Cognitive Behavioral Therapy (CBT), Stress Inoculation Training (SIT), Cognitive Therapy, Eye Movement Desensitization and Reprocessing (EMDR), Group Therapy, Psychodynamic Therapy, and Group interpersonal psychotherapy. Therapies that show promise included Creative Arts Therapy for Children and Play Therapy. Treatment approaches that may be effective but need more research include Virtual Reality Exposure Therapy, use of the internet, videoconferencing, multi-modal, transtheoretical, and multi-phase.

In this chapter, a review of the literature on counseling for PTSD has been presented, and the context for counseling for trauma related to AA has been established. In conclusion, trauma may be defined as a particular event or whatever an individual subjectively determines to be traumatic; it is also a criterion for PTSD. The general population has a high prevalence rate of 62% to 80.8% for trauma, and a prevalence rate of 0.09% to 0.36% for PTSD, with females having a 2:1 ratio of PTSD over males. Individuals' responses to trauma range from brief disruption of functioning to chronic and debilitating PTSD. Some traumatic symptoms are internalizing and externalizing behavior problems, depression, and anxiety. Many AA patients meet criteria for PTSD. Some consequences of PTSD related to AA are numbing of

responsiveness, increased arousal, extreme fear of future surgeries, persistent and intrusive recall of AA events, sleep disturbances, and panic attacks that last for years and require treatment.

Therapies effective in the treatment of trauma are Cognitive Behavior Therapy, Hypnosis, Emotional Exposure treatment, Psycho-Educational Group Therapy, Eye Movement Desensitization and Reprocessing, Systemic Psychotherapy, and Multisystemic Therapy.

Therapies effective in the treatment of PTSD are imaginal and *in vivo* exposure therapy, Cognitive Behavioral Therapy, Stress Inoculation Training, Cognitive Therapy, Eye Movement Desensitization and Reprocessing, Group Therapy, Psychodynamic Therapy, and Group interpersonal psychotherapy. Therapist attributes related to the Rogerian tradition are most helpful (e.g., encouraging, warm, accepting, and facilitative); whereas, critical, impatient, unresponsive, and having poor boundaries are hindering therapist attributes.

Although the percentage of cases that result in AA may be small, AA is not a rare occurrence because of the high number of surgeries performed. No studies have been conducted to establish what types of counseling and what counselor attributes are effective with AA clients. There is a need to explore what clients perceive as helpful or hindering in their counseling experiences for AA so that counselors may serve this client population more effectively.

CHAPTER THREE

METHODOLOGY

In this chapter, the purpose of the proposed study is reiterated, and the methodology is described. The qualitative design is discussed, and my role as researcher is explained. Research questions, data collection methods, ethical considerations, and data analysis methodology are presented.

Introduction

In 2006, approximately 81 million inpatient and outpatient surgeries were performed in the United States (National Center for Health Statistics, 2009). Some patients regained consciousness during surgery; this experience is called Anesthesia Awareness (AA). Incidence reports vary widely (Pollard et al., 2007; Osterman et al., 2001; Sandin et al., 2000); however, .1% to .2% (20,000 to 40,000 incidences annually/20 million inpatient surgeries) was generally mentioned as the rate in which surgical procedures performed under general anesthesia in the United States resulted in AA (Blusse, 2008; Sebel et al., 2004).

Among those who experience AA, approximately .44 % (Lenmarken et al., 2002) to 56.3% (Osterman et al., 2001) at some time will meet the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision* (DSM-IV-TR, 2000) criteria for Posttraumatic Stress Disorder (PTSD). Many of these cases will involve people who suffer from enduring emotional, behavioral, and psychological symptoms such as flashbacks, extreme mental distress, impairment of social life, and panic attacks (Lenmarken & Sydsjo, 2007; Mathews & Wang, 2007). Because of the unique and potentially serious problems

that may result from AA, counselors need to understand how to provide effective services for people who may seek counseling for trauma related to AA.

Clients' experiences during counseling have been researched extensively, and significant events in therapy have been investigated for more than 20 years (Elliott, 2008; Elliott & James, 1989; Elliott & Shapiro, 1988; Paulson et al., 1999; Rees et al., 2001; Timulak, 2003). Despite this extensive research, more exploration is needed. For example, Levitt and colleagues (2006) called for more qualitative approaches to further understanding of in-session processes of change. Clients' accounts of their counseling for trauma related to AA, including their perceptions of what was helpful and hindering in the counseling process, have the potential to provide unique information about which therapists are unaware or lack understanding, and lead to better therapeutic interventions and theoretical understandings of mediational processes (Elliott, 2008) for this population.

Qualitative Research

Research methodology supplies the philosophical assumptions of a study (Lopez & Willis, 2004), justifies the methods (Carr, 2006), and provides the procedures to convert data into knowledge (Levers et al., 2008). Methodology is based on the area to be studied (Polkinghorne, 2006). The increased use of qualitative research over the past ten years makes discussing its methodologies important, especially because the epistemological bases of methodologies are different, but also overlap (Smith, 2004).

Qualitative research is a broad term for processes that explore people's experiential worlds (Wertz, 2005) with the aim of making sense of phenomena from the meanings people

ascribe to them (Denzin & Lincoln, 1994). This approach to research is fast becoming established in health psychology (Smith, 2006), and it has been noted for its ability to explore clients' experiences for improving counseling services (Berrios & Lucca, 2006). A recent online query of Academic Search Complete revealed journal articles on qualitative research that included topics such as understanding hope when diagnosed with Human Immunodeficiency Virus (HIV) (Harris & Larsen, 2008), patients' views on counseling received in a hospital for orthopedic rehabilitation (Schoenberg & Shiloh, 2002), and the relationship between meaning making and growth for trauma survivors (Park & Ai, 2006). Because qualitative research is an established methodology in health psychology that has been used to improve counseling services by exploring clients' experiences, it is an appropriate choice to explore how clients perceive their counseling experiences for trauma related to AA. The influences that contribute to the methodology and the epistemological development for the proposed study are presented in the following sub-sections.

Retrospective Viewpoint

The unit of client experience for the proposed research is the entire course of therapy that has occurred in the past, making the proposed research retrospective (Elliott, 1989).

Retrospective research is an excellent approach to use after a course of therapy for clients to describe what was helpful and what was not. The advantage of a retrospective approach is the use of clients' overall perceptions and feelings about the therapeutic relationship and what worked in therapy. Among the disadvantages of a retrospective approach are confounding with

treatment outcome, bias from distorted memories, influence of beliefs and expectations regarding therapy, and difficulty connecting retrospections to specific therapy events (Elliott, 1989).

My research study was exploratory and sought to understand clients' perceptions of what helped or hindered their counseling for trauma related to AA. Therefore, limitations such as distorted memories, difficulty connecting retrospections to specific therapy events, and influence of beliefs and expectations regarding therapy were not controlled for. To prevent confounding participants' perceptions of the outcome of their counseling for trauma related to AA with their perceptions of what helped or hindered their counseling process for trauma related to AA, I asked participants if they thought the outcome of their therapy affected their perceptions of the counseling they received. The distortions of individual participants were minimized by the selection of homogeneous participants and the provision of a frequency table that compared responses so that greater weight was allotted to the responses that were most frequently given.

Phenomenological Inquiry

My study was phenomenological. Phenomenology, an empirical form of inquiry that is grounded in experience (Shank, 1995), falls under the umbrella of qualitative research (Wertz, 2005). Developed by Edmund Husserl (1859-1938), phenomenology aims to describe and understand subjective and objective lived experience through dialogue (Ballard et al., 2006). Husserl maintained that phenomena appear in consciousness and are interpreted through a personal world of experience with human meanings (Smith, 2008), and that presuppositions can be bracketed, or set aside (Johnson, 2000). Smith used the example of daffodils meaning something very different to a poet than to a horticulturist. The interpretations of phenomenology

go beyond the descriptions involved in other types of qualitative research (Porterfield, 2009), and make it especially suited for counseling research (Wertz, 2005).

Heideggerian Philosophy

The study was further situated within the philosophy of Husserl's student and contributor to the development of phenomenology, Martin Heidegger (1889-1976) (Byrne, 2001).

Heidegger, unlike Husserl, saw consciousness as a part of the world, and presuppositions as inseparable from the world (Lavery, 2003). Heidegger believed that people are always interpreting meaning, whether or not they are aware of it (Conroy, 2003). According to Dowling (2004), Husserl claimed that language is the link that makes understanding possible, so that language shapes all situations and experiences- past, present, and future. His view was that people reflect on their own and others' experiences through language, and previous experiences give meaning to the words that are used (Dowling). For instance, a confident recommendation made by a surgeon may be interpreted to mean that counseling is relatively helpful and valuable. This positive view of therapy, if upheld through experience and corroborated by others, can create positive expectations that influence current experiences as well as future perceptions of counseling.

Heidegger also thought that people have unrecognized presuppositions that limit their understanding of the world (Holroyd, 2007), and interpretive analysis is more likely to occur when something disrupts those presupposed ideas (Dowling, 2004). Heidegger's view was that people will seek understanding when disruption of presuppositions occurs, and new or different knowledge will result from their attempts to understand the disruptive experiences (Dowling).

An example of this is a negative event in counseling that causes a reevaluation of previously held views on the helpfulness and value of therapy, which then influences current perceptions and alters future expectations regarding counseling. Through interpretive analysis of the experience, a person may begin to expect counseling to be unproductive or even harmful. Heideggerian research examines participants' life experiences in order to discover their shared practices and common experiences (Byrne, 2001), making this approach a good choice to explore the perceptions of individuals who sought counseling for trauma related to AA with the ultimate goal of helping counselors better serve this population.

Interpretative Phenomenological Analysis

The design for this qualitative phenomenological study is Interpretative Phenomenological Analysis (IPA; Smith, 2004). Although IPA is now used more frequently in counseling research (Lambert, 2007), it has been most often used in healthcare, particularly in nursing (Biggerstaff & Thompson, 2008). In nursing, IPA studies have been conducted on community mental health teams' communication (Donnison et al., 2009), death and hospice nurses' lived experiences (Mercer, 2009), IPA as the method of choice in healthcare research (Biggerstaff & Thompson, 2008), and community psychiatric nurses who worked with people who self-harm (Thompson et al., 2008). In counseling there have been IPA studies on personal therapy in clinical practice (Rizq & Target, 2008), women's illness perceptions, adjustment and coping (White et al., 2007), and therapists' personal therapy (Daw & Joseph, 2007).

IPA is designed to explore meaning (Brocki & Wearden, 2005) and deepen the understanding of subjective experiences (Polkinghorne, 2006). IPA is inductive, or bottom-up,

and does not test hypotheses (Reid et al., 2005). IPA's focus on how people construct meaning in their social and personal worlds (Smith, 2008) contains an aspect of Symbolic Interactionism (SI; Blumer, 1900-1987). SI, a major sociological perspective, is based on the human mind's capacity to respond subjectively and create meaning through a process of interacting, interpreting symbols, and filtering (Rank & LeCroy, 1983). IPA's focus is on interpretation (Smith et al., 2009) that is conducted through an empathic hermeneutics of trying to understand participants' point of view, and a questioning hermeneutics of asking critical questions to make sense of what participants are saying.

As suggested by Chapman and Smith (2002), I viewed participants as experts on their own experiences, and my role as researcher was to reduce the complexity of experiential data through case-by-case and cross-case analysis. I achieved reduction through data analysis in IPA's detailed case-by-case examination and cross-case analysis of themes that were found in participants' interviews. I wrote interpretive summaries from participants' accounts of their experiences, and I coded, and compared and contrasted individual and cross-case data. Smith (2004) said this approach to analysis makes IPA solidly idiographic, or focused on insights about how participants made sense of their world. Smith further explained that the interrogative hermeneutics of IPA allows the researcher to ask questions that participants might not be able to arrive at themselves, and obtain a fuller understanding of participants' lived experiences (Smith). As posited by Reid et al. (2005), I did not consider the results in this IPA study as facts; rather, they were seen as grounded in the data and plausible.

Although IPA is concerned with individuals' perceptions of events, it also recognizes the role of the researcher in making sense of participants making sense of their world; or, a double hermeneutic. IPA assumes a connection between what people say, think and feel with the understanding that interpretation is needed because they may not always fully self-disclose (Smith, 2008). IPA's case-by-case design made it an excellent choice for in-depth exploration of people's perceptions of their counseling for trauma related to AA.

The Role of the Researcher

The qualitative researcher's role is to examine, try to understand, and give meaning to participants' lived experiences (Byrne, 2001). Phenomenological researchers examine lived experiences to gain an understanding of essential truths about phenomena. Heideggerian researchers examine life experiences to become aware of shared practices and common experiences, while acknowledging researcher bias and assumptions (Byrne). In addition, IPA researchers try to make sense of participants making sense of their world (Smith, 1996). Through a double hermeneutic of understanding and questioning, IPA researchers examine participants' accounts of lived experiences for interpreting and meaning-making (Smith, 2008).

From a professional perspective as a researcher, I wanted to understand how clients perceive their experiences of counseling for trauma related to AA, with the goal of providing new knowledge that would improve counseling for the identified population. Specifically, I was interested in learning what clients perceive as helpful or hindering in their counseling experiences for trauma related to AA.

From a personal perspective, I am someone who experienced AA and sought counseling to help me deal with the trauma. When I was four years old, my appendix ruptured and I developed sepsis. Emergency surgery saved my life; but I awoke, paralyzed, sometime during the surgery in which my appendix and part of my intestines were removed. I developed Posttraumatic Stress Disorder, suffered long-term psychological effects, and spent many years in therapy before resolving the trauma. I am grateful for the life-saving procedures that were performed, so my intent in this research was to increase understanding and improve therapeutic services for people who seek counseling for trauma related to AA.

According to Heideggerian thought, the presuppositions I have as a person who experienced AA and as a counselor could not be completely bracketed. Because interpretations that the researcher makes are based on his or her conceptions, beliefs, expectations, and experiences (Smith et al., 2009), I was reflexive and clearly presented those that I was aware of in the study as I kept what participants said in the foreground. Reflexivity consisted of reporting presuppositions through a reflective journal that I maintained. I increased credibility for the study by maintaining the researcher's journal, and clarifying my biases.

Presuppositions about AA that I brought to the study were that AA is under-recognized as a problem; the number of people who experience AA is sometimes under-reported; the adverse effects of AA are underappreciated; and what works best to help people who have negative experiences of AA is unknown. A presupposition about counseling that I brought to the study was that counseling can be helpful in resolving problems related to trauma. Another presupposition I had about counseling was that the relationship between the counselor and the

client has more therapeutic effect than the actual interventions used, and that clients' expectations about counseling have a significant effect on counseling outcome. A final presupposition that I had about counseling was that how clients perceive the outcomes of their therapy may affect their perceptions of their counseling experiences. These or similar presuppositions were identified in my journal and clearly reported in the study to increase researcher transparency and control for researcher bias.

Research Questions

The research question should ground the methodology (Maggs-Rapport, 2001), and an exploratory research question is best when little is known about a topic or when discovering knowledge that has practical importance (Frankel et al., 2000). This IPA study began with the broad research question: "How do clients perceive their experience of counseling for trauma related to AA?" More specific research questions designed to answer this broad research question included:

"Are there experiences indicating that clients' therapy processes have been helped or hindered?"

"If so, what factors do clients perceive were helpful in their counseling for trauma related to AA?"

"If so, what factors do clients perceive were hindering in their counseling for trauma related to AA?"

"What are the therapeutic effects for clients regarding helpful and hindering factors in their counseling for trauma related to AA?"

Participant Selection

The first step in data collection was to identify participants. For this IPA research, homogeneous participants (Smith, 2004) related to the research question (Lyons & Coyle, 2007) ensured quality of findings (Polkinghorne, 2006). Thus, the participants consisted of adults who had the experience of receiving counseling for trauma related to AA. Similar to Elliott's (1989) research on clients' meaningful experiences in counseling, this study sought to explore participants' perceptions of experiences that had special meaning, therapeutic impact, or importance over the entire course of their therapy. Enough data to produce thick, rich, in-depth descriptions were obtained by interviewing seven participants. This number of participants allowed in-depth exploration and analysis of similarities and differences among participants without the data overwhelming the researcher (Lyons & Coyle, 2007; Smith, 2007). A small group of participants was appropriate for the proposed IPA study because, according to Chapman & Smith (2002), the aim of IPA is to examine in detail participants' perceptions rather than make general claims.

Although data were collected through face-to-face and Skyped, in-depth interviews and written member checks with participants who experienced previous trauma, significant participant reactions that impacted safety and comfort did not arise. No participants were excluded from the study because of any physical disability (e.g., hearing, writing, speaking), and/or cognitive disability (e.g., memory) that prevented them from fully understanding and providing detailed answers to research questions. Difficulty locating participants required the inclusion of individuals who had experienced previous trauma (e.g., family death or life-

threatening events) prior to the experience of AA; however, no participant indicated that she or he had experienced trauma immediately before or after their AA experience or before their counseling for AA. No participants were excluded because of a current mental illness not related to PTSD from AA (e.g., Axis I: Clinical Syndromes and Axis II: Developmental and Personality Disorders) (*DSM-IV-TR, 2000;4th ed., text rev.*) which increased the potential for participant distress, symptoms of mental illness, and confounding mental health symptoms with AA symptoms. Similarly, no participants were excluded because of substance abuse and/or counseling for severe emotional or behavioral problems not related to PTSD from AA. I considered Collogan et al.'s (2004) characteristics that may increase the likelihood of unexpected distress, and found no participants who needed to be excluded for preexisting distress (e.g., debilitating relationship, employment, or financial problems), being a person of advanced age (e.g., resulting in age-related disability that would prohibit understanding and providing detailed responses), social vulnerability (e.g., isolation, poverty, recent incarceration), and current severe physical injury (e.g., injury requiring extensive or ongoing medical treatment). I made an exception for participants who had exposure to multiple traumas (family death, life-threatening events); however, none of the participants had experienced multiple traumas immediately before their AA experience, immediately before or after their counseling for AA, or immediately before their interview.

Recall for salient events has been found to be relatively stable across one year (Rivers, 2001); in this study, every participant except one was either still in counseling or had been in counseling during the past year. An exception was made for one participant who experienced

AA when she was five years old and had stopped counseling three years prior to the interview. All participants had received at least 15 hours of counseling; which was found by Bradley et al. (2006) to be the average for PTSD. There were no limitations based on sex, race or ethnicity. One participant lived abroad, and six lived in the United States: one in the northwest, one in the west, three in the northeast, and one in the south. To ensure the trustworthiness of this research, all participants received equal treatment as much as possible.

Data Collection Procedures

The recommended data collection method for IPA is the face-to-face semi-structured interview in which initial questions on an interview schedule are modified according to how they are answered by participants (Smith, 2008). My goal for data collection was to enter, as far as possible, into the world of each participant through detailed description. This form of interview facilitated rapport and empathy, was flexible, and produced rich data.

Although some researchers have criticized member checks and peer review because participants and peers may not remember what was said or understand interpretations, these techniques remain highly valued in qualitative research (Cohen & Crabtree, 2008). In order to provide trustworthiness for this research, I used member checks and peer review to ensure neutrality, or confirmability. Also, to provide truth value, or credibility for this study (Conroy, 2003; Creswell, 2005), I used member checks and peer review to ensure that interpretations I made reflected what participants said and meant. The goal of member checks was to provide individual participants with summaries of my interpretations of what they said and obtain

corrective feedback or further insight. New or different data were not obtained from participants' written responses to the researcher's interpretive summaries.

Peer review was intended to allow a knowledgeable professional who was not involved in the research to analyze participants' interview transcripts and interview summaries, and my summary of data analysis across all cases and obtain corrective feedback or further insight. I included new data obtained from the peer reviewer in the final analysis and summary across all cases.

I utilized rich, thick descriptions, clear delineation of the research process, immersion, and reflexivity, all hallmarks of high-quality research (Cohen & Crabtree, 2008), in the research to ensure that the data reflected what participants said and meant rather than what I had added. Rich, thick descriptions (Creswell, 2005), immersion, and reflexivity through journaling (Conroy, 2003) increased the credibility of the data.

I developed a semi-structured interview schedule (see Appendix A) to facilitate an inductive spiral of analysis to clarify meaning from participants' descriptions of their counseling for trauma related to AA. The interview schedule followed IPA's approach to questioning that focuses on relevant experiences in people's lives and was well suited to explore significant moments in counseling (Breakwell et al., 2006). Elliott (1989) found clients' experiences in therapy to consist of thoughts, feelings, perceptions, and sensations during and about psychological therapy. These client experiences were broad enough to encourage in-depth exploration of many types of experiences (Elliott), and I used them to guide question development for the interview schedule.

I asked additional questions during the interview when participants appeared to have difficulty answering questions. Subsequent interview questions, intended to help participants focus their answers, provided no new data. As suggested by Breakwell et al. (2006) and Smith (2008), I changed questions during the interviews to accommodate the direction participants were taking, and attention was paid to participant answers that were unexpected and answered the general research question. I began each interview by asking participants to discuss their experiences of AA.

Permissions

I obtained University of New Orleans Institutional Review Board approval of my research before data collection began. I then approached an advocate for AA who said she maintained a database of more than 1,000 individuals who reside in the Southern United States and registered online as having had an experience of AA. I enlisted the advocate to help recruit participants, provided her with the requirements for participant inclusion in the research, and requested she generate a list of six individuals who might meet the requirements. She contacted four potential participants to determine if they were interested in speaking with me about participating in the study. I then contacted the potential participants by phone to provide them with information about the study, request their participation, and give them instructions on how to become a participant. There were no potential participants that the advocate provided who refused to participate. The advocate was unable to continue to provide me with potential participants, so I posted information regarding my research on blogs for AA online, and provided my email address. Three participants responded by email and were recruited. One participant

was referred by a counselor/friend. The cycle of recruitment continued until seven participants were selected. I obtained signed consent from participants when I conducted face-to-face interviews, and I obtained verbal consent from five participants when I Skyped interviews. One interview conducted by Skype was not used due to recorder malfunction, and one participant interviewed by Skype was excluded because he had not obtained counseling. Rich data were obtained from the seven participants who were interviewed.

In exchange for participating in the research, a name was drawn from the total participants for a \$100 dinner for two at a restaurant of the participant's choice.

Contacting Participants

Recruitment letters (see Appendix B) were sent to participants for whom the advocate provided contact information after IRB approval was obtained. The other participants were provided with recruitment letters by email. The letters stated the name of the researcher, provided University of New Orleans contact information, discussed the purpose of the study, described the procedures that would be used, and estimated a minimum of one hour and a maximum of two hours for the interview. The recruitment letters also described post-interview and post-analysis follow up, explained right of refusal to participate and right to withdraw at any time without penalty, and disclosed possible negative and beneficial consequences of participation. Lastly, the recruitment letters provided contact information and the co-investigator's name for further information. Included was a copy of the Informed Consent form (appendix C) in which I provided the names of the investigator and co-investigator, and disclosed intended use of results. Wilkinson (2001) maintained that participants should be told

about the researcher's personal characteristics when conceptually connected to the research, so I self-identified as a Licensed Professional Counselor, doctoral candidate, and a person who experienced AA and obtained counseling for AA.

