ART AS A HEALING MODALITY IN CHRONIC ILLNESS

by

Lisa M Wayman

A Dissertation Submitted to the Faculty of the

COLLEGE OF NURSING

In Partial Fulfillment of the Requirements
For the Degree of

DOCTOR OF PHILOSOPHY

In the Graduate College

THE UNIVERSITY OF ARIZONA

2013
As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Lisa M Wayman entitled “Art as a Healing Modality in Chronic Illness” and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

Mary S Koithan, PhD, RN, APRN, BC
Associate Professor

Date: April 5, 2013

Pamela G Reed, PhD, RN, FAAN
Professor

Date: April 5, 2013

Rebecca Ross, PhD, RN
Associate Professor

Date: April 5, 2013

Final approval and acceptance of this dissertation is contingent upon the candidate’s submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

Dissertation Director: Mary S Koithan, PhD, RN, APRN, BC
Associate Professor

Date: April 5, 2013
STATEMENT BY AUTHOR

This dissertation has been submitted in partial fulfillment of requirements for an advanced degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Brief quotations from this dissertation are allowable without special permission, provided that accurate acknowledgment of source is made. Requests for permission for extended quotation from or reproduction of this manuscript in whole or in part may be granted by the head of the major department or the Dean of the Graduate College when in his or her judgment the proposed use of the material is in the interests of scholarship. In all other instances, however, permission must be obtained from the author.

SIGNED: Lisa M. Wayman

__________________________
ACKNOWLEDGEMENTS

An advanced degree is a huge undertaking that cannot be completed without tremendous support. I would like to acknowledge those people who inspired me to undertake the challenge to obtain a PhD and who encouraged me along the way. Dr. Honey Lea Gaydos has been my mentor and friend throughout my nursing career and encouraged me to consider investigation into whole person healing and art as an intervention. Dr. Kristine Campbell is my cousin and provided personal support and professional advice based in her own experience as a PhD nurse. The assistance of both these powerful and wonderful women was much appreciated.

I would also like to acknowledge the work of my chair Mary Koithan and my committee members Pamela Reed and Rebecca Ross who pushed me to challenge myself and think in new ways. They also worked to assure that my work was my best work and that this project would be a valuable contribution to nursing and a useable study in which to base a research career.

Much thanks.
DEDICATION

I dedicate this degree to my husband Charlie. Without his substantial support I would have never been able to complete my studies. He supported me in more ways than I can count. Charlie’s quiet love held me together as I struggled to learn. Without him this degree would not have been possible. My PhD is as much his accomplishment as it is mine and I dedicate it to him with all my love.
TABLE OF CONTENTS

LIST OF FIGURES .................................................................................................................. 16
LIST OF TABLES ..................................................................................................................... 18
ABSTRACT ............................................................................................................................... 21

CHAPTER 1: INTRODUCTION ................................................................................................. 23
Definitions .................................................................................................................................. 24
   Chronic Illness ....................................................................................................................... 24
   Health Promotion ................................................................................................................... 25
   Creating Art as Intervention ................................................................................................. 26
Systems Thinking Informing Art for Healing ............................................................................. 27
   Complex Systems Science .................................................................................................... 27
      Whole systems ..................................................................................................................... 28
      Change over time ............................................................................................................... 28
      Change characteristics ...................................................................................................... 30
      Emergence ......................................................................................................................... 31
      Self-organization ............................................................................................................... 31
      Stability and flexibility ...................................................................................................... 32
      Summary ............................................................................................................................. 33
   Nursing’s Theoretical Perspectives ....................................................................................... 33
      The Unitary-Transformative perspective .......................................................................... 34
   Summary ............................................................................................................................... 36
Positivity Influencing Art as a Healing Intervention .................................................................... 37
   Broaden-and-Build .............................................................................................................. 37
   Positive Emotions ................................................................................................................. 38
   Global Outcomes of Positive Emotions ................................................................................ 38
   Positive Emotions and Creating Art ...................................................................................... 39
Promoting Health within the Context of Chronic Illness: Art as Intervention ............................ 40
   Health Promotion: A CSS and Unitary-Transformative Perspective .................................... 41
   Art as a Health Promotion Modality ..................................................................................... 42
   Art as Intervention: Knowledge Gaps ................................................................................... 44
Intervention Theory: An Organizing Framework ......................................................................... 46
Specific Research Aims ............................................................................................................ 47
Significance .............................................................................................................................. 48
Conclusion ............................................................................................................................... 49

CHAPTER 2: REVIEW OF THE LITERATURE ........................................................................ 50
Health Promotion and Healing in Chronic Illness .................................................................... 50
Art as a Healing Intervention in Chronic Illness ....................................................................... 52
   Art as Intervention: Promoting Health through Art .............................................................. 53
      Structure ............................................................................................................................. 53
      Patient characteristics ...................................................................................................... 53
## TABLE OF CONTENTS - Continued

### CHAPTER 4: STUDY PARTICIPANTS
- Sample Description .................................................................................................................. 95
- Representative Participants ......................................................................................................... 97
  - Participant 11 .......................................................................................................................... 97
  - Participant 26 .......................................................................................................................... 105
  - Participant 15 .......................................................................................................................... 112
  - Participant 64 .......................................................................................................................... 118
  - Participant 42 .......................................................................................................................... 124
  - Participant 88 .......................................................................................................................... 130
- Summary ....................................................................................................................................... 135

### CHAPTER 5: RESULTS
- Characteristics of Participants .................................................................................................... 136
  - Illness Experience ....................................................................................................................... 137
    - Physical aspects of the illness experience. .............................................................................. 140
      - Symptoms. ............................................................................................................................. 140
      - Exemplars of symptoms. ........................................................................................................ 141
        - The effect of diagnosis on symptom experience. ................................................................. 142
        - Exemplars of the effect of diagnosis on symptom experience. ........................................... 142
      - Treatment issues ...................................................................................................................... 143
        - Exemplars of treatment issues. ............................................................................................ 144
          - The effect of diagnosis on treatment issues. ....................................................................... 144
          - Exemplars of the effect of diagnosis on treatment issues. ................................................... 145
  - Mental Aspects of the Illness Experience ..................................................................................... 145
    - Exemplars of mental aspects of illness experience. ............................................................... 146
      - The effect of diagnosis on illness obsession ........................................................................ 146
      - Exemplars of the effect of diagnosis on illness obsession .................................................... 147
  - Emotional Aspects of the Illness Experience .............................................................................. 147
    - Exemplars of emotional aspects of the illness experience. .................................................... 148
      - The effect of diagnosis on emotional aspects of the illness experience. ............................. 148
        - Exemplars of effect of diagnosis on emotional aspects of the illness experience. ............ 149
  - Social Aspects of the Illness Experience .................................................................................... 149
    - Exemplars of social aspects of the illness experience. ........................................................... 150
      - The effect of diagnosis on social aspects of the illness experience ..................................... 151
      - Exemplars of the effect of diagnosis on social experience ................................................... 151
  - Spiritual Aspects of the Illness Experience .................................................................................. 152
    - Exemplars of spiritual aspects of the illness experience ........................................................ 152
      - The effect of diagnosis on spiritual illness experience ......................................................... 152
      - Exemplars of the effect of diagnosis on spiritual experience ............................................... 153
- Art Experience .............................................................................................................................. 153
### TABLE OF CONTENTS - Continued

- Exemplars of art experience level .......................................................... 154
  - The relationship of diagnosis and art experience .................................. 155
    - Exemplars of the relationship of diagnosis and spiritual experience .......... 155
- Art Attitude ................................................................. 156
  - Exemplars of art attitudes .................................................................. 156
    - The relationship of art attitude and art experience .......................... 157
      - Exemplars of relationship of art experience and art attitude ............ 157
- Summary ................................................................. 158
- Characteristics of the Intervention Facilitator ........................................... 159
- Facilitator Accessibility ................................................................. 161
  - Exemplars of facilitator accessibility .................................................. 162
    - The relationship of art experience and facilitator accessibility .......... 162
      - Exemplars of the relationship of facilitator accessibility and art experience level .......................................................... 162
- Demeanor ................................................................. 163
  - Exemplars of facilitator demeanor ...................................................... 163
    - The relationship of art experience and facilitator demeanor ............ 164
      - Exemplars of the association of facilitator demeanor and art experience level .......................................................... 164
- Instruction ................................................................. 165
  - Exemplars of facilitator instruction ..................................................... 165
    - The relationship of art experience and facilitator instruction .......... 166
      - Exemplars of the relationship of art experience level and facilitator instruction .......................................................... 166
- Summary ................................................................. 167
- Characteristics of Context ................................................................. 168
- With Whom Art Created ................................................................. 169
  - With whom art created: Solitary ...................................................... 169
    - Exemplars of with whom art created: solitary ................................ 170
      - The relationship of art experience and with whom: solitary .......... 170
        - Exemplars of the relationship of art experience and with whom: solitary .......................................................... 171
  - With whom art created: Group ...................................................... 171
    - Exemplars of with whom art created: group ................................ 171
      - The relationship of art experience and with whom art created: group .......................................................... 172
        - Exemplars of the relationship of art experience and with whom: group .......................................................... 172
- Environment for Art Creation ................................................................. 173
  - Exemplars of environment for art creation ........................................ 174
- Summary ................................................................. 174
TABLE OF CONTENTS - Continued

Components and Dose .............................................................................................................................................. 175
Components ............................................................................................................................................................ 176
Component: Color. .................................................................................................................................................. 176
  Exemplars of component: color. .......................................................................................................................... 178
    The effect of diagnosis on use of color ................................................................................................................ 179
    Exemplars of diagnosis and color ....................................................................................................................... 179
Component: Content. .............................................................................................................................................. 180
  Exemplars of component: content. ........................................................................................................................ 181
    The effect of diagnosis on component: content .................................................................................................. 182
    Exemplars of diagnosis and component: content .............................................................................................. 182
Component: Material manipulation. ......................................................................................................................... 183
  Exemplars of material manipulation. .................................................................................................................. 184
    The relationship between art experience and component: material manipulation. ...................................... 184
    Exemplars of relationship between art experience and component: material manipulation. ....................... 185
Dose .......................................................................................................................................................................... 185
  Exemplars of dose. .............................................................................................................................................. 186
    The effect of art experience on dose. .................................................................................................................. 187
    Exemplars of the effect of art experience on dose. ......................................................................................... 187
Summary ................................................................................................................................................................. 187
Enactment and Adherence ...................................................................................................................................... 188
Enactment Encouragement .................................................................................................................................... 189
  Exemplars of enactment encouragement ............................................................................................................ 190
    The relationship of art experience and enactment encouragement ... 191
    Exemplars of the effect of art experience on enactment encouragement ..................................................... 191
Enactment Discouragement ................................................................................................................................. 192
  Exemplars of enactment discouragement ......................................................................................................... 192
    The effect of art experience on enactment discouragement. ........................................................................ 193
    Exemplars of the effect of art experience on enactment discouragement .................................................... 193
Adherence Encouragement ...................................................................................................................................... 194
  Exemplars of adherence encouragement ............................................................................................................ 194
    The relationship of art experience with adherence encouragement ... 194
    Exemplars of the effect of art experience on adherence .............................................................................. 195
Adherence Discouragement ................................................................................................................................. 196
  Exemplars of adherence discouragement ........................................................................................................ 196
    The effect of art experience level on adherence discouragement. ............................................................... 197
    Exemplars of the effect of art experience on adherence discouragement .................................................... 197
Summary ................................................................................................................................................................. 197
TABLE OF CONTENTS - Continued

Immediate Outcomes ........................................................................................................ 198
Mental Aspects of Immediate Outcomes ........................................................................ 200
Exemplars of mental aspects of immediate outcomes ................................................. 202
  *The effect of art experience on mental aspects of immediate outcomes.* ................... 202
  Exemplars of the effect of art experience on mental aspects of immediate outcomes. .... 202
  *The relationship between material manipulation and mental aspects of immediate outcomes.* ......................................................... 203
  Exemplar of relationship between material manipulation and mental aspects of immediate outcomes. ......................................... 204
Emotional Aspects of Immediate Outcomes .................................................................... 205
Exemplars of emotional aspects of immediate outcomes ............................................. 207
  *The effect of art experience on emotional aspects of immediate outcomes.* ............. 207
  Exemplars of the effect of art experience on emotional aspects of immediate outcomes. 207
  *The relationship of color and emotional aspects of immediate outcomes.* ............... 208
  Exemplar of the relationship of color and emotional aspects of immediate outcomes. .... 208
Physical Aspects of Immediate Outcomes ..................................................................... 209
Exemplars of physical aspects of immediate outcomes ................................................. 210
  *The effect of diagnosis on physical aspects of immediate outcomes.* ......................... 210
  Exemplar of the effect of diagnosis on physical aspects of immediate outcomes. ........... 210
  *The relationship between mental and physical aspects of immediate outcomes.* ......... 211
  Exemplar of the relationship between mental and physical aspects of immediate outcomes. ........................................................................................................................................ 211
Social Aspects of Immediate Outcomes ........................................................................ 212
Exemplars of social aspects of immediate outcomes .................................................... 212
  *The effect of diagnosis on social aspects of immediate outcomes.* ......................... 213
  Exemplars of the effect of diagnosis on social aspects of immediate outcomes. .......... 213
Spiritual Aspects of Immediate Outcomes ...................................................................... 214
Exemplars of immediate spiritual outcomes ................................................................. 215
  *The effect of art experience on spiritual aspects of immediate outcomes.* ................. 215
  Exemplars of art experience and spiritual aspects of immediate outcomes. .................. 216
Summary ........................................................................................................................... 217
Intermediate Outcomes .................................................................................................................. 218
Aspects of the Piece of Art .............................................................................................................. 220
Exemplars of aspects of the piece of art ......................................................................................... 222
  *The effect of art experience on aspects of the piece of art* ............................................. 223
  Exemplars of the effect of art experience on aspects of the piece of art ........................................ 223
  *The relationship between content and aspects of the piece of art* .................................... 224
  Exemplar of the relationship between content and aspects of the piece of art ....................... 224
Mental Aspects of Intermediate Outcomes .................................................................................... 225
Exemplars of mental aspects of intermediate outcomes ............................................................. 225
  *The effect of art experience on aspects of mental intermediate outcomes* .................... 226
  Exemplars of the effect of art experience on mental aspects of intermediate outcomes ............... 226
  *The relationship between aspects of the piece of art and mental intermediate outcomes* ....... 227
  Exemplar of the relationship between aspects of the piece of art and mental intermediate outcomes .............................................................................................................................. 227
Emotional Aspects of Intermediate Outcomes .............................................................................. 228
Exemplars of intermediate emotional outcomes ............................................................................ 229
  *The effect of art experience on emotional aspects of intermediate outcomes* .................. 229
  Exemplars of the effect of art experience on emotional aspects of intermediate outcomes .......... 230
Social Aspects of Intermediate Outcomes ................................................................................... 230
Exemplars of social aspects of intermediate outcomes ................................................................. 231
  *The effect of art experience on social aspects of intermediate outcomes* ......................... 231
  Exemplars of the effect of art experience on social aspects of intermediate outcomes .............. 232
Summary ........................................................................................................................................... 233
Ultimate Outcomes ....................................................................................................................... 234
Mental Aspects of Ultimate Outcomes .......................................................................................... 235
Exemplars of mental aspects of ultimate outcomes ................................................................. 236
  *The effects of art experience and mental aspects of ultimate outcomes* ....................... 237
  Exemplars of the effects of art experience and mental aspects of ultimate outcomes ............... 237
Mental Aspects of Intermediate and Ultimate Outcomes .......................................................... 238
Exemplar of the mental aspects of intermediate and ultimate outcomes ..................................... 238
TABLE OF CONTENTS - Continued