I included a statement in the recruitment letters that I would call potential participants by landline or mobile phone within seven days. Participants indicated how they wanted to be contacted. The purpose of the phone calls was to build rapport, answer questions, discuss the informed consent, and arrange interviews. During the telephone conversations, I assessed the suitability of participants by asking if there were any physical or cognitive reasons they would have difficulty understanding or answering the research questions. I also confirmed that participants had obtained counseling for trauma related to AA, and I determined their ability to give informed consent.

Interviews

Interviews took place at locations (e.g., hotel or private office) or by Skype, and at times that were comfortable for participants. All interviews began by obtaining the informed consent that was discussed during the initial telephone contact. I explained to participants that I could not guarantee absolute anonymity. I also explained the inability to have secure conversations by mobile phone. Participants expressed comfort using mobile phones, so I obtained and provided general information that included personal data by mobile phone. I transmitted transcripts and participants' responses to findings by HIPAA compliant email (U.S. Department of Health & Human Services, 2003). I informed participants that I would hand deliver copies of their transcripts and other data to a master's level counselor who is not involved in the research, and

she would return her findings to me using the same procedures. Finally, I explained the steps I would take to protect participants' identities; these steps included coding participants by allowing them to choose their own pseudonyms at the interview; keeping participants' addresses and phone numbers in separate locations and not accessible by computer; preparing a chart with participants' names and corresponding pseudonyms that I would place in a locked box located in my home; using only HIPAA compliant email to transmit transcripts, interpretations, and responses; clearing the computer cache after sending emails; locking data in a secure and controlled environment for transport and storage; and destroying or deleting data collection materials when transcription was complete.

After the individual participants and I signed two copies of the Informed Consent, one copy was given to the participants, and I kept the other copy. I also made notations that the Informed Consent was discussed at the beginning of each Skyped interview. I asked demographic questions (see Appendix D), which Grinnell and Unrau (2008) indicated would help provide context for the study. I coded demographic data on age, sex, race, and geographic location by the participants' aliases. I invited individual participants to tell about their AA experiences, and I conducted their interviews following Smith's (2007) guidelines. Smith recommended that the interview schedule guide rather than dictate the interview to allow the interviewer to be free to probe interesting areas that arise, as well as follow participants' interests or concerns (Smith, 2007). He recommended moving from general questions to ones that are more specific only if participants need to be prompted to answer a question, but maintained that the interview will probably include questions and answers that move between the two.

Interviews moved into areas that were not covered by the questions on the schedule, and I remained vigilant to ensure the interviews did not move too far away from the main research question.

Data Collection

Data consisted of the following. First, transcriptions were made of digital audio recordings of seven participants' verbal responses to interview questions that were designed to answer the broad research question, "How do clients perceive their counseling for trauma related to AA?" Second, transcriptions were made of participants' verbal responses to interview questions designed to provide information on their reasons for seeking counseling for trauma related to AA; what their expectations and beliefs were about counseling; what thoughts, feelings, and/or sensations they perceive as having been helpful and not helpful in their counseling for trauma related to AA; what their counselor said or did they perceive as having been helpful and not helpful in their counseling for trauma related to AA; how they perceive the outcome of their therapy affected their perceptions of their counseling for trauma related to AA; what they perceive was helpful in their counseling for trauma related to AA; and what they perceive was hindering in their counseling for trauma related to AA. Third, the researcher's written interpretive summaries were included. Finally, data consisted of notes on observations, understandings, and questions that I wrote immediately following the interviews.

Data collection began as I conducted interviews and made notes on all observations, understandings, and questions that arose during or after the interviews. I then transcribed the digital recordings of respective participants' responses, and composed interpretive summaries by

coding the data, analyzing groups of transcripts for themes, comparing and contrasting individual texts for common meaning, and identifying patterns that link themes. I then sent the written interview summaries to respective participants approximately 90 days after the interviews, with a request for participants to provide written responses to the summaries. To provide trustworthiness for this study, I also inquired about the applicability or fittingness of this research by asking participants to provide a verbal answer to the question “Do you think this research will be useful to individuals who seek counseling for trauma related to AA or the counselors who work with them?” Interview summaries consisted of narratives on my interpretive activity and participants’ accounts of their experiences in their own words. I sent the summaries to respective participants by a secure method of transmission that individual participants selected (HIPAA compliant email). No written responses with new data were received.

After the two week deadline for participants to return their written responses to the interview summaries, I began peer review. I sent a peer review agreement of confidentiality (see Appendix E) to a peer reviewer who is also a master’s level counselor. After the peer review agreement was signed by the peer reviewer and returned to me, I hand delivered photocopies of participants’ interview transcripts, interview summaries, and analysis of data to the peer reviewer. I requested that the peer reviewer examine, analyze, and provide a written response to the data. To provide trustworthiness for this study, I inquired about its applicability or fittingness by also asking the peer reviewer to answer the question “Do you think this research will be useful to individuals who seek counseling for trauma related to AA or the counselors who work with them?” The peer reviewer’s response was returned to me by the same method of

transmission within 15 days. Finally, I informed participants about the results of the study by HIPAA compliant email.

To protect participants' privacy and confidentiality, I coded participants' names by allowing them choose their own pseudonyms at the interview. I also kept their addresses and phone numbers in separate locations, used only secure sources for communicating, cleared my computer caches after emailing, locked data in a secure and controlled environment for transport and storage, and destroyed and or deleted data collection materials when transcription was complete. Data collection materials included cassette recordings, transcripts, written summaries, member checks, peer review, secure emails, demographics, and my reflective journal. Furthermore, I was vigilant in identifying any confidentiality issues that arose and transcribed all data to ensure participants' privacy.

Ethical Considerations

Research with participants who may be trauma survivors includes ethical concerns such as protection from harm, informed consent, researcher responsibility, minimal interference, confidentiality, and multicultural sensitivity (*ACA Code of Ethics, 2005*).

One consideration for this research study was the potential for participants' emotional sensitivity when answering questions because their experiences may have been traumatic. For example, Johnson and Benight (2003) found that from 10% to 13% of the participants in their study on trauma-focused research and domestic violence reported experiencing more distress than anticipated. Although distress was reported in the literature, a majority of participants in trauma-related studies said that it was minimal with greater cost-benefit value (Cromer et al.,

2006; Newman & Kaloupek, 2004) and they did not regret their research participation (Newman & Kaloupek). Participants who were most distressed still reported seeing their research experience as valuable, and felt validated for participating (Cromer et al., 2006).

Moreover, concern about the possibility of participants' re-traumatization by questioning is mitigated by the fact that discussing an experience is not the same as being exposed to a trauma experience (Collogan et al., 2004). Collogan et al. argued that the uncontrollable environment of "intense fear, helplessness, or horror" (DSM-IV, 2000) that results in PTSD, is different from the research experience in which participants are given a high degree of control in a safe environment. Collogan et al. (2004) claimed there are characteristics that may increase the likelihood of unexpected distress; those that may relate to participants in this study include preexisting distress, diagnosed mental illness (unrelated to AA), persons of advanced age, exposure to multiple traumas, social vulnerability, severe physical injury (unrelated to AA), and repetitive participation in research (e.g., participation in more than two studies on AA). I eliminated participants with these characteristics prior to the interview with the exception of participants with multiple traumas; however, participants indicated they had not experienced multiple traumas immediately before or after their AA experience or before their counseling for AA. I did not know if three participants had participated in more than two research studies.

To address the potential for emotional sensitivity, in the informed consent protocol, I disclosed to participants the risks of distressing emotions both during and after their participation. I instructed participants prior to the interview that any answers they wished to rescind could be withdrawn at any time and they could end their participation at any time without

penalty. Smith (2007) recommended spending time at the interview to put participants at ease, and going slowly to monitor participants' emotional states. I monitored participants for distress as information was gathered, and addressed potential distress and made changes to procedures that reduced risk. I was not asked to discontinue a line of questioning by a participant, but I did perceive responses that were emotional. When participants became emotional, I continually monitored them and questioned them to assess their ability to continue comfortably. Every participant became emotional during her or his interview, and every participant expressed a strong commitment to continue. This is in agreement with previous research on the value participants place on participation in research on trauma (Cromer et al., 2006; Newman & Kaloupek, 2004).

I debriefed participants, assessed for discomfort, offered contact information for community counseling and crisis line resources, and discussed the importance of contacting a counselor should participants become upset by discussing painful experiences. I also obtained private and public counseling and crisis line resources by contacting a public mental health agency and performing an online search for counselors in the community in which participants lived. No participant requested counseling support following an interview.

Ethical sensitivity to context was maintained as I monitored my assumptions, kept a culturally open perspective, and maintained awareness of issues such as gender, race, age, or ability. For instance, I became aware that I had overlooked the issue of ability when I arranged a meeting room for a participant who had difficulty driving to meet me. I also learned that another participant had an unresolved symptom of fear of riding in elevators when I arranged for her to

meet me on the fourth floor of a building. When I became aware of their difficulties, I offered support and asked what I could do to minimize their discomfort. Both participants assured me that the discomfort was worth the opportunity to participate. I provided understandable informed consent to every participant, and as suggested by Morrow et al. (2001), I remained sensitive to researcher privilege and power. Lastly, I was sensitive to current public and professional views regarding AA and how participants had been affected by these views.

Data Analysis

Interpretative analysis started after data collection as I reviewed all transcripts. The work of Draucker (1999) and Smith (2007) guided my analysis. First, I read interviews for overall understanding. Following Smith's suggestions, my analysis included several detailed readings of the interviews to obtain a holistic perspective and ground further interpretations within participants' accounts. During analysis, I was reflexive and adjusted interpretations to data that emerged. I coded the data, identified themes, clustered, and checked them against the data through a process that refined, condensed, and examined the connections between them. I then compared and contrasted individual texts for common meaning, and identified patterns that linked themes. As suggested by Draucker (1999), I constructed a written interpretive summary of each interview as I analyzed the data. Within approximately 90 days, I sent each participant a copy of his or her interview summary. I asked each participant to provide a written response to the interview summary to ensure the accuracy of my interpretations. I also asked participants to write in complete sentences in order to ensure clarity of their meaning when writing their responses to the interview summaries. As I reviewed participants' transcripts and interview

summaries, I completed case-by-case and cross-case analysis of themes and patterns to assure that analysis fit with the data. After the two week deadline for participants to return their written responses to the interview summaries, I compared and contrasted across all cases for common meaning and patterns that linked themes, and constructed a final interview summary. I then gave to the peer reviewer, for her analysis, participants' interview transcripts, photocopies of all interview summaries, and a written summary of analysis of the data across all cases. I included new or different interpretations that were received from the peer reviewer in the final analysis and written interview summary. As discussed by Smith (2007), the interview summary consisted of a narrative on my interpretive activity as researcher and participants' accounts of their experiences in their own words.

Data in IPA analysis are derived from not only participants, but also from the researcher's personal experiences, values, and beliefs (Draucker, 1999). Data analysis is the result of the "hermeneutic spiral" which involves interpretations building on each other over time through a cycle of reading, writing, and dialogue (Conroy, 2003; Smythe et al., 2008). Following Conroy, I engaged in a hermeneutic process of interpretation that included reviews from the participants and I which spiraled out to include a peer reviewer who was not involved in the research. I analyzed the results as they related to the original research questions. Cohen and Crabtree (2008) recommended thick, rich descriptions, clear delineation of the research process, researcher immersion, and researcher reflexivity as tools for data analysis, which I utilized to report findings in this study.

In whole, the methodology for this study has been presented in chapter three.

A detailed discussion of the study's methodology has been provided, including its philosophical assumptions, epistemological bases, and research design. The role of the researcher has been clarified, the purpose of the study and research questions have been reiterated, participant selection has been described, data collection has been delineated, and ethical considerations have been discussed. Finally, a presentation of data analysis methodology has been presented.

CHAPTER FOUR

RESULTS

The purpose of this study was to explore individuals' perceptions of their experiences of counseling for trauma related to Anesthesia Awareness (AA). In this chapter, data analysis procedures are discussed, demographic information about the participants is provided, participants are introduced, the results are presented, and finally, the research questions are reviewed and answered with data collected from the interviews.

Data Analysis Procedures

According to Interpretative Phenomenological Analysis (IPA) method, I conducted and recorded open-ended interviews with seven participants on their perceptions of their counseling experiences for trauma related to Anesthesia Awareness (AA), and then transcribed the recordings. Next, I completed six stages of data analysis for the purpose of answering primary and secondary research questions. In the first stage, I performed five steps to identify themes and compose interview summaries: (1) I read each interview transcript several times to obtain a holistic perspective; (2) I coded the data and analyzed emerging themes; (3) I included as themes the emerging themes that were coded three or more times or strongly emphasized by a participant in an interview; (4) I delineated descriptive titles that conveyed the meanings of the themes; and (5) I provided quotes that support the themes. In the second stage, I followed two steps for member checks and completion of the final interview summaries. First, I sent to each participant a copy of a summary of her or his interview for a member check to ensure accuracy; and second, I compared and contrasted new data received from member checks, and constructed

the final interview summaries. Third, I performed two steps for peer review: I sent participants' interview transcripts, copies of all interpretive summaries, and a written summary of analysis of all data to a peer reviewer for review to ensure they were being interpreted accurately; and I included new or different interpretations that were received from the peer reviewer in the analysis and the themes. Fourth, I performed three steps to develop clusters and study data across participants: (1) I analyzed and identified patterns that linked themes to develop clusters; (2) I analyzed individual participants as a collective; and (3) I included new or different interpretations from the analysis of the combined participants. Fifth, I performed four steps to answer each of the research questions with data collected from the interviews: (1) I provided a review of the research questions; (2) I analyzed clusters to ensure they answered the broad research questions; (3) I identified clusters that supported the specific research questions; and (4) I provided quotes that support the clusters across participants. I then presented a summary of the peer review procedure. Finally, I maintained a researcher's journal to document the process.

Participants' Demographic Information

A total of seven participants were interviewed, all of whom obtained counseling for trauma related to AA. Six participants were female, and one was male. The age of the participants ranged from 29 to 61, and their average age was 49. One participant lived abroad, and six lived in the United States: one in the northwest, one in the west, three in the northeast, and one in the south. Six participants reported a great degree of pain and one reported a great degree of trauma from terror and horror. All participants reported a great degree of discomfort from symptoms following AA.

Six participants were unsure whether they obtained services from Licensed Professional Counselors (LPC), Social Workers (SW), Psychiatric Nurse Practitioners (PNP), or Clinical Psychologists (CP), and frequently used different terms interchangeably. Two participants were sure about the professional identity of at least one provider from whom they obtained services; one received services from an LPC, and one obtained services from a SW and a PNP. To avoid confusion, the term *counselor* will be used in this chapter unless another term is quoted from a participant.

Five participants started counseling approximately within one year following their AA experience. The range was one day to decades, and one participant did not answer the question. The length of time that participants spent in counseling made it difficult for them to estimate the number of sessions they received; however, the fewest reported sessions was 32, and the most was more than 96. The range for participants' length of time in counseling was three months to eight years. Two participants attended group therapy, seven attended individual therapy, and one attended both. Two clients received EMDR, one received systematic desensitization, one received Somatic Experiencing, and one received existential counseling. Five participants were satisfied with their counseling, one was minimally satisfied, and one was dissatisfied. Pseudonyms were applied to all participants for confidentiality. Because data were too approximate or unknown for *type of counseling received* and *number of counseling sessions received*, they are not included in the table (Table 1).

Participants

Participants are introduced in the same order in which the interviews were conducted.

Descriptions of the participants at the time of the interview and a brief account of their AA counseling experiences are given to provide context for the data obtained during the interviews.

Table 1: *Participants' Demographics*

	Lucy	John Philips	Shamus	K.L.	Ebi	Keistador	L.K.
Sex	F	M	F	F	F	F	F
Age	42	43	61	57	29	52	61
Geographic Location	Abroad	North East	North East	North East	West	North West	South
Age at Time of AA	39	43	54	47	25	48	5
Degree of Pain/Trauma	Great	Great	Great	Great	Great	Great	Great
Discomfort from Symptoms	Great	Great	Great	Great	Great	Great	Great
Counseling Provided By	?	?	?	?	LPC	PNP LCP LPC	LSW
Time Between AA And Start of Counseling	5 Wk	3 Mo	3 Mo	?	1 Day	12 Mo	Decades
Time in Counseling	Yrs	3 Mos	8 Yrs	Yrs	Yrs	Yrs	4 Yrs
Group Sessions	N	N	Y	Y	Y	N	N
Individual Sessions	Y	Y	Y	Y	Y	Y	Y
Group and Individual Sessions	N	N	Y	Y	Y	N	N

Lucy. Lucy was initially guarded during the interview, but became more comfortable as we proceeded. She described waking during orthopedic surgery as her husband and their six-week-old baby were just a few yards away, in a hospital outside of the United States. Lucy talked about how she was “treated ... absolutely inhumane[ly]”

by a nurse anesthetist who “smelled of old BO (body odor) and chemicals.” As the mother of three small children, she was “desperate” to begin counseling for PTSD because “I was feeling like I was going mad, really ... because the [AA] thoughts were so constant.” Lucy said, “it’s like I was ... like a bombed out building. I had to rebuild everything.”

Lucy explained, “It took three years to find somebody who validated and believed me.” Before then, the counselor she worked with “was out of her depth” and “made [me] feel as if I am a camp story for her other patients.” Finding the counselor who “I knew right away I could trust” was “an amazing thing.” Lucy said the counseling she received gave her “peace, peace of mind ... and ... [moved] ... me through the trauma.”

John Phillips. John Phillips was likely in the early stages of trauma reaction because his AA occurred only a few months previously. He appeared agitated, impatient, and frustrated during the interview. He expressed suspicion about counselors when he said, “It gives me a little bit of a pause when I think about why I am seeking out help from someone that is crazier than I am.” In spite of his distressed state, John Phillips was cooperative and extremely clear about his perceptions and views.

As stated by John Phillips, he began counseling when he was “deep in the throes of PTSD” from what he described as “anesthesia victimization” and not AA. He said he, “wanted answers to some ... psychological questions,” and to “deal with the enormous amount of anxiety that was going on.”

Finding a counselor who “has been patient and has stuck it out” did not change John Phillips’ negative beliefs about counselors. He stated, “Maybe about that one person, but ... I still think headshrinkers are all kind of crazy.” His chief complaint about his counseling was “the process seems slow.” He expressed some change in how he viewed his counselor when he said, “But do I believe that he is going to be able to alleviate some of the symptoms? That's what I'm hopeful for.”

John Phillips expressed hope about his counseling when he said, “I’ll work with this guy [counselor],” but he limited the amount of time he was willing to invest, stating “I’m willing to give it [counseling] another six to eight months” and if “people have not fixed me ... I will just have to live my life as damaged goods.” He also acknowledged some progress when he stated, “I’m still suspicious if it’s gonna work, but I’m not paranoid that this counselor is going to be doing something nefarious to me.”

Shamus. When I interviewed Shamus, she was eager to talk about the counseling she received for AA during surgery for a hysterectomy. Prior to AA, she was a busy mother, wife, and employee, but after AA she said a part of her “left me that I could no longer retrieve.” She had received Electroconvulsive Therapy (ECT) which reduced her depression but caused her to speak slowly, pausing frequently to consider what she was going to say. Following AA and prior to the interview, Shamus had a double mastectomy and was in remission for breast cancer.

“I was in hope that therapy would help,” was the reason Shamus cited for seeing a counselor, and her biggest problem was severe Posttraumatic Stress Disorder (PTSD). She remembered that the counselor she most connected with “explained that what happened to me is

very similar to what happened to a person being raped,” and he taught her “there’s still a me that didn’t die.” Counseling was not easy for Shamus. She recalled seeing a new counselor: “I was feeling extreme fear, extreme anxiety, I was hysterically crying, I had difficulty talking, I was back at the beginning.” She said, “all the different things we tried and did, and I still have major issues about each one of them.” Eventually progress was made, and, at the time of the interview, she praised her counselor by describing him as “my saving grace” and was pleased she could “smile and laugh and joke now.”

K.L. When K.L. arrived for her interview, she was pleased that she rode in the elevator because she had previously suffered from panic episodes in enclosed spaces. She was a petite woman who spoke with resolve about the AA she experienced during surgery on her sinuses, and the anger she felt about the demoralizing AA legal struggle she endured afterward.

K.L. began by stating that her “main goal ... was to really get someone that would really understand me as a person” when she began counseling. She had positive results, saying “a lot of them gave me ideas” and “I do trust a couple of them,” but negative experiences frequently outweighed the positive. According to her, the EMDR specialist “dismissed me” and other counselors “when they heard my story, they should have sent me to someone else They couldn't handle it ... a lot of my years were wasted.” K.L. eventually found a counselor she liked, one who treated “two other people who had anesthesia awareness.” Describing her experience, K.L. said, “she hugged me and just told me I was not alone. I needed to hear that.”

Ebi. I Skyped the interview with Ebi because funding did not allow me to travel to meet with her in person. She said she woke up during orthoscopic surgery on her knee five years

before the interview. She reported that she was also a rape survivor, but her AA trauma was more severe: “I think if I had my choice back then I would not have been alive.” At the time of the interview, she reported that she “had more hope,” and she spoke about the return of joy, or what she called “*joie de vivre*.” Ebi has worked in her hometown and on the internet to help AA survivors since her AA experience.

When Ebi described starting counseling she explained, “I had no expectations whatsoever.” She reported that the counselors she worked with were helpful, but it was a “long process.” She compared her trauma work to opening a Dr. Pepper can that had been shaken up, “trying to open it slowly, so the fizzy doesn’t get all over your hand.” Ebi commented on her success, stating “I hardly have any nightmares.” She maintained that being in a group with people who had chronic trauma helped her realize “I consider myself a pretty lucky girl.”

Keistador. Keistador reported that she experienced AA during a spinal revision for scoliosis that resulted in PTSD symptoms. Because she had had a previous positive counseling experience, she sought counseling. She was open and used sarcastic humor to deal with the anger she had about counselors whom she said, “actually made me worse.” For example, she talked about a counselor who rarely spoke during a session: “I stayed for 16 sessions; that is how stupid I was.”