The relationship between pride and mental aspects of ultimate outcomes. .......................................................................................................................... 239
Exemplar of relationship between pride and mental aspects of ultimate outcomes. ................................................................. 239

Emotional Aspects of Ultimate Outcomes ................................................................................................................................. 240
Exemplars of ultimate emotional outcomes ......................................................................................................................... 240

The effect of art experience on emotional aspects of ultimate outcomes. ................................................................................................. 240
Exemplars of the effect of art experience on emotional aspects of ultimate outcomes. ................................................................. 240

Social Aspects of Ultimate Outcomes ................................................................................................................................. 241
Exemplar of social aspects of ultimate outcomes ......................................................................................................................... 241

The relationship between mental and social ultimate outcomes ........................................................................................................ 242
Exemplars of the relationship between mental and social ultimate outcomes. ......................................................................................... 242

The effect of art experience and social aspects of ultimate outcomes ................................................................................................. 243
Exemplars of the effect of art experience and social aspects of ultimate outcomes. ......................................................................................... 243

Spiritual Aspects of Ultimate Outcomes ................................................................................................................................. 244
Exemplars of spiritual aspects of ultimate outcomes ......................................................................................................................... 244

The effect of art experience on ultimate spiritual outcomes ........................................................................................................ 244
Exemplars of the effect of art experience on ultimate spiritual outcomes. ......................................................................................... 245

The relationship between immediate and ultimate spiritual outcomes. ................................................................................................. 245
Exemplar of relationship between immediate and ultimate spiritual outcomes. ......................................................................................... 246

Summary ......................................................................................................................................................................................... 246
Conclusion ......................................................................................................................................................................................... 247

CHAPTER 6: DISCUSSION ................................................................................................................................................................. 248

Introduction ......................................................................................................................................................................................... 248

Summary ......................................................................................................................................................................................... 250

Discussion of Results ......................................................................................................................................................................... 250

Structure ......................................................................................................................................................................................... 251

Characteristics of the participants. ......................................................................................................................................................... 251
Characteristics of the facilitators. ......................................................................................................................................................... 252
Characteristics of context ................................................................................................................................................................. 253

Summary ......................................................................................................................................................................................... 254

Process ......................................................................................................................................................................................... 254

Components .................................................................................................................................................................................. 254

Dose ......................................................................................................................................................................................... 255
TABLE OF CONTENTS - Continued

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enactment</td>
<td>255</td>
</tr>
<tr>
<td>Adherence</td>
<td>256</td>
</tr>
<tr>
<td>Summary</td>
<td>257</td>
</tr>
<tr>
<td>Outcomes</td>
<td>258</td>
</tr>
<tr>
<td>Immediate outcomes</td>
<td>258</td>
</tr>
<tr>
<td>Intermediate outcomes</td>
<td>260</td>
</tr>
<tr>
<td>Ultimate outcomes</td>
<td>260</td>
</tr>
<tr>
<td>Summary</td>
<td>262</td>
</tr>
<tr>
<td>Study Implications</td>
<td>262</td>
</tr>
<tr>
<td>Practice</td>
<td>263</td>
</tr>
<tr>
<td>Summary</td>
<td>266</td>
</tr>
<tr>
<td>Research</td>
<td>267</td>
</tr>
<tr>
<td>Characteristics of the participants.</td>
<td>267</td>
</tr>
<tr>
<td>Characteristics of the facilitators.</td>
<td>268</td>
</tr>
<tr>
<td>Characteristics of the context.</td>
<td>269</td>
</tr>
<tr>
<td>Components</td>
<td>270</td>
</tr>
<tr>
<td>Dose</td>
<td>271</td>
</tr>
<tr>
<td>Enactment</td>
<td>272</td>
</tr>
<tr>
<td>Adherence</td>
<td>272</td>
</tr>
<tr>
<td>Immediate outcomes</td>
<td>273</td>
</tr>
<tr>
<td>Intermediate outcomes</td>
<td>273</td>
</tr>
<tr>
<td>Ultimate outcomes</td>
<td>274</td>
</tr>
<tr>
<td>Summary</td>
<td>275</td>
</tr>
<tr>
<td>Theory</td>
<td>275</td>
</tr>
<tr>
<td>Intervention theory</td>
<td>275</td>
</tr>
<tr>
<td>Nursing theory</td>
<td>276</td>
</tr>
<tr>
<td>CSS</td>
<td>278</td>
</tr>
<tr>
<td>Study Limitations</td>
<td>278</td>
</tr>
<tr>
<td>Research Program Next Steps</td>
<td>279</td>
</tr>
<tr>
<td>Conclusions</td>
<td>281</td>
</tr>
</tbody>
</table>

APPENDIX A: THEORETICAL LITERATURE .................................................. 282
APPENDIX B: PROGRAM REVIEW LITERATURE ............................................. 288
APPENDIX C: RESEARCH LITERATURE ....................................................... 291
APPENDIX D: EMAIL TO PROFESSIONAL AND PERSONAL CONTACTS ........................ 296
APPENDIX E: SAMPLE RECRUITMENT ADVERTISEMENTS .................................. 298
APPENDIX F: SCREENING SCRIPT ............................................................. 300
APPENDIX G: EXPLANATION OF THE RESEARCH ......................................... 303
APPENDIX H: THE UNIVERSITY OF ARIZONA RESEARCH DISCLOSURE FORM ..... 305
APPENDIX I: ART DATA COLLECTION FORM ................................................................. 309
APPENDIX J: INTERVIEW GUIDE .................................................................................. 311
APPENDIX K: CODE BOOK .......................................................................................... 314