She was certain the outcome of her counseling caused her to “have a negative attitude towards it.” She said she had counselors who were “too chatty,” “*very, very professional* (sarcastic),” and “wanted in five states,” but finally found a counselor who was “able to relate to what I was saying.” Keistador reported, “she believed me ... And she talked about PTSD,” but

after a few months of therapy, Keistador was “just not ready ... to do all this work.” At the time of the interview, Keistador could not locate a trauma specialist who accepted Medicaid. She reported, “It is very, very disheartening to know that there is nobody that will help.”

L.K. L.K. was enthusiastic when she shared her perceptions of the counseling she received for PTSD she developed after awakening during a tonsillectomy when she was five years old. Although her AA experience was decades before and she had “bad dreams about that all throughout my life,” she had received counseling only within the past 5 years. L.K. reported a history of emotional trauma such as the death of a parent and at least one other significant trauma, rape. L.K. was asked to keep her answers related to AA only, and she rarely discussed another trauma during the interview.

L.K. said she decided to seek counseling because she “just collapsed” from the stress in her life. She said it was the “intense terror and horror” during her surgery that was traumatic. Her nightmares were so disturbing that eventually L.K.’s mother, a psychologist, would just tell her “‘go back to sleep’ when I would wake up screaming.”

When L.K. found a counselor she described as “young enough to be my son” to help her with anger and isolation, she was “hopeful.” “He was ... helping teenage kids” so, she “really admired him.” She said, “I had no idea I would feel the depth of pain and ... despair and ... fear that I did in therapy.” For instance, L.K. said she had “scar tissue on my retina” because “I cried so hard and so long.” Introduced to the work of Viktor Frankl by her counselor, she was inspired to write a book about trauma recovery. When interviewed, she said she was living a life that is “richer than she had hoped for” in spite of having some manageable PTSD symptoms.

Data Analysis and Reduction

I analyzed each participant's transcript individually, and a total of 73 themes emerged. I consolidated the 73 themes from the seven participants and analyzed them as a whole. This resulted in 14 clusters for all participants. The clusters follow in order from those that appeared most frequently or strongly to those that appeared least often: (1) factors that motivated the client to seek counseling, (2) factors that affected client satisfaction/rapport, (3) client's perception of the counselor, (4) factors that affected the client's perception of the counselor, (5) counseling outcome, (6) responses that affected counseling, (7) client's perception of counselor-facilitated strategies/interventions, (8) client comfort in counseling, (9) changing perspectives of the client, (10) factors that affected the choice of counselor, (11) counselor factors that influenced the client to leave counseling, (12) role of family and significant others, (13) barriers to obtaining counseling, and (14) commitment to counseling.

I then compared the 14 clusters to ensure they fit with transcribed interviews, and analyzed them. Quotes that support the clusters across participants are included.

Cluster #1— Factors that motivated the client to seek counseling

John Phillips and K.L. focused on factors that seemed to relate a loss or significant shift in identity to their motivation to seek counseling. John Phillips explained he was looking for understanding, "that's all I'm looking for ... some understanding of who this new John Phillips is because the old one died on [the operating table]." K.L. expressed a similar reason when she said, "I thought I was just doomed. Someone else had taken over where I had left off; I don't want to live that way."

The factor that most motivated Lucy, Shamus, Ebi, and Keistador was seeking relief from debilitating PTSD symptoms. Lucy recalled that for a long time she could not sleep, “my reason for everything was sleep, just sleep. I wanted sleep”; Shamus said she experienced panic attacks, “I’d have ten panic attacks a day. You know, and not knowing in the least how to control them.” Ebi discussed flashbacks, “What I needed help for was the amount of flashbacks,” and Keistador remembered that she wanted to overcome PTSD, stating “I had symptoms, you know; I didn’t know how to get over PTSD, I didn’t know what kind of steps there are in therapy to do so.”

Exhaustion drove L.K. to seek counseling. She described her experience, “And I tried ... to go back to work And I just couldn’t do it, and collapsed.”

Cluster #2: Factors that affected client satisfaction/rapport

For Lucy and Shamus, their counselor’s compassionate understanding was a crucial factor. As Lucy stated, “I have a very good therapeutic alliance because she is very compassionate ... sympathetic and knows her stuff, “and Shamus expressed similar thoughts in her statement “He showed me compassion, understanding, and did give me avenues to continue to feel that way.”

Support and validation were also important factors in client satisfaction. Lucy attributed a strong therapeutic alliance to her counselor validating “yes, that [AA] definitely happened.” Shamus, once again, expressed a similar sentiment when she stated, “I felt I had support; it made me feel lifted, made me feel validated.”

For K.L. and L.K., knowing that the counselor was really listening seemed to provide a climate of trust and safety. K.L. commented “Whenever they give me that answer I know that

they were listening to me that is what has built up my trust” and L.K. spoke about the feeling of release and then peace when “for the first time I...was able to tell anybody that I had waited ... to scream.”

Ebi was the only participant who identified having a similar characteristic as the counselor as a factor that made her feel closer to her counselor. She clarified, “My therapist is close to the same age as me Now we have at least age commonality.”

Keistador referred to factors that negatively affected rapport and satisfaction with counseling. Keistador seemed to see her counselor as disengaged, stating “I told him my symptoms and my story and he sat there and took notes. I stayed for ... 16 sessions. That is how stupid I was.”

For Shamus and Lucy, compassion, or the lack of it, was strongly related to how satisfied they were with their counseling and how well they related to their counselors. Shamus benefited from a compassionate counselor who “showed me compassion, understanding, and did give me avenues to continue to feel that way ... I felt I had support, it made me feel lifted, made me feel validated.” In the same way, Lucy related compassion to rapport when she commented “Not only do I have a very good therapeutic alliance because she is very compassionate, sympathetic, and knows her stuff She said ‘yes, that [AA] definitely happened.’” Conversely, John Phillips’ dissatisfaction with counseling seemed to be exacerbated by factors related to his views of counseling, he surmised “I’m a very impatient person, so you know that this is going to take a long time to work through, something I am not looking forward to in the least.” For K.L. and Keistador, counselor responses seem to be essential to their satisfaction and rapport in

counseling. K.L. appeared to measure how well a counselor listened by the answers she was given, she concluded “Whenever they give me that answer I know that they were listening to me ... that is what has built up my trust. Whereas, Keistador felt foolish for staying with a counselor who was verbally non-responsive with her, she related how she felt when she said, “I told him my symptoms and my story and he sat there and took notes. I stayed for 16 sessions. That is how stupid I was.” According to L.K., telling her story was very helpful; she said, “once you have tasted that feeling of release, followed by peace ... for the first time I was able to tell anybody that I had waited ... to scream.” Whereas, Ebi indicated her satisfaction with counseling was improved by having a counselor “close to the same age as me [so] Now we have at least age commonality.”

Cluster #3— Client’s perception of the counselor

Participants assessed their counselors’ skills, and it appears that counselors who are open, competent, and supportive were most noticed. For instance, Shamus had this to say about one of her counselors, “he was the most trained and best fit for me as far as being comfortable with him ... he was very open.” Ebi evaluated a counselor she really liked positively when she said, “She was young and although she hadn’t been doing it for a long time, obviously she paid attention in school, and she had a natural knack for it,” and K.L. praised a helpful counselor when she affirmed that the counselor “dealt with two other people who had Anesthesia Awareness. Wonderful. Supportive.”

Counselors who demonstrated core values of caring were perceived more positively by John Phillips who said it was important that his counselor “was somebody that showed some

compassion and sympathy.” and L.K. who stated that she immediately trusted her counselor because she “felt a spiritual closeness with him. I just sensed his goodness.”

There also were counselors who were not perceived as favorably. Lucy described being disturbed by a counselor’s different religious views, “And I really felt sorry for her in a way because she doesn’t have that [religious belief].” Keistador criticized a counselor who failed to connect with her and meet her needs, describing “That is all I asked from him, but that was too much. Jerk.”

Cluster #4— Factors that affected the client’s perception of the counselor

Participants’ views of their counselors were affected by various factors, both positively and negatively. However, the greatest focus was on the counselors. “I’ve had someone that has been patient and has stuck it out” was an emphasis for John Phillips. For Shamus, “somebody besides the anesthesiologists that wasn’t doing anything for me anyways actually valued what I said as being truth instead of fiction.” Whereas, Ebi appeared to value her counselor’s technique; she said, “I felt she had a really good technique. She put it in the conversation; I thought kinda conniving, but good.”

Although only one participant said that how she saw her counselor was affected by the environment, for L.K. the environment played an important role in increasing her positive assessment of her counselor, “I felt like the environment was a good environment ... we either met in a church building or his office.”

Negative perceptions of counselors seemed to be fueled by impressions. Lucy described feeling “real negative thoughts of paranoia; I never felt completely safe with her and I came to

find, afterwards, that she didn't actually believe what I was telling her.” K.L. and Keistador fixed their attention on counselor behavior. K.L. stated, “You know they do different things to keep looking at the clock, you know they're not interested in what you're saying,” and Keistador said, “Every session, the first ten or fifteen minutes was him going over that [lawsuit refusal] again.”

Cluster #5— Counseling outcome

Every participant except one agreed that counseling had helped them, although one participant said counseling only had a small positive impact. Lucy stated “It's given me peace, peace of mind; quieting my mind, and ... moving me through the trauma.” For K.L. “it has guided me in the direction of I'm not crazy; that they [counselors] believe me.” Ebi's outcome was very positive, “little by little it [suicidal intention] went away Cause I haven't wanted to kill myself in quite a few years.” John Phillips concluded “I feel a little bit better since the episode, but counseling has not abated it that much ... maybe, maybe a little bit.”

Unfortunately, Keistador assessed the outcome of her counseling as harmful; she thought “They [counselors] actually made me worse.”

Cluster #6— Responses that affected counseling

For John Phillips, a practical suggestion by his counselor was interpreted by him as supportive, “he's been supportive of [told me] ... to get out of the house, to leave the property.” Ebi was assured by a counselor's responses that she perceived as kind, “when I looked into her eyes I saw a lot of kindness and compassion, and that helped me open up more to her.” Shamus talked about a counselor who seemed to provide her with an important context; she recalled him

telling her “what happened to me is very similar to what happened to a person being raped ... that’s when I got my recorder.”

K.L., on the other hand, appeared angry when she discussed a counselor’s responses that were hindering to her counseling; describing his behavior, “He doesn't say anything, he doesn't answer anything, and he has no interest; he wants to see if I want the next appointment ... I am very uncomfortable while I am there.” While Keistador was sarcastic as she mocked the counselor whose hindering responses were “counseling clichés” stating “here is a good one, ‘hmm, that’s interesting.’”

L.K., in contrast, most emphasized her own response to counseling as a strong motivator, she said, “I *had* to grab onto it [counseling]. It was my chance to be whole again.” In a similar way, Lucy recalled her own helpful response to her Somatic Experiencing counselor as she said, “I told her everything ... I was thinking this is going to work, this is going to help me.”

Cluster #7— Client’s perception of counselor-facilitated strategies and/or interventions

It was clear from several participants’ accounts that counselors demonstrated unconditional positive regard and accurate empathic understanding when utilizing strategies and interventions. Shamus valued her counselor utilizing her creative skills to process her trauma, she recounted that he said, “let’s start painting [he] worked with me a lot, taking my mind off a lot of things, getting me interested in something.” Although there was a damaging outcome in court, K.L. still commended her counselor for getting her to journal; she said, “my therapist told me to write in a journal ... I did ... but if anybody ever goes to court ... don't let them know ... because they [lawyers] will try and use it against you.” For L.K., her counselor’s

method of communicating with her met an important need, she expressed her appreciation for his understanding of her when she said, “He emailed me; that was very effective with me, because sometimes it was so late at night ... when I either had questions or it just hurt.” Ebi’s respect for the purpose of her counselor’s strategies and/or interventions seemed clear as she recounted “I didn’t like when the therapist asked pointed questions, but I knew she was doing it for a reason so I just made myself put up with it.” Keistador remembered that she was helped, “I thought of something with the third therapist that was helpful; she said, “you’re like a prisoner of war.” Being given a different perspective seemed to be valued by her. John Phillips was the only participant who said he received little benefit; he stated “most of what helped I’ve mulled through by myself in the wee hours of the morning.”

Cluster #8— Client comfort in counseling

Every participant who discussed their comfort in counseling focused on trauma symptoms. John Phillips said these symptoms were a problem for him during sessions, “Headaches, pretty much the PTSD symptoms; if there are PTSD symptoms,” while K.L. emphasized “palpitations, panic attacks, numbness tingling, everything flashbacks, just laying there, tubes down my throat, not getting to move, everything.” Ebi recalled that she “often got the feeling I was still intubated ... I would feel that sensation and I would not want to talk anymore.” Shamus described her emotional reactions while processing her trauma, “I read a section of ... what happened into the recorder and ... played it back ... for months and ... at the end I could listen to it without becoming hysterical and crying.” L.K. commented that her

counselor “would bring me back to this day in time because I was having such bad flashbacks,” and Keistador again reported that she “felt insignificant. I wasn’t being taken seriously.”

Cluster #9— Changing perspectives of the client

The perspectives that participants seemed to most remember were those about the counselor, the participant, and PTSD symptoms. Over time, Lucy realized “she [counselor] wanted to talk about her stuff a lot too ... so it became counterproductive in an expensive kind of way”, while John Phillips gained a more positive view of his counselor, “but I’m not paranoid that this counselor is gonna be doing something nefarious to me.” Perspective changed for Shamus as she realized “one of the most positive things I got from him overall is the fact that ... there is a me that didn’t die.” Ebi said it was an important moment in her counseling when “It made me realize I ... am not so alone out there.” L.K. gained a greater understanding of her trauma experience, stating “in the middle of this crying like a baby I realized it was a post-traumatic stress episode is what I called it.”

Cluster #10— Factors that affected the choice of counselor

Participants cited different factors that affected their choice of counselor. For instance, Lucy said, “I wanted to speak to a woman about it; I would have had a hard time with a male therapist”, and Shamus chose someone who “never charged me.” Shamus said, “I worked with him for over two years.” Keistador and L.K. discussed their process of selecting a counselor, “I knew the first one, because I had been working with her, and then I got to the third one; I had read about her. We had a therapist guide, and she sounded good” was Keistador’s response,

while L.K. looked for indicators that her counselor had qualities she valued, “He was doing adoptions and this really cool stuff so, I really admired him.”

Cluster #11— Counselor factors that influenced the client to leave counseling

Participants were clear about their reasons for leaving counseling. Counselors’ errors were frequently the cause, with Lucy stating “it was insulting because she was comparing fairly mundane experiences to what happened to me which made me really understand she didn't grasp what happened”, whereas Keistador disapproved of her counselor’s behavior, saying “she ended up being too chatty ... I sometimes had trouble getting her to stop.” Not believing was a strong factor for K.L. to leave counseling; she related “I said what I needed to say. If they didn't want to believe me that's fine, I don't have to go there anymore. I can go to somebody else.” At least one participant had to leave counseling because her counselor moved away; L.K. stated “He actually moved to another part of the country, so I had to grow up real quick”, but another participant ended counseling when the participant perceived the counselor as judging her, “I just got up and left and never went back ... I thought a therapist would be able to listen instead of giving me her judgments.”

Cluster #12— Role of family and significant others

Although the role of family and significant others was directly discussed only by John Phillips and L.K., their focus was strong. Concern for family and significant others’ reactions to post-AA personality changes were a focus for John Phillips when he said, “And I'm sorry that I'm not the same person that I was so the people that loved me before I died [loss of identity due to AA] might not like the new one.” On the other hand, L.K. needed the support of family as

she dealt with trauma symptoms and said, “I had to have my daughter drive my car once because I was afraid I wouldn’t be all together [after a counseling session].” While Lucy, K.L., Shamus, and Keistador did not discuss the role of their family and significant others directly, they all made references to them throughout their interviews. For instance, Lucy mentioned having small children, K.L. made a reference to the quality of the relationship with her husband, Shamus discussed speaking with a counselor about her husband, and Keistador commented on her adult children.

Cluster #13— Barriers to obtaining counseling

For those participants who needed assistance obtaining counseling, money was a barrier. Shamus recalled “I called veterans [Veterans Administration] and they said they only deal with veterans and not this kind of population. I was at a dead end” and Keistador talked about not being able to find a counselor she could afford, “It is very, very disheartening to know that there is nobody that will help.”

Another barrier was the painful experience of counseling that K.L. described, “you’re always reliving ... that fear, that anger, every time you talk about that to someone different ... you just start to lose a little bit of trust and faith in the therapists.”

Cluster #14— Commitment to counseling

AA counseling requires a commitment of time and emotional energy. It is noteworthy that of the four participants who mentioned the expense of counseling, none said they chose to stop counseling because of financial reasons. It appears that the participants value counseling for trauma related to AA whether they can afford it or not.

Counselors and clients committed to counseling. For instance, Shamus spoke of one of her counselors, “one of his biggest things was there is no such word as *can't*. He ingrained that in me for eight years,” and L.K. reported on the length of time she was in counseling for trauma related to AA, “I saw him for almost four years.”

A summary of the analysis of the transcripts indicates the following number of clusters that emerged from interviews with the participants: Lucy— 8; John Phillips— 10; Shamus— 13; K.L.— 10; Ebi— 9; Keistador— 11; and L.K.— 12. A combined analysis of the clusters by participant is presented in Table Two.

Findings by Research Question

The process of collecting and analyzing data was conducted with the goal of answering the broad research question “How do clients perceive their experience of counseling for trauma related to AA?” and the more specific research questions: “Are there experiences indicating that clients’ therapy processes have been helped or hindered?”; “If so, what factors do clients perceive were helpful in their counseling for trauma related to AA?”; “If so, what factors do clients perceive were hindering in their counseling for trauma related to AA?”; and “What are the therapeutic effects for clients regarding helpful and hindering factors in their counseling for trauma related to AA?”. Each of the research questions was answered with data collected from the interviews.

Broad Research Question: How do clients perceive their experience of counseling for trauma related to AA?

Table 2: *Combined Analyses of Seven Participants: List of 14 Clusters*

Cluster	Theme Total	Lucy	John Philips	Shamus	K.L.	Ebi	Keistador	L.K.
Factors that affected client satisfaction/rapport	7	X	X	X	X	X	X	X
Factors that affected the choice of counselor	4	X		X			X	X
Factors that motivated the client to seek counseling	7	X	X	X	X	X	X	X
Changing perspectives	5	X	X	X		X		X
Counselor factors that influenced the client to leave counseling	4	X			X		X	X
Counseling outcome	6	X	X	X	X	X	X	
Client's perception of counselor	7	X	X	X	X	X	X	X
Responses that affected counseling	6		X	X	X	X	X	X
Client's perception of counselor-facilitated strategies and/or interventions	6		X	X	X	X	X	X
Role of family/significant others	3		X	X				X
Comfort in counseling	6		X	X	X	X	X	X
Factors that affected the client's perception of the counselor	7	X	X	X	X	X	X	X
Commitment to counseling	2			X				X
Barriers to obtaining counseling	3			X	X		X	
Total Themes	73	8	10	13	10	9	11	12

Based on analysis of the transcripts, participants' perceptions of their experience of counseling for trauma related to AA focused on the 14 clusters and answered the four specific research questions. Combined, these clusters answered the broad research question. Specific research questions that answered the broad research question follow:

Specific research question #1: Are there experiences indicating that clients' counseling processes have been helped or hindered?

Based on analysis of the transcripts, participants answered that there are factors which helped and hindered their counseling processes for trauma related to AA. Specific research questions two and three discuss these factors; they follow and examples of participants' quotes are provided:

Specific research question #2: If so, what factors do clients perceive were helpful in their counseling for trauma related to AA?

Two examples of each factor are included for clarity, but due to space limitations every example is not presented. Clients perceived their counseling processes were helped by the following:

Factors that affected client satisfaction/rapport

Lucy stated "Not only do I have a very good therapeutic alliance because she is very compassionate, sympathetic, and knows her stuff ... she said, 'yes, that [AA] definitely happened.'" L.K. stressed, "Whenever they give me that answer I know that they were listening to me that is what has built up my trust."

Factors that affected the choice of counselor

Shamus said, “I ... explained to him about my situation he never charged me, and I worked with him for over two years.” L.K. stated “He was doing adoptions and this really cool stuff So, I really admired him.”

Client’s perception of the counselor

Ebi emphasized “when I looked into her eyes I saw a lot of kindness and compassion, and that helped me open up more to her.” John Phillips said, “I’ve had someone that has been patient and has stuck it out.”

Responses that affected counseling

John Phillips said, “he’s been supportive of [told me] ... to get out of the house, to leave the property.” Shamus recalled, “He explained to me that what happened to me is very similar to what happened to a person being raped ... that’s when I got my recorder.”

Client’s perception of counselor-facilitated strategies and/or interventions

L.K. reported “He emailed me; that was very effective with me because sometimes it was so late at night ... when I either had questions or it just hurt.” Shamus said, “he said, let’s start painting ... there has to be 400 eyes The final eyes I got to I was, ‘Whew! I finally got it!’ Which was exciting for me!” Keistador recalled, “I thought of something with the third therapist that was helpful; she said, ‘you’re like a prisoner of war.’”

Factors that affected the client’s perception of the counselor

Ebi explained “I felt she had a really good technique. She put it in the conversation; I thought kinda conniving, but good.” Shamus stated “somebody besides the

anesthesiologists that wasn't doing anything for me anyways, actually valued what I said as being truth instead of fiction.”

A summary of the helpful factors by participant indicates the following number of helpful factors: Lucy— 5; John Phillips— 5; Shamus— 9; K.L.— 2; Ebi— 5; Keistador— 3; and L.K.— 8.

Specific research question #3: If so, what factors do clients perceive were hindering in their counseling for trauma related to AA?

Two examples of each factor are included for clarity, but due to space limitations every example is not presented. Clients perceived their counseling processes were hindered by the following:

Factors that affected client satisfaction/rapport

John Phillip said, “I'm a very impatient person, so you know that this is going to take a long time to work through, something I am not looking forward to in the least.”

Keistador reported, “I told him my symptoms and my story and he sat there and took notes I stayed for 16 sessions That is how stupid I was.”

Counselor factors that influenced the client to leave counseling

Lucy emphasized, “it was insulting because she was comparing fairly mundane experiences to what happened to me which made me really understand she didn't grasp what happened.” K.L. stated “I just got up and left and never went back ... I thought a therapist would be able to listen instead of giving me her judgments.”

Client's perception of the counselor

K.L. expressed, “So, I really don't think that this person understands me.”

Lucy said, “And I really felt sorry for her in a way because she doesn't have that [religious belief].”

Responses that affected counseling

Keistador recounted, “here is a good one, ‘hmm, that’s interesting’ (sarcastic).”

Similarly, K.L. said, “He doesn't say anything, he doesn't answer anything, and he has no interest; he wants to see if I want the next appointment ... I am very uncomfortable while I am there.”