REFERENCES .................................................................................................................. 320
LIST OF FIGURES

FIGURE 1. Positivity Model .................................................................................................. 39
FIGURE 2. Intervention Theory Model .............................................................................. 46
FIGURE 3. Participant 11 Art ......................................................................................... 97
FIGURE 4. Participant 26 Art ......................................................................................... 105
FIGURE 5. Participant 15 Art ......................................................................................... 112
FIGURE 6. Participant 64 Art ......................................................................................... 118
FIGURE 7. Participant 42 Art ......................................................................................... 124
FIGURE 8. Participant 88 Art ......................................................................................... 130
FIGURE 9. Characteristics of Participants ....................................................................... 139
FIGURE 10. Characteristics of the Intervention Facilitator ............................................ 161
FIGURE 11. Characteristics of Context ........................................................................... 169
FIGURE 12. Components and Dose .............................................................................. 176
FIGURE 13. Color For Meaning – Participant 72 .......................................................... 177
FIGURE 14. Color to Elicit Emotion – Participant 42 .................................................... 177
FIGURE 15. Color for Enjoyment – Participant 22 ........................................................ 178
FIGURE 16. Illness Based Content – Participant 78 ....................................................... 180
FIGURE 17. Non-Illness Based Content – Participant 82 ............................................... 181
FIGURE 18. Layering – Participant 54 ........................................................................... 183
FIGURE 19. Texturing – Participant 64 .......................................................................... 184
FIGURE 20. Enactment and Adherence ......................................................................... 189
FIGURE 21. Immediate Outcomes ................................................................................ 200
FIGURE 22. Immediate Mental Outcome – Interest – Participant 28 .............................. 201
FIGURE 23. Material Manipulation and Mental Aspects of Immediate Outcomes: Participant 15 ......................................................................................................................................................................................... 205
FIGURE 24. Immediate Emotional Outcome – Enjoyment – Participant 88 ................. 206
FIGURE 25. Immediate Spiritual Outcome – Participant 32 .......................................... 216
FIGURE 26. Intermediate Outcomes .............................................................................. 219
FIGURE 27. Representation of Self – Participant 99 ........................................................ 220
FIGURE 28. Representation of Values – Participant 11 .................................................... 221
FIGURE 29. Representation of Transformation – Participant 27 ..................................... 222
LIST OF FIGURES - Continued

FIGURE 30. Ultimate Outcomes ........................................................................................................... 235
FIGURE 31. Intervention Theory Model .............................................................................................. 249
LIST OF TABLES

TABLE 1. Concepts of Unitary Transformative Nurse Theorists ........................................... 35
TABLE 2. Sample Description .................................................................................................. 96
TABLE 3. Illness Experience – Physical Symptoms ................................................................. 141
TABLE 4. Physical Limitations and Type of Illness ................................................................. 142
TABLE 5. Illness Experience – Physical Treatment Issues ..................................................... 143
TABLE 6. Diagnosis and Treatment Issues ............................................................................. 144
TABLE 7. Illness Experience – Mental ..................................................................................... 145
TABLE 8. Diagnosis and Illness Obsession ........................................................................... 146
TABLE 9. Emotional Aspects of the Illness Experience ......................................................... 147
TABLE 10. Illness Emotional Experience and Type of Illness ............................................. 148
TABLE 11. Illness Experience – Social .................................................................................. 150
TABLE 12. Diagnosis and Social Aspects of the Illness Experience ..................................... 151
TABLE 13. Illness Experience – Spiritual ............................................................................. 152
TABLE 14. Diagnosis and Spiritual Illness Experience ........................................................ 153
TABLE 15. Art Experience .................................................................................................... 154
TABLE 16. Diagnosis and Art Experience ............................................................................. 155
TABLE 17. Art Attitudes ......................................................................................................... 156
TABLE 18. Art Experience and Art Attitude ......................................................................... 157
TABLE 19. Facilitator Accessibility ...................................................................................... 161
TABLE 20. Facilitator Accessibility and Art Experience Level ............................................ 162
TABLE 21. Facilitator Demeanor .......................................................................................... 163
TABLE 22. Facilitator Demeanor and Art Experience .......................................................... 164
TABLE 23. Facilitator Instruction ........................................................................................ 165
TABLE 24. Art Experience and Facilitator Instruction ........................................................ 166
TABLE 25. With Whom Art Created: Solitary ..................................................................... 170
TABLE 26. Art Experience and With Whom: Solitary .......................................................... 170
TABLE 27 With Whom Art Created: Group ........................................................................ 171
TABLE 28. Art Experience and With Whom Art Created: Group ...................................... 172
TABLE 29. Environment for Art Creation ............................................................................. 173
TABLE 30. Component: Color ............................................................................................. 177
LIST OF TABLES - Continued

TABLE 31. Diagnosis and Component: Color ................................................................. 179
TABLE 32. Content ......................................................................................................... 180
TABLE 33. Diagnosis and Component: Content .............................................................. 182
TABLE 34. Material Manipulation ................................................................................ 183
TABLE 35. Art Experience Level and Material Manipulation ............................................ 185
TABLE 36. Dose ................................................................................................................ 186
TABLE 37. Art Experience and Dose ................................................................................. 187
TABLE 38. Enactment Encouragement .......................................................................... 190
TABLE 39. Art Experience Level and Enactment Encouragement ..................................... 191
TABLE 40. Enactment Discouragement .......................................................................... 192
TABLE 41. Art Experience and Enactment Discouragement ............................................. 193
TABLE 42. Adherence Encouragement ........................................................................... 194
TABLE 43. Art Experience and Adherence Encouragement ............................................. 195
TABLE 44. Adherence Discouragement .......................................................................... 196
TABLE 45. Art Experience and Adherence Discouragement ............................................. 197
TABLE 46. Mental Aspects of Immediate Outcomes ......................................................... 201
TABLE 47. Art Experience and Immediate Mental Outcomes .......................................... 202
TABLE 48. Material Manipulation and Mental Aspects of Immediate Outcomes .................. 204
TABLE 49. Emotional Aspects of Immediate Outcomes .................................................. 206
TABLE 50. Art Experience and Immediate Emotional Outcomes ....................................... 207
TABLE 51. Color and Emotional Aspects of Immediate Outcomes .................................... 208
TABLE 52. Physical Aspects of Immediate Outcomes ....................................................... 209
TABLE 53. Diagnosis and Immediate Physical Outcomes ............................................... 210
TABLE 54. Immediate Mental Outcomes and Immediate Physical Outcomes ..................... 211
TABLE 55. Social Aspects of Immediate Outcomes ......................................................... 212
TABLE 56. Diagnosis and Immediate Social Outcomes .................................................... 213
TABLE 57. Immediate Outcome – Spiritual ..................................................................... 214
TABLE 58. Art Experience and Spiritual Aspects of Immediate Outcomes .......................... 215
TABLE 59. Aspects of the Piece of Art ............................................................................. 220
TABLE 60. Art Experience Level and Aspects of the Piece of Art ....................................... 223
LIST OF TABLES - Continued

TABLE 61. Content and Aspects of the Piece of Art ................................................................. 224
TABLE 62. Intermediate Outcomes – Mental ............................................................................. 225
TABLE 63. Art Experience Level and Intermediate Mental Outcomes ...................................... 226
TABLE 64. Aspects of the Piece of Art and Mental Intermediate Outcomes .......................... 227
TABLE 65. Intermediate Outcomes – Emotional ....................................................................... 229
TABLE 66. Art Experience and Intermediate Emotional Outcomes ........................................ 229
TABLE 67. Social Aspects of Intermediate Outcomes .............................................................. 231
TABLE 68. Art Experience and Social Aspects of Intermediate Outcomes ............................. 232
TABLE 69. Mental Aspects of Ultimate Outcomes ..................................................................... 236
TABLE 70. Art Experience Level and Ultimate Mental Outcomes ........................................... 237
TABLE 71. Intermediate Mental Outcomes and Ultimate Mental Outcomes .......................... 238
TABLE 72. Pride and Ultimate Mental Outcomes ...................................................................... 239
TABLE 73. Emotional Aspects of Ultimate Outcomes ............................................................... 240
TABLE 74. Art Experience and Emotional Aspects of Ultimate Outcomes ............................ 240
TABLE 75. Social Aspects of Ultimate Outcomes ..................................................................... 241
TABLE 76. Mental and Social Ultimate Outcomes .................................................................... 242
TABLE 77. Art Experience and Social Aspects of Ultimate Outcomes .................................... 243
TABLE 78. Spiritual Aspects of Ultimate Outcomes ................................................................. 244
TABLE 79. Art Experience and Spiritual Aspects of Ultimate Outcomes ................................ 245
TABLE 80. Relationship Between Immediate and Ultimate Spiritual Outcomes .................. 245
ABSTRACT

Chronic illness is endemic in the United States. Though people with chronic illnesses will not be cured, interventions can improve their well-being. Creating art as an intervention has been shown to assist people with chronic illnesses to improve well-being. Though creating art as a health promotion intervention is widespread it has not been well studied and the structure, process and outcomes of the intervention are not well understood.

The purpose of this study was to identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness. This study developed knowledge that will assist practitioners who use this complex intervention and researchers seeking to test its effectiveness in health promotion and healing in a chronically ill population.

A qualitative descriptive design was used to explore art as a healing intervention. Photographs of art created by participants were observed, and participants were interviewed to collect data on the structure, process and outcomes of art as a healing intervention. The content and descriptive analysis of the data are used to describe the components of art as an intervention as well as the modifiers of the intervention process and the relationship of the components to each other to allow further research to be appropriately focused.

Creating art is an intervention that works with a whole person to provide an opportunity for emergent change through disrupting old patterns, creating movement, and providing the opportunity for the participant to adopt new healthier patterns for living with chronic illness. Creating art does not have a predictable outcome, but rather has patient specific outcomes dependent on the patient’s particular needs and individual self-organization.
This study contributed to knowledge about creating art as a healing intervention by exploring various intervention components that must be explicated prior to development of program initiatives in practice and conducting systematic studies about the effectiveness of this intervention. The results of this study provide a foundation for a research career that both furthers the use of art as a healing intervention and further develops intervention theory to include complex evaluation methods.
CHAPTER 1: INTRODUCTION

It is estimated that more than 87% of all deaths in the United States (US) are from chronic illness (World Health Organization [WHO], 2012). In addition, chronic illness causes major limitations to more than 25 million people each year in the US (Center for Disease Control [CDC], 2012). With funding from the American Recovery Act, the US is working to prevent chronic disease and to promote well-being in all people, including people with chronic illness (CDC, 2012).

Chronic illness affects health-related quality of life (HRQOL) (Blinderman, et al. 2009; CDC, 2012) but does not preclude well-being (Parslow, Lewis & Nay, 2011). Well-being is the subjective assessment of one’s own health experiences (Blinderman, et al. 2009; CDC, 2012; Parslow, Lewis & Nay, 2011). The experience of chronic illness varies independent of the objective assessment of symptoms (Delgado, 2007). For some people, a symptom such as fatigue or breathlessness may greatly reduce their quality of life, while for others the same symptom may simply be an annoyance that must be managed. Well-being correlates with the perception of symptoms and social behavior (Blinderman, et al. 2009).

Creating art is a health promotion and healing modality that assists people to modify their perceptions of their situation and positively transform the meaning and threat of the illness experience (Haltiwinger, Rojo, & Funk, 2012; Marvin, 2011; McNiff, 1992; Monti, et al. 2006; Rockwood Lane, 2005a; Rockwood Lane, 2005b; Rockwood Lane & Graham-Pole, 1994; Watson, 1999). In addition, creating art as part of a group builds relationships between participants and strengthens participants’ social networks (Collie & Kante, 2011; Dissanayake, 1995; Dufrene & Coleman, 1994; Grey, 2001; Haltiwinger, Rojo, & Funk, 2012; McNiff, 1992;

A major focus for nurses working with chronically ill populations is support of well-being, improved HRQOL, and decreased symptom distress (Blinderman, et al. 2009; Delgado, 2007; Parslow, Lewis & Nay, 2011). Many interventions have been identified that ameliorate the burden of living with chronic illness and improve the quality of life (Blinderman, et al. 2009; Delgado, 2007; Parslow, Lewis & Nay, 2011). Art is one of these interventions and has been identified as a healing modality that promotes positive transformation of people’s perceptions and behaviors, thus improving well-being and promoting healing and health (Collie & Kante, 2011; Haltiwinger, Rojo & Funk, 2012; Marxin, 2011; Monti, et al. 2006; Rockwood Lane, 2005a; Rockwood Lane, 2005b; Stuckey & Nobel, 2010; Visser, & Op’t Hoog, 2008; Wood, Molassiotis & Payne, 2011). The purpose of this study was to identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness. This study developed knowledge that will assist practitioners who use this complex intervention and researchers seeking to test its effectiveness in health promotion and healing in a chronically ill population.

Definitions

Chronic illness, health promotion and art as healing are concepts relevant to this study and will be described here.

Chronic Illness

Chronic illness may be defined as an illness with a long and slow progression (WHO, 2012). The progression of chronic illness can be understood as a dynamic trajectory (Corbin, 1991). A person with chronic illness will experience different stages of illness including: crisis,
acute, stable, comeback, unstable, downward and dying (Corbin, 1991). The stages are complex
to multiple influences on illness and do not occur in a predictable linear manner, but
rather reflect the dynamic nature of chronic illness (Burton, 2000; Corbin, 1991; Halcomb &
Davidson, 2005). Therefore for this study chronic illness will be defined as an illness with a long
duration and slow dynamic progression.