Client’s perception of counselor-facilitated strategies and/or interventions

John Phillips reported, “most of what helped I've mulled through by myself in the wee hours of the morning.” L.K. said, “my therapist told me to write in a journal ... I did ... but if anybody ever goes to court ... don't let them know ... because they [lawyers] will try and use it against you.”

Client comfort in counseling

Keistador said, “I felt insignificant. I wasn’t being taken seriously.” In a similar vein, John Phillips described “Headaches, pretty much the PTSD symptoms; if there are PTSD symptoms.” L.K. recalled, “palpitations, panic attacks, numbness tingling, everything flashbacks, just laying there, tubes down my throat, not getting to move, everything!”

Factors that affected the client’s perception of the counselor

K.L. said, “You know they do different things to keep looking at the clock; you know they're not interested in what you're saying.” Similarly, Lucy recounted, “I had ... real

negative thoughts of paranoia; I never felt completely safe with her, and I came to find afterwards that she didn't actually believe what I was telling her.”

Barriers to obtaining counseling

Shamus explained, “And I called veterans [Veterans Administration] and they said they only deal with veterans and not this kind of population. I was at a dead end.” Keistador recalled, “and she [counselor] talked about PTSD. So that was when I was diagnosed. You see, there was nothing [no diagnosis] before.”

A summary of the hindering factors by participant indicates the following number of hindering factors: Lucy— 3; John Phillips— 3; Shamus— 2; K.L— 7; Ebi— 1; Keistador— 7; and L.K.— 2.

Specific research question #4: What are the therapeutic effects for clients regarding helpful and hindering factors in their counseling for trauma related to AA?

Two examples of each factor are included for clarity, but due to space limitations every example is not presented. Based on analysis of the transcripts, participants stressed therapeutic effects that were helpful and hindering in their counseling process. Examples of the therapeutic effects of helpful and hindering factors follow:

Clients' perception of the therapeutic effects of helpful factors in counseling

Lucy reported, “It's given me peace, peace of mind; quieting my mind, and ... moving me through the trauma.” L.K. stated “it has guided me in the direction of I'm not crazy; that they believe me.” Ebi said, “That's the last part of it; after I already tried suicide a few times ... and little by little it went away Cause I haven't wanted to kill myself in quite a few years.”

Clients' perception of the therapeutic effects of hindering factors in counseling

Keistador reported “They actually made me worse.”

A summary of participants with the number of helpful therapeutic effects follows: Lucy— 6; John Phillips— 5; Shamus— 8; K.L— 3; Ebi— 5; Keistador— 2; and L.K.— 7. A list of participants with the number of hindering therapeutic effects follows: Lucy— 3; John Phillips— 2; Shamus— 2; K.L— 7; Ebi— 1; Keistador— 6; and L.K.— 2. A combined analysis of the seven participants with the number of helpful and hindering therapeutic effects by participant is presented in Table Three.

Table 3: *Combined Analyses of Seven Participants: Helpful and Hindering Therapeutic Effects*

Cluster	Theme	Lucy	John Phillips	Shamus	K.L.	Ebi	Keistador	L.K.
Helpful Therapeutic Effects	36	6	5	8	3	5	2	7
Hindering Therapeutic Effects	23	3	2	2	7	1	6	2
Total Themes	59	9	7	10	10	6	8	9

Summary of Peer Review Procedure

A master’s level counselor who demonstrated understanding of the research procedure and the coding method of qualitative analysis reviewed interview transcripts, scanned copies of all interpretive summaries, and reviewed a written summary of analysis of all data. There were

no written responses from participants to the interpretive summary. The peer reviewer was utilized to determine if the development of themes appeared accurate. The peer reviewer and I discussed the research questions, rationale for theme development, and the research topic. The peer reviewer made recommendations that helped me focus on the emphasis each participant gave to a specific emerging theme. The peer reviewer also made recommendations regarding additional themes she saw emerging, which I then included in data analysis.

Conclusion

In this chapter, I presented a detailed description of the themes that emerged from the individual interviews of the research participants. I conducted an analysis of themes for each participant, and a process of analysis condensed them into 14 clusters. I then provided quotes that support the themes and clusters. Next, I reviewed the research questions, identified the clusters that answer the research questions, and presented the quotes that support the themes. I also provided a summary of the peer review. Finally, I maintained a researcher's journal to document the process.

CHAPTER FIVE

DISCUSSION

In this chapter, the philosophical foundation of the study is described, the purpose of the study is restated, and a summary of the procedures and results is presented. Findings are discussed, linked to previous research, and presented in an order that encourages understanding of the data. The limitations of the study are reviewed. In addition, implications for counselors are discussed as are recommendations for future research. The chapter concludes with a personal reflection from the researcher.

Philosophical Foundation

Within the philosophical context of this Heideggerian research study, a traumatic experience such as Anesthesia Awareness (AA) will have meaning to the people who experience it, and their counseling experiences may facilitate understandings that may be helpful or hindering in ameliorating symptoms of Posttraumatic Stress Disorder (PTSD). This research study explored clients' perceptions of their counseling experiences for trauma related to AA.

Purpose and Research Questions

The purpose of this study was to explore individuals' perceptions of their experience of counseling for trauma related to AA. A review of the literature revealed very little research on this topic. The primary research question was: How do clients perceive their experience of counseling for trauma related to AA? Specific research questions were:

1. Are there experiences indicating that clients' therapy processes have been helped or hindered?

2. If so, what factors do clients perceive were helpful in their counseling for trauma related to AA?
3. If so, what factors do clients perceive were hindering in their counseling for trauma related to AA?
4. What are the therapeutic effects for clients regarding helpful and hindering factors in their counseling for trauma related to AA?

Summary of Methods and Findings

I utilized an Interpretive Phenomenological Analysis (IPA) approach to explore how clients perceive their experience of counseling for trauma related to AA. I utilized purposeful, convenience sampling for recruitment of participants. An advocate for AA provided me with names and contact information for five participants. One participant was excluded because he had not received counseling, and one participant's responses were not included in my analysis because of a recording malfunction. The participants who were provided by the advocate were: John Phillips, Shamus, and K.L.; the remaining participant did not receive a pseudonym. I was contacted by the following three AA survivors who read a post I made about my research on an internet site for Anesthesia Awareness: Lucy, Ebi and Keistador. Finally, one participant, L.K., was referred to me by a Licensed Professional Counselor. Altogether, I interviewed eight participants who had received counseling for trauma related to AA, but only seven participants were included in this research study. Each participant had obtained more than 15 hours of counseling. I continued to collect data until the point of saturation.

Data collection

Data collection was accomplished through face-to-face interviews with the following four participants: Lucy, John Phillips, Shamus, and K.L. Three interviews were conducted through Skype; these included Ebi, Keistador, and L.K. I conducted and transcribed all individual interviews.

Data analysis

I coded the data and identified emerging themes when reviewing the transcribed texts. The themes were clustered and used to address the primary and secondary research questions, and the results were organized into 14 separate but related clusters. A cross-case analysis of participant responses was then conducted which resulted in no new themes. The clusters that were identified are presented in Table 4:

Table 4: *Clusters*

Factors that motivated the client to seek counseling	Client's perception of the counselor	Client comfort in counseling
Barriers to obtaining counseling	Factors that affected client satisfaction/rapport	Commitment to counseling
Factors that affected the choice of counselor	Client's perception of counselor-facilitated strategies and/or interventions	Counselor factors that influenced the client to leave counseling
Role of family and significant others	Responses that affected counseling	Counseling outcome
Factors that affected the client's perception of the counselor	Changing perspectives of the client	

Findings

Findings are discussed as they answer the research questions and supporting quotes are provided. The broad research question was as follows:

How do clients perceive their experience of counseling for trauma related to AA?

The broad research question, “How do clients perceive their experience of counseling for trauma related to AA?” was answered as clients replied to specific research questions which were designed to answer the broad research question. Specific research questions follow which address helpful and hindering factors of counseling, and the perceived therapeutic effects of those factors:

The first specific research question was: *Are there experiences indicating that clients’ therapy processes have been helped or hindered?*

Participants perceived experiences that indicate their therapy processes were both helpful and hindering. They focused on relational factors of counselors as helpful; and the therapy process, external barriers, and PTSD symptoms as hindering.

The second specific research question was: *What factors do clients perceive were helpful in their counseling for trauma related to AA?*

Positive relational experiences were cited by all participants as helpful. Counselor factors most often mentioned by all participants can be described as congruence, unconditional positive regard, and accurate empathic understanding. These factors are among the core conditions for therapeutic change in Roger’s person centered therapy. Rogers identified psychological contact, client incongruence, counselor congruence, counselor unconditional

positive regard, empathic understanding, and counselor communication of empathic understanding and positive regard as the conditions for personality change. He stated that the process of constructive personality change will follow if the conditions are present long enough (Rogers, 1956). Compassionate understanding and active listening seemed to be critically important to the participants. *As Lucy stated*, “Not only do I have a very good therapeutic alliance because she is very compassionate, sympathetic, and knows her stuff She said ‘yes, that [AA] definitely happened.’” *John Phillips made a similar statement*, “ just that he was somebody that showed some compassion and sympathy has been helpful,” as did *Shamus, who observed* “He showed me compassion, understanding, and did give me avenues to continue to feel that way ... I felt I had support; it made me feel lifted, made me feel validated.” *K.L. further affirmed* “Whenever they give me that answer I know that they were listening to me ... that is what has built up my trust.” *Ebi spoke in a similar vein when she said* “when I looked into her eyes I saw a lot of kindness and compassion, and that helped me open up more to her,” and *L.K. stated* “He emailed me; that was very effective with me because sometimes it was so late at night ... when I either had questions or it just hurt.”

The third specific research question was: *What factors do clients perceive were hindering in their counseling for trauma related to AA?*

Hindering factors perceived by participants were more varied than were helpful factors. Hindering factors were described within the context of counselor behaviors by four participants, and one participant each reported as hindering the therapy process, external barriers to obtaining counseling, and PTSD symptoms during counseling. *Lucy related* “it was insulting because she

[counselor] was comparing fairly mundane experiences to what happened to me which made me really understand she didn't grasp what happened." *John Phillips further related* "I'm a very impatient person, so you know that this is going to take a long time to work through, something I am not looking forward to in the least." *Shamus iterated* "I called veterans [Veterans Administration] and they said they only deal with veterans and not this kind of population. I was at a dead end." K.L. and Keistador also responded; *K.L. said*, "He doesn't say anything, he doesn't answer anything, and he has no interest; he wants to see if I want the next appointment ... I am very uncomfortable while I am there," and *Keistador stated*, "Every session, the first 10 or 15 minutes was him going over that [lawsuit refusal] again." *Ebi responded* "Sometimes I would feel that sensation [intubation], and I would not want to talk anymore," as did *L.K. who answered* "He actually moved to another part of the country, so I had to grow up real quick."

The fourth specific research question was: *What are the therapeutic effects for clients regarding helpful and hindering factors in their counseling for trauma related to AA?*

For all but one of these participants, it appears that counseling for trauma related to AA was more helpful than not. Five participants identified a reduction of trauma symptoms as the therapeutic effect of helpful factors in counseling, one participant reported an increase in trauma symptoms, and one participant did not focus on counseling outcome. *As mentioned by Lucy*, "It's given me peace, peace of mind; quieting my mind, and ... moving me through the trauma." *John Phillips expressed the belief* "I still haven't gotten any answers, I feel a little bit better since the episode, but counseling has not abated it that much ... *maybe, maybe* a little bit." *Shamus pointed out* "It must have helped a little because I'm a little bit more, like, I used to be; I mean, I

can smile and laugh and joke now.” *K.L. further affirmed that counseling* “guided me in the direction of I’m not crazy; that they believe me.” *Ebi noted* “That’s the last part of it, after I already tried suicide a few times ... and little by little it went away Cause I haven’t wanted to kill myself in quite a few years.”

In contrast, *Keistador asserted* “They actually made me worse.”

In summary, findings have been discussed as they answered the broad research question and the specific research questions, and supporting quotes have been provided. Following is a discussion of the existing literature that will provide the context to examine the 14 clusters found in this research study:

Many people who experience AA have trauma symptoms that serve as *motivation to seek counseling*. Particularly, they most often seek help to reduce physical and emotional trauma symptoms, increase understanding of their traumatic experience, and improve interpersonal relationships following their trauma. Trauma symptoms as a result of AA are consistent with previous research by Schwender et al. (1998), who found 3 patients out of 18 experienced moderate to severe pain and developed PTSD which required medical treatment. Also, Osterman et al. (2001) found that more than half (56.3%) of their 16 subjects met criteria for PTSD for an average of 7.9 years following AA.

Barriers to obtaining counseling were discussed by one participant as a factor that helped or hindered in counseling for AA. Other participants emphasized motivation to seek counseling, counselor characteristics, or responses that affected counseling as factors that helped or hindered their counseling. It appears that, from the majority of the clients’ perspectives, barriers to

obtaining counseling had little or no impact on the counseling experience. Further inquiry is needed, however, to conclusively determine the importance AA survivors place on barriers to obtaining counseling.

Financial need was mentioned by only one participant, but it was strongly emphasized as a barrier to obtaining counseling. The financial capacity of some people who have experienced AA may be compromised by a lack of medical insurance, extensive medical bills, and absences or termination from employment. The finding of financial limitations as a barrier to counseling, although noted by only one participant, is in line with research studies (Curtis et al., 2004; Paulson et al., 2001) that showed increased fees and difficulty with insurance companies were hindering factors.

Affinity may be an important *factor that affects the choice of counselor* for people who experience AA. Clients seem to make decisions to see counselors whom they perceive as sharing characteristics similar to their own (LaFromboise, 1992). Some participants reported selecting counselors of the same sex, whereas other participants chose counselors with similar values. Possible explanations for the role of affinity in the selection of a counselor may be found in previous research findings which have indicated that clients are concerned about vulnerability with the counselor (Clarke et al., 2001) and that traumatized AA survivors feel unsafe and helpless (Osterman et al, 2001). One possible conclusion is that clients may perceive counselors with similar characteristics as safer. Because the lack of affinity was reported as problematic for participants in this research study, it appears that affinity may be a helpful or hindering factor in counseling for trauma related to AA. For instance, Lucy said, “I wanted to speak to a woman

about it; I would have had a hard time with a male therapist,” and Ebi stated “My therapist is close to the same age as me.... Now we have at least age commonality.”

Trauma from AA can result in emotional numbing, isolation, and rage or panic that may have a profoundly negative effect on relationships with family and significant others. A majority of participants reported feeling as if they were not the same person after their AA experience, and they worried about how their changed personality affected their close relationships. As a result, the primary *role of family and significant others* appeared helpful as it motivated those who experienced AA to obtain counseling to improve communication and understanding. It is noteworthy that the majority of participants said they wished their family and significant others had been included in their counseling sooner and more frequently. Previous research studies have indicated that AA has deleterious effects on interpersonal relations (van der Kolk et al., 2005); however, no research existed on family or significant others as motivation for seeking counseling. A possible explanation for this lack of researcher emphasis on family and significant others may be under-reporting by participants, or a focus on other aspects of the effects of AA on survivors' families.

Believing and caring emerged as important factors to which AA clients seem to become hyper-sensitive during their AA experiences, and these factors *affect the client's perception of the counselor*. Traumatic AA can be an intensely intrapersonal experience, and the horror and pain may challenge the human capacity to comprehend it. Coupled with the fact that AA occurs during periods when it may be impossible to indicate to another person that consciousness has returned, the question of what is and is not real becomes paramount to those who have

experienced it as well as those who were present and did not know it happened. In their Sentinel Event, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO, 2004) acknowledged the importance of believing the patient, stressing the need to assure AA patients of the credibility of their accounts. The JCAHO Sentinel Event also recognized the importance of caring for the patient. In its guidelines for professionals dealing with individuals who experienced AA, professionals were encouraged to “sympathize with the patient’s suffering (JCAHO, 2004; n.p.)” A possible conclusion is that because of clients’ sensitivity to the issues of believing and caring, they often emphasized these factors when discussing what helped or hindered their perceptions of their counselors.

Caring and skillful are how most participants perceived their counselors; with equal weight given to each. For these participants, it appears that AA clients’ *perception of the counselor* was measured by the counselor’s compassion, attention to the client, and altruism in their work with others; as well as how smart, trained, and conversely, how incompetent and disrespectful they are. Participants discussed the benefits of caring counselors; however, remarks and behaviors by counselors that clients perceived as uncaring were just as frequently discussed with equally negative impacts on counseling. The significance of client perceptions was an important result in Elliot and James’ (1989) meta-synthesis of early research on client experiences in counseling. They found a strong dimension of client evaluation of the counselor’s feelings, attitudes, and interpersonal characteristics that had a helpful or hindering effect, and client perceptions of the counseling relationship and counselor style of relating were shown to predict the outcome of counseling.

An observation that merits mention is that participants tended to perceive counselors more negatively earlier in their recovery process. It appeared that distrust and anger were primary feelings that interfered with early counseling relationships following AA. Considering that many PTSD symptoms may resolve within the first year following a traumatic event, further research is required to explore how the AA client-counselor relationship changes over time, and the possible role of PTSD resolution in the process.

One potential conclusion regarding the importance participants placed on counselors' believing and caring is that people who have experienced AA have been sensitized by medical professionals' failure to provide those helpful responses. Further inquiry is needed to conclusively determine how AA clients perceive their counselors.

From the perspective of the participants in this study, it appears that the *factors that affect client satisfaction/rappport* most often are connection to their counselor, followed by the slow process of counseling and the benefits of counseling. Participants reported that satisfaction /rappport was helped by counselors' caring, and hindered by counselors' lack of caring and the slow process of counseling. Singer (2005) determined that counselors' ability to make clients feel honored, understood, and accepted is the most helpful thing counselors can do. It can be assumed that honoring, understanding, and accepting are closely connected to caring, which facilitates connection between the client and counselor. Singer (2005) determined that clients who doubted their counselor's understanding of them and their counselor's ability to provide useful suggestions did not have as satisfying an experience in counseling.

It is significant that the *client's perception of counselor-facilitated strategies and/or interventions* included the failure of counseling or the counselor, focused on the strategies and/or interventions that were helpful, but did not include strategies and interventions that did not work. Participants understood that the strategies and/or interventions their counselors utilized may have been uncomfortable, even painful, but ultimately participants perceived them as helpful. They also emphasized the importance of the counselor believing them when they discussed AA and its after-effects. Previous researchers found that the counselor's confirmation of the client's experience is helpful and motivates the client (Lilliengren & Werbart, 2005; Timulak & Lietaer, 2001). In research on empowering moments in therapy, Timulak and Lietaer (2001) identified counselor interventions as one of three large clusters of helpful processes in counseling. They found that, among other categories, safety and insight were helpful experiences that contributed to client empowerment. Considering that AA survivors feel unsafe and helpless (Osterman et al., 2001), strategies and/or interventions designed to convey belief in the client may not only empower the client but also may facilitate the client's perception of counseling as safe and motivate the client to continue work that may be difficult.

Counselor response or lack of response has a powerful effect in how helpful or hindering clients perceive their counseling to be. Participants said counselor *responses that affected counseling* positively were compassion, affirmation, sensitivity, and guidance, whereas counselor responses that negatively affected counseling were inappropriate silence, insensitivity, own agenda, and use of counseling clichés. These findings are in agreement with findings of previous research that highlight therapist caring, understanding, warmth, and concern as helpful

(Grafanaki & McLeod, 1995; Levitt et al., 2006; Singer, 2005). Regarding hindering factors, previous researchers identified excessively passive, not enough feedback, lack of counselor understanding, returning to a point over and over again, and lack of counselor attention to the relationship (Lilliengren & Werbart, 2005; Paulson et al., 2001; Singer, 2005). It is worth mentioning that few participants focused on their own responses, and when they did, they attended to responses to conflict they perceived with their counselors. A possible explanation may be that AA clients might experience hyper-vigilance with counselors, especially during the early stages of counseling, due to previous harm by medical professionals. More research is needed to understand the impact of having been severely harmed by a healthcare provider on a client's ability to trust future healthcare providers.

The most significant *changing perspectives of the client* in counseling for AA seem to be the realization that a counselor, a particular approach, or counseling in general is helping. AA clients entered counseling because they were looking for symptom reduction and understanding, but they entered with doubts and suspicions. As previously stated, clients tend to perceive counselors and counseling negatively following the AA experience, but over time their perception improves. A possible conclusion is that the client sees the counselor more positively as PTSD symptoms resolve. Research by Jinks (1999) supported this; he found that when clients feel a lack of trust in the dependability of the counselor they are likely to evaluate the counseling relationship more negatively. Clarke et al. (2004) found that feelings of resistance and fear were more prominent at the beginning of counseling and improved over time, which led clients to feel more comfortable. However, it should be noted that there are very few counselors who are

skilled at treating trauma related to AA. According to some participants in this study, finding skilled counselors to treat severe PTSD is difficult, so dealing with counselors who do not fully comprehend the complexity and severity of AA trauma is fairly common. More research is needed to understand how AA clients' perspectives change over time, and how many counselors AA clients see before becoming comfortable with one.

With the exception of one participant, *client comfort in counseling* focused strongly on trauma symptoms. Participants reported flashbacks, sensations of being intubated, headaches, panic, paralysis, and hysteria. Participants also discussed the discomfort of feeling misunderstood, disbelieved, and disrespected. More positively, participants identified feelings of trust, release, relief, and safety. Although participants dealt with discomfort or comfort in counseling, it seemed that PTSD symptom resolution mattered most to them. There were no previous studies on AA survivors' perceptions of comfort during counseling; however, it is generally accepted that trauma counseling can be stressful. For instance, Broad and Wheeler (2006) explained that EMDR has the potential to be intense, and measures for client safety during the procedure must be ensured. In-session factors such as lack of trust in the counselor (Jinks, 1999), feelings of resistance and fear (Clarke et al., 2004), and flashbacks (Salomons et al., 2004) have been previously discussed as deleterious to the counseling process and potentially uncomfortable for AA clients.

Recovery from trauma related to AA may require a solid *commitment to counseling* by both counselor and client. In addition to the three participants who discussed the four to eight years they spent in counseling with their respective counselors, other participants reported

commitment to counseling. Two clients returned to ineffective counselors in the hope that therapeutic work would still help them. One counselor invested personal time to communicate with a client by email after hours for at least one year, one counselor obtained an anesthesia mask for desensitization with a client, and another counselor worked with a client for at least two years pro-bono. Lack of commitment was reported, as well. Two clients spoke about the difficulty of being referred to other counselors; one client discussed a counselor's insulting behavior; and another client believed her counselor never committed to their sessions. At least one client was hesitant to commit to counseling, and objected to a long process in which he was unwilling to participate. No previous research studies were found on the commitment to counseling for trauma related to AA. More research is needed increase understanding of the concept of commitment to counseling, especially within the context of AA recovery.