Health Promotion

Health promotion in chronic illness requires comprehensive intervention (Corbin, 1991). Though symptom management is an important part of health promotion in chronic illness, chronic illness can negatively affect quality of life even when symptoms are controlled and methods that go beyond symptom management are needed (Blinderman, et al. 2009). Health promotion in chronic illness includes assisting patients and families to manage the trajectory of the disease and promote quality of life (Corbin, 1991; Pender, Murdaugh & Parsons, 2011). The highest quality of life is flourishing, and all people, including those with chronic illness, have the potential to flourish.

Human flourishing is the highest level of resilience. Resilience can be understood as nested levels of positive response to a challenge or a trauma. Each level contains the previous levels. The most basic response level is recovery to baseline (Community and Regional Resilience Initiative, 2008; Cutter, et al. 2008; Glass, Dainty & Gibb, 2008; Göran Mäller & Zhong Li, 2010; Miller & Wooster, 2010; Shin, et al. 2010; Zacheis & Doran, 2009). A higher level of resilience is includes building protective mechanisms to prevent future challenges from becoming crises (Burack, et al. 2007; Hegney, et al. 2008; Houston, 2010; Jones, 2007; Lodegar & Fleming, 2008; Magis, 2010; Maguire & Cartwright, 2008; Vanderbilt-Adriance & Shaw, 2008). Resilience can also be conceptualized as growth in response to challenges or trauma
(Arizona State University Resilience Group, 2010; Community Resilience Project Team, 2000; Corley, 2010; Cutter, et al. 2008; Magis, 2010; Phipps, 2007; Walsh, 2007). Finally, resilience can be seen as flourishing, or positive transformation in the context of challenge (Fredrickson, 2004). Transformation is becoming something fundamentally different than before (Corley, 2010; Magis, 2010; Maguire & Cartwright, 2008). Flourishing is a creative response demonstrated by unexpected growth and generative change that may be out of proportion to the stressor or intervention (Fredrickson, 2001, 2004; Fredrickson & Losada, 2005). Flourishing is a leap in development rather than orderly growth to predictable levels. Health promotion in chronic illness should include interventions to assist the patient to positively change their response to the most resilient or flourishing response possible.

Creating Art as Intervention

Art is an intervention that can facilitate human flourishing. Art is both the process of creation and interaction with the product of art (Thompson, 2009). Interaction with the product of art of others can be healing through increasing ones’ openness to a wide variety of responses to life challenges (McNiff, 1992; Panter, 2009; Rancour & Barrett, 2011; Thompson, 2009). The healing aspect of interacting with the art of others is the driving force behind the creation of healing spaces which includes architecture and the display of art (Watson, 1999). While engagement with the art of others can be healing, it lacks the healing aspects of the creative process and is less deeply personal than engagement with one’s own art.

Creating one’s own art is more healing than interacting with the art of others because the creative process has aspects of expression, attention to here and now, making the ordinary special, and non-mediated genuine observation as well as immediate outcomes of reactions and enactment. An exploration of how these aspects are healing will be presented in chapter two.
Further healing occurs when the artist connects to self and others and engages with their own product of art to create meaning and transform perceptions and behaviors. The art a person creates is the symbolic externalization of internal processes. When internal processes are made evident and separate from the artist, it allows the artist to engage with the content and discover expressions, connections and facets of self and situation that were not apparent with rational thought (Dissanyake, 1995; McNiff, 1992; Tinnin, 1994). Art is also used to represent a vision of what might be (Marxin, 2011; Watson, 1999). Art of what might be is a concrete expression of hopes and dreams, and an attractor for a different way of being. Unlike engagement with the art of others, engagement with one’s own art is deeply personal and the outcomes are person specific. The intervention of interest for this study is the creation and engagement with one’s own art.

**Systems Thinking Informing Art for Healing**

The use of creating art as a healing intervention has concepts that correlate with the conceptual framework of complex systems science (CSS). Therefore, understanding CSS will aid in understanding art as an intervention for people with chronic illness. A general overview of CSS will be presented here, followed by an exploration of consistent nursing theories and an explanation of how creating art is an intervention that fits within those theoretical frameworks.

**Complex Systems Science**

CSS is based in von Bertalanffy’s work (Gaustello, Koopmans & Pincus, 2009). In the beginning of the twentieth century, von Bertalanffy developed a system theory of life for biology, also called the organismic theory (Drack, 2009). Von Bertalanffy’s theory arose from his dissatisfaction in mechanistic and positivistic theories of biology. He posited that wholeness is the primary attribute of life. Therefore observing events separately will not lead to
understanding of the whole because the whole is greater than the sum of the parts and focused on what is created by the relationships between the parts (Drack, 2009). Biological wholes have dynamic interactions that give rise to increasing order and increasing complexity (Drack, 2009). Part of the complexity of systems rests in the supposition that systems are open and dynamic systems in continuous relationship with their environment (Drack, 2009). The dynamism of a biological system creates a flux equilibrium in which organisms reach a homeodynamic relationship between assimilation and dissimilation that allows for work (Drack, 2009). The systems approach has evolved over time to a set of theories that is now known as complex systems science (CSS) which can be applied to many disciplines, including the health sciences (Gaustello, Koopmans & Pincus, 2009).

In CSS, people can be understood as complex adaptive systems (CAS) (Koithan, et al. 2012). Basic tenets of CAS propose that people are: a) whole systems, that b) exhibit changes over time, and c) that are characterized by emergence, connectivity and mutual causation, in which d) emergence is a function of the whole system and not predictable by the properties of the parts, and is e) driven by self-organization, in which f) stability and flexibility are critically paired (Koithan, et al. 2012). A brief overview of the concepts is presented here.

**Whole systems.**

CSS is based on an observation that systems are integrated wholes that are formed by relationships between components (Koithan, et al. 2012). As such, understanding each part separately will not help to understand how the whole works since each piece is so intimately interconnected and interrelated and the function of the whole is based on the inherent relationships that occur within that whole (Koithan, et al. 2012; Laszlo, 1996; Schwartz & Russek, 1997). For example, though each section of the heart is capable of initiating a beat and
contracting on its own, the heart cannot be understood by removing pieces for examination. A system cannot be taken apart to understand the whole because the relationship between parts creates dynamic and essential information that defines the whole (Bar-yam, 2003).

Nor can the parts be understood without an understanding of the whole since each CAS is part of a nested system (Koithan, et al. 2012). For example, the cells in the heart are part of the heart and the heart is part of the body, the body is part of the person, the person is part of their community, an onward. Understanding just part of the system does not lead to understanding of the whole. Though nurses may limit their focus to examine a specific aspect of human health, it should be understood that the phenomenon of study exists as a larger whole (Ritenbaugh, et al. 2003). Any intervention in a CAS spreads through the web of connectedness to affect the whole system (Koithan, et al. 2012). Therefore interventions to promote health in people with chronic illness will affect the whole person as well as their environment.

**Change over time.**

Change is inherent in CAS and occurs over time in an unpredictable manner (Koithan, et al. 2012; Verhoef, et al. 2012). The inherent change and movement in the system is an opportunity for nurses to work with patients to encourage changes to healthier patterns. CAS continually moves between attractors and repellors (Koithan, et al. 2012). Bifurcation points in the attractors are points where abrupt change in patterns can take place to new and more adaptive patterns (Koithan, et al. 2012). Nurses can work with chronically ill people to create new attractors that are introduced at critical junctures (or bifurcation points) and encourage change in experiences or health/illness patterning. This type of change has been equated to health promotion when the change is to healthier more adaptive, flexible and complex patterns (Koithan, 1997; Parse, 2012).
Change characteristics.

Change in a CAS is characterized by emergence, connectivity and mutual causation (Koithan, et al. 2012). Because a CAS is a whole system of interconnected parts, change is non-linear as opposed to the linear models of conventional science. Linear models, frequently used in health-related research, have been used to explain the relationship of phenomena or variables one to another (i.e., as X increases by a factor of 1, Y will increase by a factor of .85). This model is then used to predict where other Y values will lie along the line. Linear models assume that the effect of X on Y remains constant (Field, 2009). Non-linear systems exhibit changes that are disproportionate to the size of the intervention; small inputs may have large effects and large inputs may have small effects (Koithan, et al. 2012). Changes may be caused by an abrupt change to a new pattern at a bifurcation point and may be initiated by small inputs when the system is receptive to change (Koithan, et al. 2012).

Many human health issues are examined using a linear model. However, human behavior does not conform to linear models. For example: linear models have been used to develop programs to encourage smoking cessation. In the past, it was thought that education on the effects of smoking would encourage people to quit. Millions of dollars were spent on programs that were guided by the thought that education was directly and linearly correlated to reduction in smoking (i.e. the more education the bigger the reduction in smoking). These programs often had a low return on investment because increasing the advertisements did not decrease smoking at rates commiserate to the rate of advertising (The Commit Research Group, 1995).

More recent programs for addressing unhealthy habits focus on small changes to personal behavior that can precipitate a jump or leap of change (Ewart, 2009). Smokers may think about changing but take no action, but then a small input such as health care worker intervening at a
time when the person is receptive (i.e., at a critical juncture point), can precipitate a sudden non-linear change in behavior. The input is disproportionate to the change and arises from the interactions between the multiple parts of the system (Koithan, et al. 2012). Small interventions can sometimes have a large effect, and large interventions can sometimes have a small effect due to the multiple feedback loops and circular causality of CAS (Koithan, et al. 2012).

**Emergence.**

In addition to the unpredictability of the size of the change in proportion to the size of the intervention, CAS is unpredictable in the type of change. Change emerges from the multiple interactions of the nested wholes which mutually act on each other (Koithan, et al. 2012). Change is unpredictable because it is different than a summation of the modifications to the parts because of the multiple relationships between the parts (Bar-yam, 2003; Koithan, et al. 2012). Living complex systems involve relationships that are continuously emerging, changing and being shaped by the information that is self-generated by their evolutionary nature (Bell & Koithan, 2006). Therefore multiple outcomes are possible from any intervention (Verhoef, et al. 2012). The pattern that emerges is driven by self-organization.

**Self-organization.**

Complex systems become more complex over time since complexity can decrease entropy and increase efficiency (Guastello & Liebovitch, 2009, Bell & Koithan, 2006; Koithan, et al. 2012). Increasing complexity is not a directed movement, but one that is self-sustaining and arises from information generated by the relationship between the organism and its environment (Koithan, et al. 2012). Developing greater complexity, organisms decrease energy expenditure, preserving self and improving overall functionality (Koithan, et al. 2012). For example: a patient with a chronic illness who has a simple social network and a simple understanding of her disease
is not efficient in adapting to her illness. She has few people to rely on for material and emotional assistance and has a limited capacity to be creative in response to challenges. Increasing the complexity of her social network and understanding of her disease will enable her to respond more efficiently and with a greater variety of responses than before. Increasing complexity improves the capacity to respond to the stressor.

**Stability and flexibility.**

In a CAS, tension exists between stability and flexibility. Stability is the ability to maintain a particular pattern and flexibility is the ability to change the pattern. A CAS needs to be able to be both stable and flexible in order to maintain functionality and adapt to the environment. The goal of health promotion is to assist the patient to use the flexibility to disrupt or unstick from the unhealthy pattern and then to adopt a more stable pattern around a new healthier attractor (Koithan, et al. 2012). During transition the system is more unstable, and it is the role of the nurse to assist the patient to adopt the new healthier pattern (Howerter, et al. 2012). Ineffective treatment leaves a person in the unstable state, or more strongly attracted to unhealthy pattern.

For example, persons with chronic illness can establish a pattern of being angry about their diagnosis and behave in ways centered on anger rather than self-care. They might limit activities and interactions with other people. Effective treatment would assist the patient to unstick from the pattern of anger by introducing alternative ways of being-doing (Parse, 2012), adopting a pattern of re-imaging their illness while finding joy in life. Creating art can become a new attractor that offers the patient a positive pattern which includes finding joy in activity and interacting with others (Haltwinger, Rojo & Funk, 2012). The new pattern is more complex and adaptive for living with a chronic illness, and is therefore healthier.
Summary.

CSS is a framework for understanding how creating art is a modality for health promotion. Creating art is an intervention that works with a whole person to provide an opportunity for emergent change through disrupting old patterns, creating movement, and providing new healthier patterns for living with chronic illness. Creating art does not have a predictable outcome, but rather has patient specific outcomes dependent on the patient’s particular needs and individual self-organization (Koithan, 1994). This study will identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness in order to develop knowledge to assist practitioners who use this complex intervention for health promotion and to assist researchers to appropriately structure further research on art as an intervention.

Nursing’s Theoretical Perspectives

Complexity is the foundation for the unitary-transformative world view, first identified by Newman, Sime and Corcoran-Perry (1991, 2009) as an ontological perspective consistent with nursing (Cowling, 1999; Newman, 1992, 2009). Further, many tenets of CSS are consistent with the tenets of the unitary-transformative perspective (Cowling, 1999; Rosa, 2011). Nursing ontology may be explored through examination of worldviews. Worldviews describe what is real, and nursing worldviews describe what is real in the realm of human health. Worldviews are a way of looking at the world that structure and order reality (Leddy, 2000, 2009). Newman, Sime and Corcoran-Perry (1991, 2009) described three world views consistent with nursing’s theoretical literature: particulate-deterministic, interactive-integrative, and unitary-transformative (Newman, 1992, 2009). The unitary-transformative worldview will be discussed here because it is the most relevant to art as a healing intervention and this research.
The Unitary-Transformative perspective.

In the unitary-transformative worldview, humans and phenomena are unitary and self-organizing fields embedded in unitary and self-organizing fields (Newman, 1992, 2009; Newman, Sime & Corcoran-Perry, 1991, 2009). Parts of the phenomenon cannot be understood separately from the whole pattern; people are much greater than and different from the sum of their parts, and patterns are only understood in their whole relationship with other patterns (Rogers, 1992, 2009).