Certain counselor behaviors may drive away clients. *Counselor factors that influenced the client to leave counseling* were most often breaches of the Rogerian core conditions for therapeutic change, which included a deficit in the counselor's unconditional positive regard and accurate empathic understanding. Clients were unwilling to remain with a counselor who did not believe them, would not respond to them, or treated them with disregard or disrespect. Not only were they angry at the time, some remained resentful years later. A possible conclusion for clients' continued resentment following a breach in the conditions for therapeutic change is that AA clients' PTSD is triggered by perceived injurious behavior by a healthcare provider who is supposed to be providing care.

Clients most often discussed a reduction in symptoms as a *counseling outcome*. This finding differs from the findings of Levitt et al. (2006) who found that participants in general counseling (e.g., treatment for sleeping, eating, anxiety symptoms) did not refer to symptom reduction as a reason why counseling was important to them. Participants in this research study emphasized feeling better, being able to laugh, and not feeling suicidal; this is in contrast to Levitt's participants who emphasized global changes such as relating better with others or feeling better *about* themselves. Given the severity of PTSD symptoms (e.g., flashbacks, panic attacks, hopelessness) and their consequences (e.g., isolation, suicidal ideation, major depression) it is reasonable to assume that symptom reduction could be an important outcome for AA clients.

It is noteworthy that every participant in this study continued to have one or more symptoms of PTSD, and only one was interviewed within the critical first year following AA when PTSD most resolves. This finding is similar to previous research by (Dale et al., 1998) who found that none of the participants who were abused as children felt they had resolved all of the problems associated with their abuse.

In conclusion, I presented a discussion of the existing literature that provided the context to examine the 14 clusters found in this research study. I also discussed findings as they answered the broad research question and the specific research questions, and I included supporting quotes. I then presented data collection and analysis, and the 14 clusters. Finally, I provided a summary that described the methods and findings, and stated the philosophical foundation for the research study.

Limitations and Delimitations

This research study has several potential limitations. The first potential limitation of this study was participant bias. Because participants were individuals who were victimized by certain medical healthcare providers, their responses may have been biased in ways that were reactive. The second potential limitation of this study was the possibility of researcher bias; because I experienced AA, my interpretations may have been influenced by my experience. These biases were detailed in chapter three. A third potential limitation is that the findings have limited generalizability; however, generalizability is not a goal of qualitative research. A fourth potential limitation was individuals who had experienced previous trauma were included because of the limited number of participants and the difficulty of locating them. Every effort was made to ensure that data reflected responses to AA, but it cannot be ensured that counseling for other trauma did not influence participants' responses. To increase the validity of the findings, participants were not allowed to participate if they had experienced a traumatic event following their AA experience. A fifth potential limitation, related to the difficulty in finding participants, is that participants were included who received counseling more than one year prior to being interviewed. The sixth potential limitation is that three participants were provided by an AA advocate who may have chosen them because their cases were extreme, or their perceptions may have been influenced by the advocate. The researcher was cognizant of this possibility, so cases were compared and contrasted to determine if participants selected by the advocate differed from other participants on relevant criteria. No differences were observed. The seventh potential limitation of this study was the homogeneity of the participants; no minority participants were

included due to the difficulty in locating potential participants, so racial, ethnic, and cultural factors were not addressed in the research. Despite the existence of limitations in this research, the study remains important because it explores the topic of perceptions of counseling for individuals who experienced trauma related to AA, a topic that has not been addressed in the literature.

Implications

Implications for counselors

A review of the literature revealed no research on clients' perceptions of counseling for trauma or PTSD related to AA. This qualitative study provided insight into such perceptions which may contribute to a better understanding of the counseling process, and facilitate more effective counseling for these individuals.

As mentioned in the previous section, it appears that AA clients perceive the counseling relationship as important to counseling helpfulness. An analysis of the current literature on person-centered counseling by Kirschenbaum and Jourdan (2005) supports the importance of the counseling relationship and three of Roger's core conditions – empathy, unconditional positive regard, and congruence – as critical elements of effective counseling. The current research study may provide valuable insight into what helps or hinders the counseling relationship with clients who have experienced AA.

Counselors may benefit from knowing that the counseling relationship appears to be more difficult during the first year following AA; and that compassion, being believed, being understood, and being listened to are highly valued by AA clients and may be powerful tools to

facilitate counseling progress. Counselors may also benefit from additional insight into how clients who experience AA may be sensitized to issues of trust, safety, and care-giving by professionals. Another benefit is increasing counselors' understanding that counselor behaviors that breach the core conditions for therapeutic change are more often perceived by AA clients as hindering to the counseling process, and may result in early termination.

Another area in which counselors may benefit from this research study is increased insight into the trauma that may result from a great deal of pain and suffering related to AA. This research study also has the potential to raise counselors' awareness of the potential of AA when clients present with symptoms that may be the result of trauma but do not have a memory of a traumatic event. Counselors will benefit from understanding that the lengthy process of therapy and uncomfortable PTSD symptoms that are triggered during sessions can hinder the progress of counseling. Finally, counselors' awareness that financial difficulties or other external barriers may be hindering to clients who experience trauma related to AA. Counselors may then set reasonable fees or develop appropriate referrals for these clients.

Implications for Counselor Educators

The implications for counselor educators may be small, but they are significant. Anesthesia Awareness is experienced by a relatively small portion of trauma clients who may seek counseling. Counselor educators will benefit from increased awareness of the similarities and differences between AA clients and clients who have experienced other types of trauma. Research on counseling for various traumas may result in more efficient counseling techniques and better outcomes. This research study contributes to the body of existing knowledge

regarding clients' perceptions of their counseling, and it contributes to the body of existing knowledge regarding clients' perceptions of their counseling for trauma related to AA. A final implication of this research study is that counselor educators may teach students about expanding their professional roles. Insight into the counseling process for individuals who have experienced traumatizing AA may provide counselors with increased opportunities to form partnerships with medical professionals or be employed in a medical practice; counselor educators can make students aware of these opportunities and perhaps identify practicum and internship sites where students can gain relevant experience.

Recommendations for Future Research

There is a continuing call for research that attempts to understand counseling for PTSD and trauma. This research study examined clients' perceptions of counseling for seven individuals who experienced a particular type of trauma, AA. Compared to other topic areas within research on trauma counseling, as well as the field of counseling, very few studies focus on clients' perceptions of counseling for trauma related to AA. The field of counseling would not only benefit from more studies that examine clients' perceptions of counseling, but also from research that investigates the similarities and differences between counseling related to different types of trauma. Specifically, there appear to be some gaps in the literature related to studies of counseling for trauma related to AA. The lack of information about counseling for trauma related to AA indicates there is a need for more research in this area. A review of the literature also revealed that most research on counseling for trauma focused on counseling techniques or pharmacological interventions. There was no literature on the role relationship plays in

effectively delivering counseling services to individuals who have been traumatized by AA. This lack of focus on the core components of counseling may impede the development of effective interventions in trauma counseling, and more research is needed to increase understanding of the role of the counselor-client relationship in trauma counseling.

Personal Reflection

Reflecting on my experience as a researcher, I was honored to be entrusted with very real and personal stories of the participants. They are people who are attempting to deal with trauma for which they were not prepared. For each of them, Anesthesia Awareness was a life-changing experience. These individuals searched for ways to understand and cope with feelings of betrayal, confusion, and symptoms of PTSD and trauma. I respect each of these participants, and I admire their courage and determination to recover as much of their former selves and former lives as possible.

My responsibility as a researcher was to remain unbiased as much as was feasible, and follow the established procedures for collecting and interpreting data. Within the context of this study, I made every effort to conduct myself in an ethical and professional manner. I was profoundly affected by the research process. Specifically, reading and rereading the transcriptions of the interviews allowed me to hear the struggles and accomplishments of this group of people. I was challenged to maintain objectivity when reading about the mistreatment many of the participants experienced during and following AA. The words *social injustice* stayed with me as I read and re-read the transcripts. I sincerely hope that this research study will be an objective voice for the participants and for anyone who has been traumatized by AA. It

has been a privilege to come into the lives of Lucy, John Phillips, K.L., Shamus, Ebi, Keistador, and L.K. Their willingness and courage to open themselves up to questions after having been disappointed by those who were supposed to care for them is greatly appreciated. Their contribution in the name of research is as admirable as their determination to help others who may experience AA.

References

- Aaen, A., & Moller, K. (2010). Through and beyond anesthesia awareness. *British Medical Journal*, 341 doi: 10.1136/bmj.c3669
- Adams, D., Hilton, H., Madigan, J., Szerlip, N., Cooper, L., Emerson, R., et. al. (1998). Evidence for unconscious memory processing during elective cardiac surgery. *Circulation*, 98(19).
- Adúriz, M., Bluthgen, C., & Knopfler, C. (2009). Helping child flood victims using group EMDR intervention in Argentina: Treatment outcome and gender differences. *International Journal of Stress Management*, 16(2), 138-153. doi: 10.1037/a0014719
- Ahmad, A., Larsson, B., & Sundelin-Wahlsten, V. (2007). EMDR treatment for children with PTSD: Results of a randomized controlled trial. *Nordic Journal of Psychiatry*, 61(5), 349-354. doi: 10.1080/08039480701643464
- Agarwal, G., & Sikh, S. (1977). Awareness During Anesthesia. *British Journal of Anaesthesia*, 49(8), 835-838.
- American Counseling Association. (2005). *ACA Code of Ethics*. Alexandria, VA: Author. doi: 10.1177/001100000831657
- American Psychiatric Association. (2000). *Diagnostic Statistical manual of mental disorders (4th text revision ed.)*. Washington, D.C.: Author. doi: 10.1016/j.ijlp.2004.01.001
- American Society of Anesthesiologists. (2006). Practice advisory for Anesthesia Awareness and brain function monitoring: A report by the American Society of Anesthesiologists Task Force on Intraoperative Awareness. *Anesthesiology*; 104(4), 847-864. Retrieved from American Society of Anesthesiologists website: http://journals.lww.com/anesthesiology/Fulltext/2006/04000/Practice_Advisory_for_Intraoperative_Awareness_and.31.aspx
- American Society of Anesthesiologists. (2008). Position on monitored anesthesia care. Retrieved from American Society of Anesthesiologists website: http://www.asahq.org/publications_and_Services/standards/23.pdf
- American Society of Anesthesiologists. (2009). ASA physical status classification system, Retrieved from the American Society of Anesthesiologists website: <http://www.asahq.org/clinical/physicalstatus.htm>

- Amstadter, A., & Vernon, L. (2008). Emotional reactions during and after trauma: A comparison of trauma types. *Journal of Aggression, Maltreatment & Trauma, 16*(4), 391-408. doi: 10.1080/10926770801926492
- Avidan, M., Palanca, B., Glick, D., Jacobsohn, E., Villafranca, A., O'Connor, M., et al., (2009). Protocol for the BAG-RECALL clinical trial: A prospective, multi-center, randomized, controlled trial to determine whether a bispectral index-guided protocol is superior to an anesthesia gas-guided protocol in reducing intraoperative awareness with explicit recall in high risk surgical patients. *BMC Anesthesiology, 9*(1), 8. doi: 10.1186/1471-2253-9-8
- Ballard, N., Robley, L., Barrett, D., Fraser, D., & Mendoza, I. (2006). Patients' recollections of therapeutic paralysis in the intensive care unit. *American Journal of Critical Care, 15*(1), 86-95. Retrieved from www.cinahl.com/cgi-bin/refsvc?jid=607&accno=2009096387
- Barr, G., Anderson, R., Owall, A., & Jakobsson, J. (2001). Being awake intermittently during propofol-induced hypnosis: A study of BIS, explicit and implicit memory. *Acta Anaesthesiologica Scandinavica, 45*, 834-838. doi: 10.1034/j.1399-6576.2001.045007834.x
- Batten, S., & Hayes, N. (2005). Acceptance and commitment therapy in the treatment of comorbid substance abuse and post-traumatic stress disorder. *Clinical Case Studies, 4*(3), 246-262. doi: 10.1177/1534650103259689
- Beck, C. (2004). Birth trauma, In the eye of the beholder. *Nursing Research, 53*(1), 28-36.
- Ben-Amitay, G., Kosov, I., Reiss, A., Toren, P., Yoran-Hegesh, R., Kotler, M., & Mozes, T. (2006). Is elective surgery traumatic for children and their parents?. *Journal of Paediatrics & Child Health, 42*(10), 618-624. doi: 10.1111/j.1440-1754.2006.00938.x
- Benight, C., Ruzek, J., & Waldrep, E. (2008). Internet interventions for traumatic stress: A review and theoretically based example. *Journal of Traumatic Stress, 21*(6), 513-520. doi: 10.1002/jts.20371
- Bergman, J., Kluger, M., & Short, T. (2002). Awareness during general anaesthesia. A review of 81 cases from the Anaesthetic Incident Monitoring Study. *Anesthesiology, 57*, 549-556. [PubMed]
- Bernat, J., Ronfeldt, H., Calhoun, K., & Arias, I. (1998). Prevalence of traumatic events and peritraumatic predictors of posttraumatic stress symptoms in a nonclinical sample of college students. *Journal of Traumatic Stress, 11*(4), 645. doi: 10.1023/A:1024485130934

- Berrios, R., & Lucca, N. (2006). Qualitative methodology in counseling research: Recent contributions and challenges for a new century. *Journal of Counseling & Development*, 84(2), 174-186. doi: 10.1177/00343552070500020801
- Berry, A., Rosenfield, D., & Smits, J. (2009). Extinction retention predicts improvement in social anxiety symptoms following exposure therapy. *Depression & Anxiety (1091-4269)*, 26(1), 22-27. doi: 10.1002/da.20511
- Biggerstaff, D., & Thompson, A. (2008). Interpretative phenomenological analysis (IPA): A qualitative methodology of choice in healthcare research. *Qualitative Research in Psychology*, 5(3), 214-224. doi: 10.1080/14780880802314304
- Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method*. Englewood Cliffs, NJ: Prentice Hall.
- Blusse, V. (2008). Awareness in children: Another two cases. *Pediatric Anesthesia*, 18(7), 654-657. doi: 10.1111/j.1460-9592.2008.02576.x
- Boettcher, R., Jakes, L., & Sigal, L. (2008). An evaluation of a community collaboration approach to psychosocial rehabilitation. *Journal of Community Practice*, 16(2), 165-181. doi: 10.1080/10705420801997989
- Bogetz, M., & Katz, A. (1984). Recall of surgery for major trauma. *Anesthesiology*, 61(1), 6-9. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/672485>
- Booth, H., & Cushway, D. (1997). Counselling in general practice: Clients' perceptions of significant events and outcome. *Counselling Psychology Quarterly*, 10(2), doi: 10.1080/09515079708254170
- Bradley, R., Greene, J., Russ, E., Dutra, L., & Westen, D. (2006). A multidimensional meta-analysis of psychotherapy for PTSD: Correction. *The American Journal of Psychiatry*, 163(2). doi: 10.1176/appi.ajp.163.2.330
- Brady, K., Dansky, B., Back, S., Foa, E., & Carroll, K. (2001). Exposure therapy in the treatment of PTSD among cocaine-dependent individuals: Preliminary findings. *Journal of Substance Abuse Treatment*, 21(1), 47-54. doi: 10.1016/S0740-5472(01)00182-9
- Breakwell, G., & Rose, D. (2006). Theory, method and research design. *Research methods in psychology* (3rd ed.), 22-23. Thousand Oaks, CA US: Sage Publications, Inc.

- Breakwell, G., Hammond, S., Fife-Schaw, C., & Smith, J. (2006). *Research methods in psychology* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Broad, R., & Wheeler, K. (2006). *An adult with childhood medical trauma treated with psychoanalytic psychotherapy and EMDR: A case study*. *Perspectives in Psychiatric Care*, 42(2), 95-105. doi: 10.1111/j.1744-6163.2006.00058.x
- Brocki, J., & Wearden, A. (2006). A critical evaluation of the use of interpretative phenomenological analysis (IPA) in health psychology. *Psychology and Health*, (21)1, 87-108. doi: 10.1080/14768320500230185
- Bronner, M., Knoester, H. Bos, A., Last, B., & Grootenhuis, M. (2008). Posttraumatic stress disorder (PTSD) in children after paediatric intensive care treatment compared to children who survived a major fire disaster. *Child and Adolescent Psychiatry and Mental Health*, 2(9). doi: 10.1186/1753-2000-2-9
- Bryant, R., Harvey, A., Dang, S., Sackville, T., & Basten, C. (1998). Treatment of acute stress disorder: A comparison of cognitive-behavioral therapy and supportive counseling. *Journal of Consulting and Clinical Psychology*. 66, 862–866.
- Bryant, R., Moulds, M., Guthrie, R., & Nixon R. (2005). The additive benefit of hypnosis and cognitive-behavioral therapy in treating acute stress disorder. *Journal of Consulting and Clinical Psychology*. 73(2), 334-340.
- Byrne, M. (2001). Hermeneutics as a methodology for textual analysis. *AORN Journal*, 73(5), 968-970. doi: 10.1016/S0001-2092(06)61749-3
- Cadamy, A., & Bong, C. (2003). Awareness and traumatic recall of cricoid pressure. *Anaesthesia*, 58(1), 91. doi: 10.1046/j.1365-2044.2003.29688.x
- Cardeña, E. (2000). Hypnosis in the treatment of trauma: A promising, but not fully supported, efficacious intervention. *International Journal of Clinical and Experimental Hypnosis*, 48(2), 225-238. doi: 10.1080/00207140008410049
- Carr, W. (2006). Philosophy, methodology and action research. *Journal of Philosophy of Education*, 40(4), 421-435. doi: 10.1111/j.1467-9752.2006.00517.x
- Carranza, F. (1989). The discovery of anesthesia - The tragic history of Wells and Morton [Web Article] [Electronic version]. *UCLA School of Dentistry*. Retrieved from <http://www.dent.ucla.edu/pic/members/carranza/anesthesia.html>

- Caton, D. (1995). "In the present state of our knowledge": Early use of opioids in obstetrics. *Anesthesiology*, 82(3), 779-784. doi: 10.1097/00000542-199503000-00021
- Chapman, E., & Smith, J. (2002). Interpretative phenomenological analysis and the new genetics. *Journal of Health Psychology*, 7(2), 125. doi: 10.1177/1359105302007002397
- Chin, K., & Yeo, S. (2004). A BIS-guided study of sevoflurane requirements for adequate depth of anaesthesia in caesarean section. *Anaesthesia*, 59(11), 1064-1068. doi: 10.1111/j.1365-2044.2004.03944.x
- Chodoff, P. (2002). The medicalization of the human condition. *Psychiatric Services*, 53, 627-628. doi: 10.1176/appi.ps.53.5.627
- Clarke, H., Rees, A., & Hardy, G. E. (2004). The big idea: clients' perspectives of change processes in cognitive therapy. *Psychology & Psychotherapy: Theory, Research & Practice*, 77(1), 67-89. doi: 10.1348/147608304322874263
- Classen, C., Koopman, C., Nevill-Manning, K., & Spiegel, D. (2001). A preliminary report comparing trauma-focused and present-focused group therapy against a wait-listed condition among childhood sexual abuse survivors with PTSD. *Journal of Aggression, Maltreatment & Trauma*, 4(2), 265-288. doi: 10.1300/J146v04n02_12
- Cohen, D., & Crabtree, B. (2008). Evaluative criteria for qualitative research in health care: Controversies and recommendations. *Annals of Family Medicine*, 6(4), 331-339. doi: 10.1370/afm.818
- Collogan, L., Tuma, F., Dolan-Sewell, R., Borja, S., & Fleischman, A. (2004). Ethical issues pertaining to research in the aftermath of disaster. *Journal of Traumatic Stress*, 17(5), 363-372. doi:10.1023/B:JOTS.0000048949.43570.6a
- Colom, F., & Vieta, E. (2004). A perspective on the use of psychoeducation, cognitive-behavioral therapy and interpersonal therapy for bipolar patients. *Bipolar Disorders*, 6(6), 480-486. doi: 10.1111/j.1399-5618.2004.00136.x
- Conroy, S. (2003). A pathway for interpretive phenomenology. *International Journal of Qualitative Methods*, 2(3), 1. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=33&hid=15&sid=6414e642-3a6f-47d5-972e-792da47872ce%40sessionmgr12>
- Courtois, C. (2008). Complex trauma, complex reactions: Assessment and treatment. *Psychological Trauma: Theory, Research, Practice, and Policy*, 1, 86-100. doi: 10.1037/1942-9681.S.1.86

- Creswell, J. & Clark, V. (2006). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Creswell & Clark.
- Creswell, J. (2005). *Educational research: planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, Pearson Education.
- Cromer, L., Freyd, J., Binder, A., DePrince, A., & Becker-Blease, K. (2006). What's the risk in asking? Participant reaction to trauma history questions compared with reaction to other personal questions. *Ethics & Behavior, 16*(4), 347-362. doi: 10.1207/s15327019eb1604_5
- Curtis, R., Field, C., Knaan-Kostman, I., & Mannix, K. (2004). What 75 psychoanalysts found helpful and hurtful in their own analyses. *Psychoanalytic Psychology, 21*(2), 183-202. doi: 10.1037/0736-9735.21.2.183
- Dale, P., Allen, J., & Measor, L. (1998). Counselling adults who were abused as children: Clients' perceptions of efficacy, client-counsellor communication, and dissatisfaction. *British Journal of Guidance & Counselling, 26*(2), 141-157. Routledge. Retrieved from <http://www.informaworld.com/index/782788391.pdf>
- Davidson, A., Huang, G., Czarnecki, C., Gibson, M., Stewart, S., Jansen, K., Stargatt, R. (2005). Awareness during anesthesia in children: A prospective cohort study. *Anesthesia & Analgesia, 100*(3), 653. doi: 10.1213/01.ANE.000015060473481.00
- Daw, B., & Joseph, S. (2007). Qualified therapists' experience of personal therapy. *Counselling & Psychotherapy Research, 7*(4), 227-232. doi: 10.1080/14733140701709064
- Deeprise, C., Andrade, J., Harrison, D., & Edwards, N. (2004). Unconscious auditory priming during surgery with propofol and nitrous oxide anaesthesia: A replication. *British Journal of Anaesthesia, 94*(11), 57-62. doi: org/10.1093/bja/ae289
- Denzin, N., & Lincoln, Y. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications, Inc.
- de Vries, G., & Olf, M. (2009). The lifetime prevalence of traumatic events and posttraumatic stress disorder in the Netherlands. *Journal of Traumatic Stress, 22*(4), 259-267. doi: 10.1002/jts.20429
- Domino, K., Posner, K., Caplan, R., & Frederick, W. (1999). Awareness during anesthesia: A Closed Claims Analysis. *Anesthesiology, 90*(4), 1053-1061.

- Donnison, J., Thompson, A., & Turpin, G. (2009). A qualitative exploration of communication within the community mental health team. *International Journal of Mental Health Nursing, 18*(5), 310-317. doi: 10.1111/j.1447-0349.2009.00620.x
- Dowd, N., Cheng, D., Karski, J., Wong, D., Munro, J., & Sandler, A. (1998). Intraoperative awareness in fast-track cardiac anesthesia. *Anesthesiology, 89*(5), 1068.
- Dowling, M. (2004). Hermeneutics: An exploration. *Nurse Researcher, 11*(4), 30-39. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=18&hid=103&sid=1923a5c6-57bc-4ca9-8ceb-b98f64d54fb8%40sessionmgr103&bdata=JnNpdGU9ZWVhc3QtbGl2ZSZzY29wZT1zaXRl#db=hch&AN=13430067>
- Draucker, C. (1999). The critique of Heideggerian hermeneutical nursing research. *Journal of Advanced Nursing, 30*(2), 360-373. doi: 10.1046/j.1365-2648.1999.01091.x
- Dushman, R., & Sutherland, J. (1997). An Adlerian perspective on dreamwork and creative therapies. *Individual Psychology: The Journal of Adlerian Theory, Research & Practice, 53*(4), 461. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=46&hid=15&sid=6414e642-3a6f-47d5-972e-792da47872ce%40sessionmgr12>
- Dyb, G., Rodriguez, N., Brymer, M., Saltzman, W., Steinberg, A., & Pynoos, R. (2008). Emotional reactions, peritraumatic dissociation, and posttraumatic stress reactions in adolescents. *Journal of Child & Adolescent Trauma, 1*(1), 63-74. doi: 10.1080/19361520801934423
- Ehlers, A., Clark, D., Hackmann, A., Grey, N., Liness, S., Wild, J., ... McManus, F. (2010). Intensive cognitive therapy for PTSD: A feasibility study. *Behavioural & Cognitive Psychotherapy, 38*(4), 383-398. doi: 10.1017/S1352465810000214
- Elklit A., & Shevlin M., (2007). The structure of PTSD symptoms: A test of alternative models using confirmatory factor analysis. *British Journal of Clinical Psychology, 46*(4), 299-313. doi: 10.1348/014466506X171540
- Elliott, R. (1985). Helpful and nonhelpful events in brief counseling interviews: An empirical taxonomy. *Journal of Counseling Psychology, 32*(3), 307-322. doi: 10.1037/0022-0167.32.3.307
- Elliott, R. (1989). Comprehensive process analysis: Understanding the change process in significant therapy events. *Entering the circle: Hermeneutic investigation in psychology*, 165-184. Albany, NY: State University of New York Press.

- Elliott, R. (2008). Research on client experiences of therapy: Introduction to the special section. *Psychotherapy Research, 18*(3), 239-242. doi: 10.1080/10503300802074513
- Elliott, R., & James, E. (1989). Varieties of client experience in psychotherapy: An analysis of the literature. *Clinical Psychology Review, 9*(4), 443-467. doi: 10.1016/0272-7358(89)90003-2
- Elliott, R., & Shapiro, D. (1988). Brief structured recall: A more efficient method for studying significant therapy events. *British Journal of Medical Psychology, 61*(2), 141-153.
- Errando, C., Sigl, J., Robles, M., Calabuig, E., Garcia, J., Arocas, F., ... García-Aguado, R. (2008). Awareness with recall during general anaesthesia: A prospective observational evaluation of 4001 patients. *British Journal of Anaesthesia, 101*(2), 178-185. doi: 10.1093/bja/aen144
- Everette, C. (1990). The field of marital and family therapy. *Journal of Counseling & Development, 68*(5), 498. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=53&hid=15&sid=6414e642-3a6f-47d5-972e-792da47872ce%40sessionmgr12>
- Fine, L. B. (2000). Client perceptions of couples therapy: Helpful and unhelpful aspects. *American Journal of Family Therapy 28*, 295-310. doi: 10.1080/019261800437874
- Foa, E., Dancu, C., Hembree, E., Jaycox, L., Meadows, E., & Street, G. (1999). A comparison of exposure therapy, stress inoculation training, and their combination for reducing posttraumatic stress disorder in female assault victims. *Journal of Consulting and Clinical Psychology, 67*(2), 194-200. doi: 10.1037/0022-006X.67.2.194
- Foa, E., Keane, T., Friedman, M., & Cohen, J. (2009). *Effective treatments for posttraumatic stress disorder: Practice guidelines from the International Society for Traumatic Stress Studies*. (2nd ed.). New York, NY: Guilford Publications.
- Frankel, R., & Devers, K. (2000). Study design in qualitative research--1: Developing questions and assessing resource needs. *Education for Health: Change in Learning & Practice (Taylor & Francis Ltd.), 13*(2), 251. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=54&hid=15&sid=6414e642-3a6f-47d5-972e-92da47872ce%40sessionmgr12&bdata=JnNpdGU9ZWZWhvc3QtbG12ZSZzY29wZT1zaXRl#db=a9h&AN=3635417>

- Frans, O., Rimmö, P., Åberg, L., & Fredrikson, M. (2004). Trauma exposure and post-traumatic stress disorder in the general population. *Acta Psychiatrica Scandinavica*, *111*(4), 291. doi: 10.1111/j.1600-0447.2004.00463.x
- Frick-Helms, S. (1997). "Boys cry better than girls": Play therapy behaviors of children residing in a shelter for battered women. *International Journal of Play Therapy*, *6*(1), 73-91. doi: 10.1037/h0089415
- Gamble, J., & Creedy, D. (2005). Psychological trauma symptoms of operative birth. *British Journal of Midwifery*, *13*(4), 218-224. Retrieved from <http://web.Ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=55&hid=15&sid=6414e642-3a6f-47d5-972e-792da47872ce%40sessionmgr12>
- Gerardi, M., Rothbaum, B., Ressler, K., Heekin, M., & Rizzo, A. (2008). Virtual reality exposure therapy using a virtual Iraq: Case report. *Journal of Traumatic Stress*, *21*(2), 209-213. doi:10.1002/jts.20331
- Ghoneim, M. (1997). Drugs, memory, and sedation: Specificity of effects. *Anesthesiology*, *87*(4), 734-736. Retrieved from http://www.anesthesiology.org/pt/re/anes/full_text.0000_0542-199710000-00002.htm;jsessionid=Lx1K111K0Kv2mvWB0GMyyvQJhHRQwRMp2K11ZKMntGNZmCLR7x!-2060166207!181195629!8091!-1
- Ghoneim, M. (2000). *Awareness during anesthesia*. Hamilton, Ontario: Butterworth-Heinemann.
- Ghoneim, M., Block, R., Haffarnan, M., & Mathews, M. (2009). Awareness during anesthesia risk factors, causes and sequelae: A review of reported cases. *Anesthesia and Analgesia*, *108*, 527-535. doi: 10.1213/ane.0b013e318193c634
- Giller, E. (1999). *Passages to prevention: Prevention across life's spectrum*. Article for workshop presentation presented at the Annual Conference of the Maryland Mental Hygiene Administration. Retrieved from Sidran website: <http://www.sidran.org/sub.cfm?contentID=88§ionid=4>
- Giller, E. (1999). What is psychological trauma? [Online Article]. *Sidran Institute*. Retrieved from Sidran website: <http://www.sidran.org/sub.cfm?Content ID=88§ionid=4>
- Grafanaki, S., & McLeod, J. (1995). Client and counsellor narrative accounts of congruence during the most helpful and hindering events of an initial counselling session. *Counselling Psychology Quarterly*, *8*, 311-324. doi: 10.1080/09515079508599591

- Greenwald, R., & Schmitt, T. (2010). Progressive counting: Multi-site group and individual treatment open trials. *Psychological Trauma: Theory, Research, Practice, and Policy*, 2(3), 239-242. doi: 10.1037/a0019361
- Grinnell, R., & Unrau, Y. (2008). *Social work research and evaluation: Foundations of evidence-based practice* (8th ed.). Oxford, UK; New York, NY: Oxford University Press.
- Grubbs, G. (1994). An abused child's use of sandplay in the healing process. *Clinical Social Work Journal*, 22(2), 193-209. doi: 10.1007/BF02190474
- Guenther, H., & Wagner, F. (2006). Comparing the efficacy of EMDR and trauma-focused cognitive-behavioral therapy in the treatment of PTSD: A meta-analytic study. *Psychological Medicine*, 36, 1515. doi: 1017/S0033291706007963
- Gruzelier, J. (2000). Redefining hypnosis: Theory, methods and integration. *Contemporary Hypnosis*, 17(2), 51-70. doi: 10.1002/ch.193
- Hagenaars, M., van Minnen, A., & de Rooij, M. (2010). Cognitions in prolonged exposure therapy for posttraumatic stress disorder. *International Journal of Clinical Health & Psychology*, 10(3), 421-434. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=48&hid=8&sid=89c98fb9-8206-45bc-b63d-f1190e881533%40sessionmgr11>
- Hamblen, J., Schnurr, P., Rosenberg, A., & Eftekhari, A. (2009). A guide to the literature on psychotherapy for PTSD. *Psychiatric Annals*, 39(6), 348-354. doi: 10.3928/00485713-20090515-02
- Hanson, T., Hesselbrock, M., Tworkowski, S., & Swan, S. (2002). The prevalence and management of trauma in the public domain: An agency and clinician perspective. *Journal of Behavioral Health Services & Research*, 29(4), 365. doi: 10.1007/BF02287344
- Hardman, J., & Aitkenhead, A. (2005). Awareness during anesthesia. *Continuing Education in Anaesthesia, Critical Care and Pain*, 5(6), 183-186. doi: 10.1093/bjaceaccp/mki049
- Harris, G., & Larsen, D. (2008). Understanding hope in the face of an HIV diagnosis and high-risk behaviors. *Journal of Health Psychology*, 13(3), 401-415. doi: 10.1177/1359105307088143

- Hayes, S. (2008). Climbing our hills: A beginning conversation on the comparison of acceptance and commitment therapy and traditional cognitive behavioral therapy. *Clinical Psychology: Science & Practice, 15*(4), 286-295. doi: 10.1111/j.1468-850.2008.00139.x
- Henry, M. (2007). Propranolol and the prevention of post-traumatic stress disorder: Is it wrong to erase the "sting" of bad memories? *Contemporary Bioethics, 7*(9), 12-20. doi: 0.1080/15265160701518474
- Hodges, E., & Myers, J. (2010). Counseling adult women survivors of childhood sexual abuse: Benefits of a wellness approach. *Journal of Mental Health Counseling, 32*(2), 139-153. Retrieved from <http://web.ebscohostcom.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=7&hid=9&sid=77bdf1d-738e-405d-b826-81bb8824f5f6%40sessionmgr14>
- Hogberg, G., Pagani, M., Sundin, O., Soares, J., Aberg-Wistedt, A., Tarnell, B., Hallstrom, T. (2007). On treatment with eye movement desensitization and reprocessing of chronic post-traumatic stress disorder in public transportation workers - A randomized controlled trial. *Nordic Journal of Psychiatry, 61*(1), 54-61.
- Holmes, A., Hodgins, G., Adey, S., Menzel, S., Danne, P., Kossmann, T., & Judd, F. (2007). Trial of interpersonal counselling after major physical trauma. *Australian & New Zealand Journal of Psychiatry, 41*(11), 926-933. doi: 10.1080/00048670701634945
- Holroyd, A. (2007). Interpretive hermeneutic phenomenology: Clarifying understanding. *Indo-Pacific Journal of Phenomenology, 7*(2), 1-12. Retrieved from http://www.ipjp.org/index.php?option=com_jdownloads&Itemid=25&view=finish&cid=5&catid=11&m=0
- Huang, G., Davidson, A., & Stargatt, R. (2005). Dreaming during anaesthesia in children: Incidence nature and associations. *Anaesthesia, 60*(9), 854-61. doi: 10.1111/j.1365-2044.2005.04259.x
- Husserl, E. (1997). (T. Sheehan & R.E. Palmer, Eds. & Trans.) Psychological and transcendental phenomenology and the confrontation with Heidegger (1927-1931). (p. 113). Dordrecht: Kluwer. Retrieved from http://books.google.com/books?id=xsoV5ET9J8C&printsec=frontcover&dq=husserl+phenomenology&hl=en&ei=fQZyTN_ED4L6lwfMssy6Dw&sa=X&oi=book_result&ct=result&resnum=8&ved=0CE8Q6AEwBzgK#v=onepage&q&f=false
- Iselin-Chaves, I., Lopez, U., & Habre, W. (2006). Intraoperative awareness in children: Myth or reality? *Current Opinion on Anaesthesiology, 19*(3), 308-314. doi: 10.1097/01.aco.0000192808.63785.bd

- Jinks, G. (1999). Intentionality and awareness: A qualitative study of clients' perceptions of change during longer term counselling. *Counselling Psychology Quarterly*, *12*(1), 57. doi: 10.1080/09515079908254078
- Johnson, J., Maxwell, A., & Galea, S. (2009). The epidemiology of posttraumatic stress disorder. *Psychiatric Annals*, *39*(6), 326-334. doi: 10.3928/00485713-20090514-01
- Johnson, L., & Benight, C. (2003). Effects of trauma-focused research on recent domestic violence survivors. *Journal of Traumatic Stress*, *16*(6), 567-571. doi: 10.1023/B:JOTS.0000004080.50361.f3
- Johnson, M. (2000). Heidegger and meaning: implications for phenomenological research. *Nursing Philosophy*, *1*(2), 134-146. doi: 10.1046/j.1466-769x.2000.00027.x
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO): Preventing, and managing the impact of anesthesia awareness. *Sentinel Event Alert*, October 6, 2004. Retrieved from Joint Commission on Accreditation of Healthcare Organizations website: http://www.jointcommission.org/SentinelEvents/SentinelEventAlert/sea_32.htm
- Kent, C. (2010). Awareness during general anesthesia: ASA closed claims database and anesthesia awareness registry. *ASA Newsletter*, *74*(2), 14–16. Retrieved from http://depts.washington.edu/asaccp/ASA/Newsletters/asa74_2_14_16.pdf
- Kerig, P., Sink, H., Cuellar, R., Vanderzee, K., & Elfstrom, J. (2010). Implementing trauma-focused CBT with fidelity and flexibility: A family case study. *Journal of Clinical Child & Adolescent Psychology*, *39*(5), 713-722. doi: 10.1080/15374416.2010.501291
- Kerssens, C., Klein, J., & Bonke, B. (2003). Awareness: Monitoring versus remembering what happened. *Anesthesiology*, *99*(3), 570. Retrieved from http://journals.lww.com/anesthesiology/Fulltext/2003/09000/Awareness__Monitoring_versus_Remembering_What.11.aspx
- Keys, T. (1954). An epitome of the history of surgical anesthesia. *Anaesthetist*, *3*(6), 273-83. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC200179/pdf/mlab00214-0115.pdf>
- Kihlstrom, L., Couture, L., Schacter, D., & Cork, R. (1998). Anesthesia, effects on cognitive functions. In G. Adelman & B. Smith (Eds.), *Encyclopedia of neuroscience* (p. unknown). New York, NY: Elsevier.

- Kilpatrick D., Ruggiero K., Acierno R., Saunders B., Resnick H., Best C. (2003). Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the National Survey of Adolescents. *Journal of Consulting and Clinical Psychology, 71*(4), 692–700. [PubMed]
- King, D., Leskin, G., King, L., & Weathers, F. (1998). Confirmatory factor analysis of the clinician-administered PTSD scale: Evidence for the dimensionality of posttraumatic stress disorder. *Psychological Assessment, 10*(2), 90-96. doi: 10.1037/1040-3590.10.2.90
- Kinzie, J., & Goetz, R. (1996). A century of controversy surrounding posttraumatic stress-spectrum syndromes: The impact on DSM-III and DSM-IV. *Journal of Traumatic Stress, 90*(2), 159-179. doi: 10.1002/jts.2490090202
- Kirkorian, R., & Layton, B. (1998). Implicit memory in posttraumatic stress disorder with amnesia for the traumatic event. *Journal of Neuropsychiatry and Clinical Neurosciences, 106*, 359-362. Retrieved from <http://neuro.psychiatryonline.org/cgi/content/full/10/3/359>
- Kirschenbaum, H., & Jourdan, A. (2005). The current status of Carl Rogers and the person-centered approach. *Psychotherapy: Theory, Research, Practice, Training, 42*(1), 37-51. doi: 10.1037/0033-3204.42.1.37
- Klein, B., Mitchell, J., Abbott, J., Shandley, K., Austin, D., Gilson, K., et al. (2010). A therapist - assisted cognitive behavior therapy internet intervention for posttraumatic stress disorder: Pre-, post- and 3-month follow-up results from an open trial. *Journal of Anxiety Disorders, 24*(6), 635-644. doi: 10.1016/j.janxdis.2010.04.005
- Knox, S., Hess, S., Petersen, D. A., & Hill, C. E. (1997). A qualitative analysis of client perceptions of the effects of helpful therapist self-disclosure in long-term therapy. *Journal of Counseling Psychology, 44*(3), 274-283. doi: 10.1037/0022-0167.44.3.274
- Krupnick, J., Green, B., Stockton, P., Miranda, J., Krause, E., & Mete, M. (2008). Group interpersonal psychotherapy for low-income women with posttraumatic stress disorder. *Psychotherapy Research: Journal of the Society for Psychotherapy Research, 18* (5), 497-507.
- Kwan, P. (2006). The application of hypnosis in the treatment of a woman with complex trauma. *Australian Journal of Clinical & Experimental Hypnosis, 34*(2), 204-215. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=6&hid=15&sid=6414e642-3a6f-47d5972e792da47872ce%40sessionmgr12&b data=JnNpdGU9ZWhvc3QtbGl2ZSZZY29wZT1zaXRl#db=psych&AN=2006-21864-007>

- LaFromboise, T. (1992). An interpersonal analysis of affinity, clarification, and helpful responses with American Indians. *Professional Psychology: Research and Practice*, 23(4). doi: 10.1037/0735-7028.23.4.281
- Lambert, P. (2007). Client perspectives on counselling: Before, during and after. *Counselling & Psychotherapy Research*, 7(2), 106-113. doi: 10.1080/14733140701345919
- Lange, A., van de Ven, J., & Schrieken, B. (2003). Interapy: Treatment of post-traumatic stress via the internet. *Cognitive Behaviour Therapy*, 32(3), 110-124. doi: 10.1080/16506070310004935
- Laverty, S. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2(3), 1. Retrieved from http://www.ualberta.ca/iiqm/backIssues/2_3final/html/Laverty.html
- Lenmarken, C., & Sydsjo, G. (2007). Psychological consequences of awareness and their treatment. *Best Practice & Research. Clinical Anaesthesiology*, 21(3), 357-367. doi: 10.1016/j.bpa.2007.04.005
- Lenmarken, C., Bildfors, K., Enlund, G., Samuelsson, P., & Sandin, R. (2002). Victims of awareness. *Acta Anaesthesiologica Scandinavica*, 46(3), 229-231. doi: 10.1034/j.1399-6576.2002.460301.x
- Leslie, K., Chan, M., Myles, P., Forbes, A., & McCulloch, T. (2010). Posttraumatic stress disorder in aware patients from the B-Aware trial. *Anesthesia & Analgesia*, 110(3), 823. doi: 10.1213/ANE.0b013e3181b8b6ca
- Lester, P., Saltzman, W., Vine, V., Comulada, W., Goldstein, R., Stuber, M., Pynoos, R. (2008). Current practice of family-based interventions for child traumatic stress: Results from a national survey. *Journal of Child & Adolescent Trauma*, 1(1), 47-61. doi: 10.1080/19361520801934399
- Levers, L., Anderson, L., Boone, A., Cebula, J., Edger, K., & Kuhn, L., ... Sindlinger, J. (2008). Qualitative research in counseling: Applying robust methods and illuminating human context. ACA Annual Conference & Exhibition, Honolulu, HI. Retrieved from <http://counselingoutfitters.com/vistas/vistas08/Levers.htm>
- Levitt, H., Butler, M., & Hill, T. (2006). What clients find helpful in psychotherapy: Developing principles for facilitating moment-to-moment change. *Journal of Counseling Psychology*, 53(3), 314-324. doi: 10.1037/0022-0167.53.3.314

- Lietaer, G., & Neirinck, M. (1986). Client and therapist perceptions of helping processes in client-centered/experiential psychotherapy. *Person-Centered Review*, 1(4), 436-455.
- Lilliengren, P., & Werbart, A. (2005). A model of therapeutic action grounded in the patients' view of curative and hindering factors in psychoanalytic psychotherapy. *Psychotherapy: Theory, Research, Practice, Training*, 42(3), 324-339. doi: 10.1037/0033-3204.42.3.324
- Liu, W., Thorp, T., Graham, S., & Aitkenhead, A. (1991). Incidence of awareness with recall during general anesthesia. *Anaesthesia*, 48(6), 435-437. doi: 10.1111/j.1365-2044.1991.tb11677.x
- Lopez, K., & Willis, D. (2004). Descriptive versus interpretive phenomenology: Their contributions to nursing knowledge. *Qualitative Health Research*, 14(5), 726-735. doi: 10.1177/1049732304263638
- Lopez, U., Habre, W., Laurenc, Haller, G., Van der Linden, M., & Iselin-Chaves, I. (2007). Intra-operative awareness in children: The value of an interview adapted to their cognitive abilities. *Anesthesia*, 62(8), 778-789. doi: 10.1111/j.1365-2044.2007.05133.x
- Lovelle, C. (2005). Dialectical behavioral therapy and EMDR for adolescents in residential treatment: A practical and theoretical perspective. *Residential Treatment for Children & Youth*, 23(1/2), 27-43. doi: 10.1300/J007v23n01_03
- Lumley, M., Cohen, J., Stout, R., Neely, L., Sander, L., Burger, A. (2008). An emotional exposure-based treatment of traumatic stress for people with chronic pain: Preliminary results for fibromyalgia syndrome. *Psychotherapy*, 45(2), 165-172. doi: 10.1037/0033-3204.45.2.165
- Lyons, E., & Coyle, A. (2007). *Analysing qualitative data in psychology*. Thousand Oaks, CA: Sage Publications Ltd.
- Lyshak-Stelzer, F., Singer, P., St. John, P., & Chemtob, C. (2007). Art therapy for adolescents with posttraumatic stress disorder symptoms: A pilot study. *Art Therapy: Journal of the American Art Therapy Association*, 24(4), 163-169. Retrieved from www.cinahl.com/cgi-bin/refsvc?jid=956&accno=2009775197
- Maggs-Rapport, F. (2001). 'Best research practice': In pursuit of methodological rigour. *Journal of Advanced Nursing*, 35(3), 373-383. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=10&hid=106&sid=a86c015b-ca8a-4821-8743-d2711a1d70f%40sessionmgr107&bdata=JnNpdGU9ZWWhvc3QtbGl2ZSZzY29wZT1zaXRl>

- Manthei, R. (2007). Clients talk about their experience of the process of counselling. *Counselling Psychology Quarterly*, 20(1), 1-26. doi: 10.1080/09515070701208359
- Marshall, R., & Suh, E. (2003). Contextualizing trauma: Using evidence-based treatments in a multicultural community after 9/11. *Psychiatric Quarterly*, 74(4), 401. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=67&hid=8&sid=89c98fb9-8206-45bc-b63d-f1190e881533%40sessionmgr11>
- Martin-Causey, T., & Hinkle, J. (1995). Multimodal therapy with an aggressive preadolescent: A demonstration of effectiveness and accountability. *Journal of Counseling & Development*, 73(3), 305-310. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=92&hid=15&sid=6414e642-3a6f-47d5-972e792da47872ce%40sessionmgr12&bdata=JnNpdGU9ZWwhvc3QtbGl2ZSZzY29wZT1zaXRl#db=a9h&AN=9505241060>
- Matthews, D., & Wang, M. (2007). Anesthesia awareness and trauma. In K. Elizabeth (Ed.), *Trauma psychology: Issues in violence, disaster, health, and illness* (pp. 63-77). Retrieved from <https://books.google.com/books?hl=en&lr=&id=NyY6GvU16aEC&oi=fnd&pg=PA63&dq=Anesthesia+Awareness+and+Trauma&ots=0oFUhmehe&sig=kGrGzPdf4iY18z7dEr63wxuRq-4>
- McDonagh, A., Friedman, M., McHugo, G., Ford, J., Sengupta, A., Mueser, K., ... Schnurr, P. (2005). Randomized trial of cognitive-behavioral therapy for Chronic Posttraumatic Stress Disorder in Adult Female Survivors of Childhood Sexual Abuse. *Journal of Consulting and Clinical Psychology*, 73(3), 515-524. doi: 10.1037/0022-006X.73. 3.515
- McDonald, S., Beckham, J., Morey, R., & Calhoun, P. (2009). The validity and diagnostic efficiency of the Davidson Trauma Scale in military veterans who have served since September 11, 2001. *Journal of anxiety disorders*, 23(2), 247-255. doi: 10.1016/j.janxdis.2008.07.007
- McMackin, R., Leisen, M., Sattler, L., Krinsley, K., & Riggs, D. (2002). Preliminary development of trauma-focused treatment groups for incarcerated juvenile offenders. *Journal of Aggression, Maltreatment & Trauma*, 6(1), 175-199. doi: 10.1300/J146v06n01_09
- Medical Merriam-Webster Online Dictionary*, <http://www.merriam-webster.com./medical>
- Menage, J. (1999). *Male and female circumcision: medical, legal and ethical considerations in pediatric practice*. Denniston, G., Hodges, F., & Milos, M. [Eds.] New York, NY: Kluwer Academic/Plenum Publishers.

- Mercer, J., & Feeney, J. (2009). Representing death in psychology: Hospice nurses' lived experiences. *Mortality*, *14*(3), 245-264. doi: 10.1080/13576270903017149
- Merritt, K., & Ornstein, P. (1994). Children's memory for a salient medical procedure: Implications for testimony. *Pediatrics*, *94*(1), 17. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=6&hid=15&sid=e6807796-5dfd-4744-9b7811a869c82b9c%40sessionmgr10&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZSZzY29wZT1zaXRl#db=a9h&AN=9610172738>
- Meyer, B., & Blacher, R. (1961). A traumatic neurotic reaction induced by succinylcholine chloride. *NY State Medical Journal*, *61*, 1255-61.
- Michaels, A., Michaels, C., Zimmerman, M., Smith, J., Moon, C., & Peterson, C. (1999). Posttraumatic stress disorder in injured adults: Etiology by path analysis. *The Journal Of Trauma*, *47*(5), 867-873.
- Moerman, N., Bonke, B., & Oosting, J. (1993). Awareness and recall during general anesthesia: facts and feelings. *Anesthesiology*. Retrieved from http://journals.lww.com/anesthesiology/Abstract/1993/09000/Awareness_and_Recall_during_General_Anesthesia_.7.aspx.
- Möhlen, H., Parzer, P., Resch, F., & Brunner, R. (2005). Psychosocial support for war-traumatized child and adolescent refugees: Evaluation of a short-term treatment program. *Australian and New Zealand Journal of Psychiatry*, *39*(1-2), 81-87. doi: 10.1111/j.1440-1614.2005.01513.x
- Montgomery, C. (2002). Role of dynamic group therapy in psychiatry. *Advances in Psychiatric Treatment*, *8*, 34-41. doi: 10.1192/apt.8.1.34
- Morrow, S., Rakhsha, G., & Castañeda, C. (2001). Qualitative research methods for multicultural counseling. *Handbook of multicultural counseling (2nd ed.)* (575-603). Thousand Oaks, CA: Sage Publications, Inc.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.
- Mufson, L., Gallagher, T., Dorta, K., & Young, J. (2004). A group adaptation of interpersonal psychotherapy for depressed adolescents. *American Journal of Psychotherapy*, *58*(2), 220-237. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=14&hid=15&sid=e6807796-5dfd-4744-9b78-11a869c82b9c%40sessionmgr10&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZSZzY29wZT1zaXRl#db=a9h&AN=14373108>

- Myhren, H., Ekeberg, O., Tøien, K., Karlsson, S., & Stokland, O. (2010). Posttraumatic stress, anxiety and depression symptoms in patients during the first year post intensive care unit discharge. *Critical Care*, *14*(1): R14. doi: 10.1186/cc8870
- Myles, P., Williams, D., Hendrata, M., Anderson, H., & Weeks, A. (2000). Patient satisfaction after anaesthesia and surgery: Results of a prospective survey of 10,811 patients. *British Journal of Anaesthesia*, *84*(1), 6.
- National Alliance of Mental Illness, Policy Research Institute. (2010). *Facts for lawmakers: Treatable causes of disability. Anxiety Disorder*. Retrieved from The National Alliance on Mental Illness website: <http://www.nami.org/Template.cfm?Section=PolicymakersToolkit&Template=/ContentManagement/ContentDisplay.cfm&ContentID=19059>
- National Center for Health Statistics. (2006). *National hospital discharge and ambulatory surgery data*. U. S. Department of Health and Human. Retrieved from the Center for Disease Control and Prevention website: http://www.cdc.gov/nchs/data/hdasd/13_139t9.pdf
- National Center for Health Statistics. (2008). *Faststats-hospital utilization*. Retrieved from the Center for Disease Control and Prevention website: <http://www.cdc.gov/nchs/FASTATS/insurg.htm/>
- National Center for Health Statistics. (2009). *Faststats-hospital utilization*. Retrieved from the Center for Disease Control and Prevention website: http://www.cdc.gov/nchs/pressroom/09newsreleases/outpatient_surgeries.htm
- Newman, E., & Kaloupek, D. (2004). The risks and benefits of participating in trauma-focused research studies. *Journal of Traumatic Stress*, *17*(5), 383-394. doi: 10.1023/B:JOTS.0000048951.02568.3a
- Nisbet Wallis, D. (2002). A reduction of trauma symptoms following group therapy. *Australian and New Zealand Journal of Psychiatry*, *36*(1), 67–74. doi: 10.1046/j.1440-1614.2002.00980.x
- Novaes, M., Knobel, E., Bork, A., Pavao, O., Nogueira-Martins, L., & Ferraz, M. (1999). Stressors in ICU: Perception of the patient, relatives and health care team. *Intensive Care Medicine*, *25*(12), 1421-1426. doi: 10.1007/s001340051091
- NY Times. (1915). Doctors disagree on twilight sleep [Newspaper Article] [Electronic Version]. Retrieved from http://query.nytimes.com/mem/archive-free/pdf?_r=1&res=9A0DE0DB1138E633A25757C2A96E9C946496D6CF

- O'Connor, M., Daves, S., Tung, A., Cook, R., Thisted, R., & Apfelbaum, J. (2001). BIS monitoring to prevent awareness during general anesthesia. *Anesthesiology*, *94*(3), 520-522. doi: 10.1097/00000542-200103000-00025
- Oflaz, F., Hatipoglu, S., & Aydin, H. (2008). Effectiveness of psychoeducation intervention on post-traumatic stress disorder and coping styles of earthquake survivors. *Journal of Clinical Nursing*, *17*(5), 677-687. doi: 10.1111/j.1365-2702.2007.02047.x
- Osborne, G., Bacon, A., Runciman, W., & Helps, S. (2005). Crisis management during anaesthesia: Awareness and anaesthesia. *Quality and Safety in Health Care*, *14*(3), e16. doi: 10.1136/qshc.2002.004358
- Orser, B., Mazer, D., & Baker, A. (2008). Awareness during anesthesia. *Anesthesiology*, *178*(2), 185-188. doi: 10.1503/cmaj.071761
- Osterman, J., Hopper, J., Heran, W., Keane, T., & van der Kolk, B. (2001). Awareness under anesthesia and the development of posttraumatic stress disorder. *General Hospital Psychiatry*, *23*(4), 198-204. doi: 10.1016/S0163-8343(01)00142-6
- Osterman, J., & van der Kolk, B. (1998). Awareness during anesthesia and posttraumatic stress disorder. *General Hospital Psychiatry*, *20*(5), 274-281. doi: 10.1016/S0163-343(98)00035-8
- Ozer, E., & Weiss, D. (2004). Who develops posttraumatic stress disorder? *Current Directions in Psychological Science (Wiley-Blackwell)*, *13*(4), 169-172. doi: 10.1111/j.0963-7214.2004.00300.x
- Paech, M., Scott, K., Clavisi, O., Chua, S., & McDonnell, N. (2008). A prospective study of awareness and recall associated with general anaesthesia for caesarean section. *International Journal of Obstetric Anesthesia*, *17*, 298-303. doi: 10.1016/j.ijoa.2008.01.016
- Park, C., & AI, A. (2006). Meaning making and growth: New directions for research on survivors of trauma. *Journal of Loss & Trauma*, *11*(5), 389-407. doi: 10.1080/15325020600685295
- Paulson, B., Everall, R., & Stuart, J. (2001). Client perceptions of hindering experiences in counselling. *Counselling and Psychotherapy Research*, *1*(1), 53-61. doi: 10.1080/14733140112331385258

- Paulson, B., Truscott, D., & Stuart, J. (1999). Clients' perceptions of helpful experiences in counseling. *Journal of Counseling Psychology, 46*(3), 317-324. doi: 10.1037/0022-0167.46.3.317
- Pennock, B., Cranshaw, L., Maher, T., Price, T., & Kaplan, M. (1994). Distressful events in the ICU as perceived by patients recovering from coronary artery bypass surgery. *Heart and Lung, 23*(4), 323-327. Retrieved from www.cinahl.com/cgi-bin/refsvc?jid=184&accno=1994197185
- Pennsylvania Patient Safety Authority. (2005). *Pennsylvania Patient Safety Advisory* [Newsletter]. Retrieved from Pennsylvania Patient Safety Authority website: http://www.psa.state.pa.us/psa/lib/psa/advisories/v3n1march2006/vol_3-1-march-06-article_i_preventing_anesthesia_awareness.pdf
- Perkonig, A., Kessler, R., Storz, S., & Wittchen, H. (2000). Traumatic events and post-traumatic stress disorder in the community: Prevalence, risk factors and comorbidity. *Acta Psychiatrica Scandinavica, 101*(1), 46-59. doi: 10.1034/j.16000447.2000.101001046.x
- Polkinghorne, D. (2006). An agenda for the second generation of qualitative studies. *International Journal of Qualitative Studies on Health and Well-Being, 1*(2), 68-77. doi: 10.1080/17482620500539248
- Pollard, R., Coyle, J., Gilbert, L., & Beck, J. (2007). Intraoperative awareness in a regional medical system: A review of 3 years' data. *Anesthesiology, 106*(2), 269-274. Retrieved from <http://www.anesthesiology.org/pt/re/anes/abstract.00000542-200702000-00014.htm;jsessionid=LpnQv8hgJnSP0vTJlplsPyg4FyZ0tyCyDs3JwysX2WHW1DyRL1ct!1162365647!181195628!8091!-1>
- Ponniah, K., & Hollon, S. (2009). Empirically supported psychological treatments for adult acute stress disorder and posttraumatic stress disorder: A review. *Depression & Anxiety (1091-4269), 26*(12), 1086-1109. doi: 10.1002/da.20635
- Porterfield, S. (2009). The use of phenomenological inquiry by the nurse practitioner to understand clinical problems. *Southern Online Journal of Nursing Research, 9*(1). Retrieved from www.cinahl.com/cgi-bin/refsvc?jid=1911&accno=2010235019
- Powers, M., Halpern, J., Ferenschak, M., Gillihan, S., & Foa, E. (2010). A meta-analytic review of prolonged exposure for posttraumatic stress disorder. *Clinical Psychology Review, 30*(6), 635-641. doi: 10.1016/j.cpr.2010.04.007

- Pretorius, G., and Pfeifer, N. (2010). "Group art therapy with sexually abused girls." *South African Journal of Psychology* 40(1) 63-73. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=31&hid=9&sid=77bdf1d-738e-405d-b826-81bb8824f5f6%40sessionmgr14>
- Raider, M., Steele, W., Delillo-Storey, M., Jacobs, J., & Kuban, C. (2008). Structured sensory therapy (SITCAP-ART) for traumatized adjudicated adolescents in residential treatment. *Residential Treatment for Children & Youth*, 25(2), 167-185. doi: 10.1080/08865710802310178
- Rampersad, S., & Mulroy, M. (2005). A case of awareness despite an "adequate depth of anesthesia" as indicated by a Bispectral Index monitor. *Anesthesia and analgesia*, 100, 1363-1364. doi: 10.1213/01.ANE.0000148121.84560.8D
- Rank, M., & LeCroy, C. (1983). Toward a multiple perspective in family theory and practice: The case of social exchange theory, symbolic interactionism, and conflict theory. *Family Relations*, 32(3), 441-448. doi: 10.2307/584622
- Rankin, M., Carretta, C., & Jaroszynski, A. (2008). Nursing care of posttraumatic stress disorder after anesthesia awareness. *Plastic Surgical Nursing*, 28(1), 35.
- Ranta, S., Herranen, P., & Hynynen, M. (2002). Patients' conscious recollections from cardiac anesthesia. *Journal of Cardiothoracic and Vascular Anesthesia*, 16(4), 426-430. doi: 10.1053/jcan.2002.125149
- Rees, A., Hardy, G., Barkham, M., Elliott, R., Smith, J., & Reynolds, S. (2001). It's like catching a desire before it flies away: A comprehensive process analysis of a problem clarification event in cognitive-behavioral therapy for depression. *Psychotherapy Research*, 11(3), 331-351. doi: 10.1093/ptr/11.3.331
- Reger, G., & Gahm, G. (2008). Virtual reality exposure therapy for active duty soldiers. *Journal of Clinical Psychology*, 64(8), 940-946. doi: 10.1002/jclp.20512
- Reid, K., Flowers, P., & Larkin, M. (2005). Exploring lived experience. *The Psychologist*, 18(1), 20-23.
- Rennick, J., Johnston, C., Dougherty, G., Platt, R., & Ritchie, J. (2002). Children's psychological responses after critical illness and exposure to invasive technology. *Journal of Developmental and Behavioral Pediatrics*, 23(3), 133-144.

- Reynolds, D. (2007). Containment, curiosity and consultation: An exploration of theory and process in individual systemic psychotherapy with an adult survivor of trauma. *Journal of Family Therapy*, 29(4), 420-437. doi: 10.1111/j.1467-6427.2007.00409.x
- Rhudy, J., Davis, J., Williams, A., McCabe, K., Bartley, E., Byrd, P., & Pruiksmá, K. (2010). Cognitive-behavioral treatment for chronic nightmares in trauma-exposed persons: Assessing physiological reactions to nightmare-related fear. *Journal of Clinical Psychology*, 66(4), 365-382. doi: 10.1002/jclp.20656
- Rivers, I. (2001). Retrospective reports of school bullying: Stability of recall and its implications for research. *British Journal of Developmental Psychology*, 19(1), 129. doi: 10.1348/0261 51001166001
- Rizq, M., and Target, M. (2008). "Not a little Mickey Mouse thing": How experienced counselling psychologists describe the significance of personal therapy in clinical practice and training. Some results from an interpretative phenomenological analysis. *Counselling Psychology Quarterly*, 21(1), 29-48. doi: 10.1080/09515070801936578
- Rose, S., & Bisson, J. (1998). Brief early psychological interventions following trauma: A systematic review of the literature. *Journal of Traumatic Stress*, 11(4), 697. doi: 10.1023/A:1024441315913
- Rosen, G., Spitzer, R., & McHugh, P. (2008). Problems with the post-traumatic stress disorder diagnosis and its future in DSM V. *British Journal of Psychiatry*, 192(1), 3-4. doi: 10.1192/bjp.bp.107.043083
- Rost, C., Hofmann, A., & Wheeler, K. (2009). "EMDR treatment of workplace trauma." *Journal of EMDR Practice & Research*, 3(2), 80-90. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=31&hid=9&sid=77bdff1d-738e-405d-b826-81bb8824f5f6%40sessionmgr14>
- Rothbaum, B., Astin, M., & Marsteller, F. (2005). Prolonged exposure versus eye movement desensitization and reprocessing (EMDR) for PTSD rape victims. *Journal of Traumatic Stress*, 18(6), 607-616. doi: 10.1002/jts.20069
- Rungreungvanich, M., Thienthong, S., Charuluxananan, S., Lekprasert, V., Pulnitiporn, A., Prakanrattana, U. (2007). Predictors of intra-operative recall of awareness: Thai anesthesia incidents study (THAI Study): a case-control study. *Journal of the Medical Association of Thailand*, 90(8), 1551.
- Russell, I. (1986). Comparison of wakefulness with two anaesthetic regimens. *British Journal of Anaesthesia*, 58(9), 965. doi: 10.1093/bja/58.9.965

- Sachsse, U., Vogel, C., & Leichsenring, F. (2006). Results of psychodynamically oriented trauma-focused inpatient treatment for women with complex posttraumatic stress disorder (PTSD) and borderline personality disorder (BPD). *Bulletin for the Menninger Clinic* 70, 125-144. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3218759/>
- Saltzman, C. (2010) Psychodynamic practice: A guide to evidence-based practice. *Psychodynamic Practice: Individuals, Groups and Organisations*, 16(3), 344-347. doi: 10.1080/14753634.2010.482194
- Salomons, T., Osterman, J., Gagliese, L., & Katz, J. (2004). Pain flashbacks in posttraumatic stress disorder. *The Clinical Journal of Pain*, 20(2), 83. doi: 10.1192/bjp.bp.107.043083
- Sandin, R., Enlund, G., Samuelsson, P., & Lennmarken, C. (2000). Awareness during anaesthesia: A prospective case study. *Lancet*, 355(9205), 707-711. doi: 10.1016/S0140-6736(99)11010-9
- Santos, M., Russo, J., Aisenberg, G., Uehara, E., Ghesquiere, A., & Zatzick, D. (2008). Ethnic/racial diversity and posttraumatic distress in the acute care medical setting. *Psychiatry: Interpersonal & Biological Processes*, 71(3). doi: 10.1521/psyc.2008.71.3.234
- Schoenberg, M., & Shiloh, S. (2002). Hospitalized patients' views on in-ward psychological counseling. *Patient Education & Counseling*, 48(2), 123. doi: 10.1016/S0738-991(02)00008-3
- Schott, B., Henson, R., Richardson-Klavehn, A., Becker, C., Thomall, V., Heinze, H. & Duzel, E. (2005). Redefining implicit and explicit memory: The functional neuroanatomy of priming, remembering, and control of retrieval. *Proceedings of the National Academy of Sciences of the United States of America*, 102(4), 1257-1262. doi: 10.1073/pnas.04090701
- Schwender, D., Klasing, S., Dauderer, M., Madler, C., Poppel, E., & Peter, K. (1995). Awareness during general anaesthesia: Definition, incidence, clinical relevance, causes, avoidance and medicolegal aspects. *Der Anaesthetist*, 44(11), 743-754.
- Schwender, D., Kunze-Kronawitter, H., Dietrich, P., Klasing, S., Forst, H., & Madler, C. (1998). Conscious awareness during general anaesthesia: Patients' perceptions, emotions, cognition and reactions. *British Journal of Anaesthesia*, 80(2), 133. Retrieved from <http://bj.a.oxfordjournals.or.g.ezproxy.uno.edu/content/80/2/133.full.pdf+htr>
- Sebel, P. (2009). To sleep, perchance to dream? NOT! *Anesthesia & Analgesia*, 108(2), 391. doi: 10.1213/ane.0b013e31818ddfb1

- Sebel, P., Bowdle, T., Ghoneim, M., Rampil, I., Padilla, R., Gan, T., Domino, K. (2004). The incidence of awareness during anesthesia: a multicenter United States study. *Anesthesia & Analgesia*, (99)3, 833-839. doi: 10.1213/01.ANE.0000130261.90896.6C
- Shank, G. (1995). Semiotics and qualitative research in education: The third crossroad. *The Qualitative Report* 2(3). Retrieved from <http://www.nova.edu/ssss/QR/QR2-3/shank.html>
- Shaw, R., Harvey, J., Nelson, K., Gunary, R., Kruk, H., & Steiner, H. (2001). Linguistic analysis to assess medically related posttraumatic stress symptoms. *Psychosomatic Medicine*, 42(1), 35-40. doi: 10.1176/appi.psy.42.1.35
- Shopper, M. (1995). Medical procedures as a source of trauma. *Bulletin Of The Menninger Clinic*, 59(2). Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/detail?vid=48&hid=15&sid=e6807796-5dfd-4744-9b7811a869c82b9c%40sessionmgr10&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZSZzY29wZT1zaXRl#db=pbh&AN=9507180994>
- Sigalovsky, N. (2003). Awareness under general anesthesia. *American Association of Nurse Anesthetists Journal*, 71(5), 373.
- Silverman, W., Ortiz, C., Viswesvaran, C., Burns, B., Kolko, D., Putnam, F., Amaya-Jackson, L. (2008). Evidence-based psychosocial treatments for children and adolescents exposed to traumatic events. *Journal of Clinical Child & Adolescent Psychology*, 37(1), 156-183. doi: 10.1080/15374410701818293
- Simpson, D. (2009). Adolescents with OCD: An integration of the transtheoretical model with exposure and response prevention. *Best Practice in Mental Health: An International Journal*, 5(2), 14-28. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=55&hid=15&sid=e6807796-5dfd-4744-9b78-11a869c82b9c%40sessionmgr10>
- Singer, M. (2005). A twice-told tale: A phenomenological inquiry into clients' perceptions of therapy. *Journal of Marital and Family Therapy*, 31(3), 269-281. doi: 10.1111/j.1752-0606.2005.tb01568.x
- Smith, A., & Kelly, A. (2008). An exploratory study of group therapy for sexually abused adolescents and nonoffending guardians. *Journal of Child Sexual Abuse*, 17(2), 101-116. doi: 10.1080/10538710801913496
- Smith, J. (1996). Beyond the divide between cognition and discourse; Using interpretative phenomenological analysis in health psychology. *Psychology & Health*, 11(2), 261-271. doi: 10.1080/08870449608400256

- Smith, J. (2004). Reflecting on the development of interpretative phenomenological analysis and its contribution to qualitative research in psychology. *Qualitative Research in Psychology*, 1(1), 39-54. doi: 10.1191/1478088704qp004oa
- Smith, J. (2006). Qualitative research in European health psychology. *The European Health Psychologist*, 2. [Position paper], Retrieved from <http://www.ehps.net/ehp/issues/2006/v8iss2>
- Smith, J. (2007). Hermeneutics, human sciences and health: Linking theory and practice. *International Journal of Qualitative Studies on Health and Well-Being*, 2, 3-11. doi: 10.1080/17482620601016120
- Smith J. (2008) *Qualitative psychology: A practical guide to research methods* (2nd ed.). London: Sage.
- Smith, J. & Osborn, M. (2007). Pain as an assault on the self: An interpretative phenomenological analysis of the psychological impact of chronic benign low back pain. *Psychology & Health*, 22(5), 517-534. doi: 10.1080/14768320600941756
- Smith, J., Flowers, P., Larkin, M. (2009). *Interpretive phenomenological analysis: Theory, method and research*. Thousand Oaks, CA: Sage.
- Smythe, E., Ironside, P., Sims, S., Swenson, M., & Spence, D. (2008). Doing Heideggerian hermeneutic research: A discussion paper. *International Journal of Nursing Studies*, 45(9), 1389-1397. doi: 10.1016/j.ijnurstu.2007.09.005
- Solter, A. (2007). A case study of traumatic stress disorder in a 5-month-old infant following surgery. *Infant Mental Health Journal*, 28(1), 76–96. doi: 10.1002/imhj.20123
- Stapleton, J., Taylor, S., Asmundson, G. (2007). Efficacy of various treatments for PTSD in battered women: Case studies. *Journal of Cognitive Psychotherapy*, 21(1), 91.
- Swenson, C., Schaeffer, C., Henggeler, S., Faldowski, R., & Mayhew, A. (2010). Multisystemic therapy for child abuse and neglect: A randomized effectiveness trial. *Journal of Family Psychology*, 24(4), 497-507. doi: 10.1037/a0020324
- Taylor, S. (2003). Outcome predictors for three PTSD treatments: Exposure therapy, EMDR, and relaxation training. *Journal of Cognitive Psychotherapy*, 17(2), 149-161. doi: 10.1891/jcop.17.2.149.57432

- Timulák, L. (2003). Empowerment events in process-experiential psychotherapy of depression: An exploratory qualitative analysis. *Psychotherapy Research, 13*, 443-460. doi: 10.1093/ptr/kpg043
- Timulák, L., & Lietaer, G. (2001). Moments of empowerment: A qualitative analysis of positively experienced episodes in brief person centered counseling. *Counselling and Psychotherapy Research, 1*(1), 62-73.
- Thompson, A., Powis, J., & Carradice, A. (2008). Community psychiatric nurses' experience of working with people who engage in deliberate self-harm. *International Journal of Mental Health Nursing, 17*(3), 153-161. doi: 10.1111/j.1447-0349.2008.00533.x
- Trzepacz, A., & Luiselli, J. (2004). Efficacy of stress inoculation training in a case of posttraumatic stress disorder (PTSD) secondary to emergency gynecological surgery. *Clinical Case Studies, 3*(1), 83-92. doi: 10.1177/1534650103258981
- United States Department of Health and Human Services (USDHHS), Office for Civil Rights (OCR), (2003). Website on HIPAA Privacy. Research. Retrieved from United States Department of Health and Human Services website: <http://www.hhs.gov/ocr/privacy/hipaa/understanding/special/research/research.pdf>
- United States Department of Veterans Affairs. (unknown). *National center for posttraumatic stress disorders factsheet*. Retrieved from United States Department of Veterans Affairs website: http://ncptsd.va.gov/ncmain/ncdocs/fact_shts/fs_faqs_on_ptsd.html
- van der Kolk, B., & Courtois, C. (2005). Editorial comments: Complex developmental trauma. *Journal of Traumatic Stress, 18*(5), 385-388. doi: 10.1002/jts.20046
- van der Kolk, B., Roth, S., Pelcovitz, D., Sunday, S., & Spinazzola, J. (2005). Disorders of extreme stress: The empirical foundation of a complex adaptation to trauma. *Journal of Traumatic Stress, 18*(5), 389-399. doi: 10.1002/jts.20047
- van Emmerik A., Kamphuis, J., Emmelkamp, P. (2008). Treating acute stress disorder and posttraumatic stress disorder with cognitive behavioral therapy or structured writing therapy: A randomized controlled trial. *Psychotherapy & Psychosomatics, 77*(2), 93-100. doi: 10.1159/000112886
- Wagner, A., Rizvi, S., & Harned, M. (2007). Applications of dialectical behavior therapy to the treatment of complex trauma-related problems: When one case formulation does not fit all. *Journal of Traumatic Stress, 20*(4), 391-400. doi: 10.1002/jts.20268

- Wang, M. (2001). The psychological consequences of explicit and implicit memories of events during surgery. In M. Ghoneim (ed.), *Awareness During Anaesthesia*, 145-154. Oxford, UK: Butterworth-Heinemann.
- Weathers, F., & Keane, T. (2007). The criterion a problem revisited: Controversies and challenges in defining and measuring psychological trauma. *Journal of Traumatic Stress*, 20(2), 107-121. doi: 10.1002/jts.20210
- Wennervirta, J., Ranta, S., & Hynynen, M. (2002). Awareness and recall in outpatient anesthesia. *Anesthesia & Analgesia*, 95(1), 72. doi: 10.1097/00000539-200207000-00013
- Wertz, F. (2005). Phenomenological research methods for counseling psychology. *Journal of Counseling Psychology*, 52(2), 167-177. doi: 10.1037/0022-0167.52.2.167
- White, J., Hunter, M., & Holttum, S. (2007). How do women experience myocardial infarction? A qualitative exploration of illness perceptions, adjustment and coping. *Psychology, Health & Medicine*, 12(3), 278-288. doi: 10.1080/13548500600971288
- Wilcox-Matthew, L., Ottens, A., & Minor, C. (1997). An analysis of significant events in counseling. *Journal of Counseling and Development*, 75, 282-291. AMERICAN COUNSELING ASSOCIATION. Retrieved from <http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:An+analysis+of+significant+events+in+counseling#0>
- Wilkinson, T. (2001). Research, informed consent and the limits of disclosure. *Bioethics*, 15(4): 341-363. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=57&hid=15&sid=e6807796-5dfd-4744-9b78-11a869c82b9c%40sessionmgr10>
- Winterbottom, E. (1950). Insufficient anaesthesia. *British Medical Journal*, 1(4649), 373-373. doi: 10.1136/bmj.1.4647.247-c
- Wood, D., Webb-Murphy, J., Center, K., McLay, R., Koffman, R., Johnston, S., ... Wiederhold, B. (2009). Combat-related post-traumatic stress disorder: A case report using virtual reality graded exposure therapy with physiological monitoring with a female seabee. *Military Medicine*, 174(11), 1215-1222. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=59&hid=15&sid=e6807796-5dfd-4744-9b78-11a869c82b9c%40sessionmgr10>
- Xu, L., Wu, a., & Yue, Y. (2009). The incidence of intra-operative awareness during general anesthesia in China: A multi-center observational study. *Acta anaesthesiologica Scandinavica*, 53, 873-82. doi: 10.1111/j.1399-6576.2009.02016.x

Zaghrou-Hodali, M., Alissa, F., & Dodgson, P. (2008). Building resilience and dismantling fear: EMDR group protocol with children in an area of ongoing trauma. *Journal of EMDR Practice & Research*, 2(2), 106-113. doi: 10.1891/1933-3196.2.2.106

Client-centered therapy. (2006). *Harvard Mental Health Letter*, 22(7), 1-3. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=6&hid=8&sid=89c98fb9-8206-45bc-b63d-f1190e881533%40sessionmgr11>

Merits of psychodynamic therapy. (2010). *Harvard Mental Health Letter*, 27(3), 1-3. Retrieved from <http://web.ebscohost.com.ezproxy.uno.edu/ehost/pdfviewer/pdfviewer?vid=61&hid=15&sid=e6807796-5dfd-4744-9b78-11a869c82b9c%40sessionmgr10>

Appendix A
Interview Schedule

Interview Schedule

- Tell me about your experience of AA.
- What were your reason(s) for seeking counseling for AA?
- What were your expectations, if any, about counseling for AA?
- What were your beliefs, if any, about counseling for AA?
- While you were receiving counseling for AA, can you recall any thoughts you had that helped your counseling process?
- While you were receiving counseling for AA, can you recall any thoughts you had that hindered your counseling process?
- While you were receiving counseling for AA, can you recall any feelings you had that helped your counseling process?
- While you were receiving counseling for AA, can you recall any feelings you had that hindered your counseling process?
- While you were receiving counseling for AA, can you recall any sensations you had that helped your counseling process?
- While you were receiving counseling for AA, can you recall any sensations you had that hindered your counseling process?
- While you were receiving counseling for AA, can you recall anything your counselor said or did that helped your counseling process?
- While you were receiving counseling for AA, can you recall anything your counselor said or did that hindered your counseling process?

- What are your feelings and thoughts regarding the outcome of your counseling for AA?
- Do you think the outcome of your therapy has an effect on how you perceive your counseling for AA; and if so, what is it?

Appendix B
Recruitment Letter

[Date]

[Business Address]

Dear _____:

A research study entitled *Clients' Perceptions of their Counseling Experiences for Trauma Related to Anesthesia Awareness (AA)* is currently recruiting individuals who have recently (within the past year) completed at least 15 hours of counseling for Anesthesia Awareness (AA). The purpose of this study is to explore individuals' perceptions of their counseling experiences for Anesthesia Awareness (AA). The purpose of this research study is to explore individuals' perceptions of their experience of counseling for trauma related to AA.

Your participation will involve being interviewed about your counseling experience for AA. The interview is anticipated to last between one and two hours at which time you will be asked open-ended questions about your counseling experiences for AA. The interview will take place in a comfortable and private location near where you live. You will be sent a copy of the researcher's analysis of your interview by postal mail or secure email, and asked to comment on it by telephone, postal mail, or secure email.

The primary risk associated with this study is that you will be asked to share personal information regarding your counseling experience for AA that may cause discomfort. You do not have to answer any question/s that you do not wish to answer, and you may withdraw any answer/s at any time you wish. In addition, you may decide to withdraw from the study at any time without consequence. If you should become tired or fatigued during the interview, you may take a break or choose to discontinue the interview. Counseling resource names will be made available to you for follow up should you decide you need assistance after the interview.

Your participation in this research study is voluntary, and will not be compensated. However, your name will be placed in a drawing for a dinner for two at a fine restaurant where you live. The benefits of participating in this study for you personally are minimal; however, you will be contributing to important scholarly research about assessing the counseling needs of individuals who experience AA to increase understanding of significant or important therapy events.

The results of this study will be published in my dissertation; however, your name and identity will not be revealed. You will be assigned or may choose a pseudonym, and the pseudonym will be used in the reporting of your comments. Your name will only be known to the researchers and any transcriptions of your interview will be kept in a locked file cabinet accessible only to the researchers for a limited time.

I will be calling you within seven days to determine if you wish to participate. In the meantime, if you want more information regarding this study you may contact Arlene Magee-Gann, LPC, NCC at (cell) 504-864-3232, or (email) nagann@uno.edu.

Thank you for your interest in this study.

Sincerely,

Arlene Magee-Gann, M.Ed., LPC, NCC
Doctoral Candidate, Co-Investigator

Appendix C
Informed Consent

Consent Form

1. Title of Research Study: *Clients' Perceptions of their Counseling Experiences for Trauma Related to Anesthesia Awareness (AA)*

2. Principle Investigator: Barbara Herlihy, PhD, LPC, NCC
Professor
Educational Leadership, Counseling, and Foundations
348 Bicentennial Education Center
504-280-6662
e-mail: bherlihy@uno.edu

3. Co-Investigator: Arlene Magee-Gann, LPC, NCC
Doctoral Candidate, Counselor Education
504-864-3232
e-mail: nagann@uno.edu

Arlene Magee-Gann, University of New Orleans doctoral student and her University of New Orleans faculty supervisor, Dr. Barbara Herlihy, are requesting your participation in a research study entitled *Clients' Perceptions of their Counseling Experiences for Trauma Related to Anesthesia Awareness (AA.)*

3. Purpose of the Research

Little is known about the counseling perceptions of individuals who have had counseling for trauma related to Anesthesia Awareness (AA). Because of the unique and potentially serious problems that may result from AA, counselors need to understand how to provide effective services for this population. The purpose of this study is to explore the perceptions of individuals who have received counseling for trauma related to AA. Specifically, it is intended to explore the whole range of helpful and hindering aspects of counseling for trauma related to Anesthesia Awareness.

4. Procedures for this Research

You will be asked to complete a one to two-hour interview with the co-investigator, in which you will be asked to discuss your counseling experiences for trauma related to AA. The interview will be conducted in a setting that offers privacy, is conducive for digital recording, and is convenient and accessible to you. Such settings may include a library meeting room, your home, or your office. Interview locations will be made with your convenience in mind at the time of scheduling. The interviews will be digitally recorded.

You will be contacted a second time in a manner that is acceptable to you (telephone, postal mail, or email) and asked to provide either verbal (telephone) or written (postal mail or email) responses to the researcher's analysis of your interview.

5. Potential Risks or Discomforts

You may experience negative emotions and/or discomfort when talking about experiences during the course of this study. If you wish to discuss these or any other discomforts you may experience, you may call the co-investigator listed in #2 of this consent form to obtain referral sources for counseling in your area if needed. You may request a break during the interview if you feel you need one. You may also choose not to answer any questions that you do not wish to answer, and you may withdraw any and all answers either during or after the interview. You may withdraw from the study at any time as well without consequence.

6. Potential Benefits to You or Others

Your participation in this project may give you an opportunity to voice your concerns, opinions, thoughts, and ideas about what significant events helped or hindered your counseling for trauma related to AA. It is hoped that results will assist counselors in developing interventions that better serve the counseling needs of people who seek counseling for trauma related to AA.

7. Alternative Procedures

There are no alternative procedures to this research. Your participation is entirely voluntary and you may withdraw consent and terminate participation at any time without consequence.

8. Protection of Confidentiality

Your identity will be kept confidential and will be maintained with an identifying pseudonym that is assigned or of your choosing. You will be asked to use this name (not your real name) to identify your responses to interview questions and to be used in publications. All identifying information will be stored separate from the information collected for added security. Digitally recorded interviews will be transcribed into Microsoft Word™ documents and saved with a password. Recordings and transcripts will be kept in a locked cabinet accessible only to the investigator and co-investigator. Recordings will be destroyed upon completion of data analysis and transcripts will be destroyed three years later. The researcher will use only a landline to obtain or provide information that may include sensitive or personal data. Likewise, either HIPAA compliant email or postal mail will be used to send information that contains sensitive or personal information. Your identity will be protected in the reporting of data to any publication. Although every effort will be made to ensure confidentiality, absolute anonymity cannot be guaranteed.

9. Signatures

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact Dr. Richard Speaker at the University of New Orleans at (504) 280-6660.

I have been fully informed of the above-described procedure with its possible benefits and risks, and I have given my permission for participation in this study.

Name of Participant Giving Consent (Print) Date

Signature of Participant Giving Consent Date

Name of Researcher Receiving Consent (Print) Date

Signature of Researcher Receiving Consent Date

Appendix D
Demographic Data Collection Sheet

Demographic Data Collection Sheet

Alias/Pseudonym _____	
Sex	Male _____ Female _____
Race	White _____ Black _____ Hispanic _____ Native American _____ Asian _____ Bi/Multiracial _____ Other _____
Age _____	
Geographic Location _____	
Age at Time of Anesthesia Awareness Experience _____	
Surgery Performed at Time of Anesthesia Awareness Experience _____	
Degree of Pain or Trauma During AA Experience	To a Great Extent _____ Somewhat _____ Very Little _____ Not at All _____
Discomfort from Symptoms Following AA Experience	To a Great Extent _____ Somewhat _____ Very Little _____ Not at All _____
Counseling Provided by	Licensed Professional Counselor _____ Licensed Social Worker _____ Licensed Psychologist _____ Licensed Marriage & Family Therapist _____ Psychiatrist _____ Other (Please Specify) _____
Time (In Weeks/Months) Between AA Experience and Start of Counseling _____	
Number of Counseling Sessions Received _____	
Type of Counseling Received	Cognitive Behavioral _____ Solution Focused _____ Brief Psychodynamic _____ Family _____ Other (Please Specify) _____
Group Sessions	Yes _____ No _____
Individual Sessions	Yes _____ No _____
Both Group and Individual Sessions	Yes _____ No _____
Satisfied With Counseling Received	To a Great Extent _____ Somewhat _____ Very Little _____ Not at All _____

Appendix E
Peer Review Agreement

Peer Review Agreement

I am a reviewer in research on *Clients' Perceptions of their Counseling Experiences for Trauma Related to Anesthesia Awareness (AA.)* As a reviewer, I will have access to participants' transcripts and the researcher's summaries. I agree to comply with the following terms and conditions:

- I agree **not** to disclose voluntarily or involuntarily, to make available to anyone, or to use Peer Review data other than as a participant in the performance of my responsibilities and duties in the research project.

I further agree:

- Not to make copies of Peer Review Data or Sensitive or Personal Information, except to the extent necessary to fulfill my responsibilities as a peer reviewer.
- To safeguard all Peer Review Data and Sensitive or Personal Information at all times it is not made available to, or may be taken by, any unauthorized persons, and to use my best efforts to ensure its safekeeping. Specifically, I agree to use either HIPAA approved email or postal mail, or secure landline to transmit data that may be of a sensitive or personal nature.
- Upon termination of my participation in the research project, I agree to deliver to the investigators any and all materials relating to the Peer Review Data and/or Sensitive or Personal Information used in the research project peer review. This includes personal notes, summaries, abstracts, and reproductions in my possession and control.

Name of Participating Peer Reviewer (Print)

Name of Participating Peer Reviewer (Signature)

Name of Co-Investigator (Print)

Name of Co-Investigator (Signature)

Date

Appendix F
IRB Approval

**University Committee for the Protection
of Human Subjects in Research
University of New Orleans**

Campus Correspondence

Principal Investigator: Barbara Herlihy
Co-Investigator: Arlene Magee-Gann
Date: October 29, 2010
Protocol Title: "Clients' Perceptions of their Counseling Experiences for Trauma Related to Anesthesia"
IRB#: 05Oct10

The IRB has deemed that the research and procedures are compliant with the University of New Orleans and federal guidelines. The above referenced human subjects protocol has been reviewed and approved using expedited procedures (under 45 CFR 46.116(a) category (7)).

Approval is only valid for one year from the approval date. Any changes to the procedures or protocols must be reviewed and approved by the IRB prior to implementation. Use the IRB number listed on this letter in all future correspondence regarding this proposal.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

Best wishes on your project!

Sincerely,

Robert D. Laird, Ph.D., Chair
UNO Committee for the Protection of Human Subjects in Research

FW: IRB Renewal

From: UNO Institutional Review Board [unoirb@uno.edu]
Sent: Tuesday, January 24, 2012 1:02 PM
To: Norma Arlene Gann
Subject: RE: IRB Renewal

Norma,

Continuation has been approved for one more year. Approval expires 1/23/13. Please let me know if you need a hard copy-- Jessica

From: Norma Arlene Gann [mailto:nagann@my.uno.edu]
Sent: Tuesday, January 24, 2012 12:57 PM
To: UNO Institutional Review Board
Cc: Barbara J Herlihy
Subject: RE: IRB Renewal

Hi Jessica,
Attached is my signed document as you requested. Please let me know if you need anything else.
Thanks,
Arlene

Arlene Magee-Gann, MEd, NCC. LPC
Doctoral Candidate
University of New Orleans
nagann@uno.edu
504.864.3232

"Always leave a window in your mind a little open so you can glimpse some of the unseen."

From: UNO Institutional Review Board [unoirb@uno.edu]
Sent: Thursday, January 19, 2012 11:01 AM
To: Norma Arlene Gann
Subject: RE: IRB Renewal

Arlene,

I'm sorry about the mix-up, I received an email from Dr. O'Hanlon on December 5th 2011 regarding the continuation to your project. We are only missing your signature on the continuation application, which is attached. If you have any questions, please let me know-- Jessica

FW: Approval IRB Continuation Application 05Oct10

From: UNO Institutional Review Board [unoirb@uno.edu]
Sent: Friday, April 05, 2013 2:54 PM
To: Norma Arlene Gann
Cc: Barbara J Herlihy
Subject: Approval IRB Continuation Application 05Oct10

Dr. Herlihy and Arlene,

The IRB Chair has approved the continuation of your project for one more year. Approval expires 4/5/14. If there is anything else that you need, let me know.

Jessica Grande
IRB Administrator
unoirb@uno.edu

From: UNO Institutional Review Board [unoirb@uno.edu]
Sent: Tuesday, March 26, 2013 11:39 AM
To: Barbara J Herlihy
Cc: Norma Arlene Gann
Subject: Reminder IRB Continuation Application 05Oct10

Dr. Herlihy,

This is another reminder that protocol 05Oct10 has expired. Please submit the attached continuation application along with a quick summary of the project to continue working on the project or to close out your file. Thanks.

Jessica Grande
IRB Administrator
unoirb@uno.edu

VITA

Arlene Magee-Gann was born in New Orleans, Louisiana. She obtained a bachelor's degree in general studies from Southeastern Louisiana University in 2003. She obtained a master's degree in counseling from the University of New Orleans in 2006. In 2007, she joined the University of New Orleans graduate program to pursue a Ph.D. in counselor education. She is currently a Licensed Professional Counselor and National Certified Counselor.