Nursing theories based in a unitary-transformative worldview guide nurses to help humans to increase complexity and integration and encourage emergent health. Rogers, Parse, Newman and Watson are nurse theorists who developed theories in the unitary-transformative worldview. (Fawcett, 1993, 2009; Giuliano, Tyer-Viola, Palan Lopez, 2005, 2009). Their views of health promotion as well as health promoting activities or interventions that nurses use are particularly relevant in this study and provided a conceptual orientation toward this study focused on creating art as an intervention that promotes health and wellbeing in the context of chronic illness. Nursing theories are based in the concepts of human being, health, the goal of nursing, mode of inquiry and mode of practice, and in the relationships of the concepts (Manhart-Barrett, 2002, 2009). The definition of the concepts by the above nurse theorists are presented in Table 1.
These nursing theories are congruent with CSS. All of the theorist’s state that people are indivisible wholes and Rogers particularly states that people and the environment are interactive; they are an inseparable whole that manifest evolving patterns (Meleis, 2007; Rogers 1992, 2009). While people are whole, they continuously change and flux. The goal of nursing is to assist others during these changes, developing their full human potential (Manhart Barrett, 2002, 2009; Meleis, 2007; Newman, 1992, 2009; Newman, Sime & Corcoran-Perry, 1991, 2009; Parse, 2005, 2009; Parse, 2012; Rogers, 1992, 2009; Watson, 1999). The nurse assists patients through reverently (Parse, 2012) entering into the patient’s pattern and reflecting the patient’s pattern while offering other patterns that may be helpful to the patient (Manhart Barrett, 2002, 2009;
Parse, 2005, 2009; Parse, 2012; Rogers, 1992, 2009; Rosa, 2011; Watson, 1999). The goal is to allow the healthier pattern specific to that patient at that time to emerge (consistent with the CSS concept of attractors) through the self-organization of the patient. Only the patient can change their own pattern for healing, and their pattern is more important than symptoms or physical changes that others could make to the patient (Manhart Barrett, 2002, 2009; Rosa, 2011). In addition, these nursing theorists recognize that humans have the capacity for quantum change; that is change that is unpredictable, complex, and incongruent with the applied nursing intervention, qualitative, sudden and positively transformative.

Two of the theorists discuss the use of art in healing, Parse (2012) and Watson (1999). Watson (1999) states that there are four different types of art in healing: art intended to directly heal, art created to facilitate artist’s personal healing, art about aspects of healing process, and artist designed healing space. Experiencing the arts of others and making ones’ own art are ways of shifting patterns (Parse, 2012, Watson, 1999). Watson (1999) states that art is an antidote to degeneration and disintegration because it stimulates deep psychic energies, and allows people to revision their future. Parse (2012) and Watson (1999) state that art is a way for people to connect with their soul and with the universal and that doing so is healing. The intervention of interest for this study is the creation and engagement with one’s own art.

**Summary**

CSS and the unitary transformative perspective provide a useful metatheoretical perspective to use when conceptualizing the intervention of creating art as a healing modality. Creating art is a whole person intervention that provides people alternative meanings (i.e., set points, attractors or mirrors) that allow new patterns to emerge, increasing the available pattern options (i.e., increasing complexity and flexibility). Greater flexibility promotes adaptability to
stressors in the environment, including the challenges present during chronic illness. Therefore, creating art offers people ways to create healthier patterns. The intervention of creating art is an intervention that seeks to assist people to make whole person positive transformative changes, and the unitary transformative perspective is the only nursing perspective that supports transformative change.

**Positivity Influencing Art as a Healing Intervention**

Positivity and positive emotions influence people in ways that are congruent with complexity theory and the unitary transformative nursing perspective. Positivity may be a contributing factor to the success of art as a healing intervention and will be discussed here as background information that contributes to understanding the intervention.

**Broaden-and-Build**

Emotions are a short lived response to the perceived meaning of an event (Fredrickson, 2004). Though emotions can be caused by an event, they can also facilitate a feedback loop that causes further positive perceptions and positive emotions (Fredrickson, 2004). Therefore positive emotions can be an indicator of wellness and also facilitate wellness (Fredrickson, 2001). While negative emotions cause a narrowing of attention and an immediate reaction response (i.e., fight or flight), positive emotions cause a ‘broaden-and-build’ response that can have long term effects (Fredrickson, 2001, 2004; Fredrickson & Losada, 2005). When people experience positive emotions they broaden their attention and thinking and build personal resources. Positive emotions cause an urge to action which in turn causes long term effects, and the actions and long term effects cause positive emotions in a feedback loop (Fredrickson, 2001, 2004; Fredrickson & Losada, 2005). In systems theory terms positive emotions cause greater complexity of pattern and create a new healthier attractor.
Positive Emotions

Joy, interest, pride, contentment and love are positive emotions (Fredrickson, 2001, 2004). Joy causes an urge to play and be creative which builds physical, social and intellectual resources (Fredrickson, 2004). Interest causes an urge to explore new information and be creative which leads to knowledge and intellectual complexity (Fredrickson, 2004). Pride causes an urge to share the outcome of the action and causes the envisioning of greater achievements (Fredrickson, 2001). Contentment causes the urge to savor and leads to insight and changed world views (Fredrickson, 2004). According to Fredrickson (2004), the combination of joy, insight, pride and contentment when shared with another engenders the feeling of love. Love has a very large scope and will not therefore be included as part of this research study.

Global Outcomes of Positive Emotions

Positive emotions can cause specific urges and outcomes, and together they cause global changes (Fredrickson, 2001, 2004; Fredrickson & Losada, 2005). Through broadening attention and thinking and building resources positive emotions fuel an upward spiral that can undo the effects of negative emotions and encourage resilience and human flourishing (Fredrickson, 2001, 2004; Fredrickson & Losada, 2005). Positive affect can become a resource for coping (Fredrickson, 2001). People can use positive emotion to fuel positive reappraisal, problem focused coping and infuse ordinary events with positive meaning and thereby cope and even flourish in challenging situations (Fredrickson, 2001). The aspects of positivity are modeled in Figure 1.
FIGURE 1. Positivity Model

Positive Emotions and Creating Art

Creating art stimulates feelings and can cause a deep satisfaction with accompanying feelings of vitality and potentiality (Disannayake, 1995; McNiff, 1992). Art creates a tension and movement that stimulate and structure emotion (Disannayake, 1995). Art does not have to contain cheerful content in order to be emotionally satisfying. Creating art can be a catharsis of negative feelings (Grey, 2001). However, consistently creating and re-creating art around negative experience can become an attractor that sticks a person with unhealthy patterns (Marxin, 2011). People with chronic illness can be assisted to use art to express negative feelings, then to influence their emotions through actively seeking positive and healing imagery.
Art can then become a vehicle to create and expand upon positive emotions and to facilitate the benefits of positive emotions.

Understanding of how art and positive emotion may work to assist people to change behaviors and enhance well-being is theoretically developed, but not yet supported by research. This research was a beginning toward the understanding of art as a healing intervention, and emotional response is part of the healing intervention.

**Promoting Health within the Context of Chronic Illness: Art as Intervention**

Nurses have a social responsibility to promote health. It is part of the scope of practice and the nurse’s role in the health care system (American Holistic Nurses’ Association (AHNA), 2005; American Nurses Association (ANA), 2010). While the patient is the primary agent in their own health promotion, the nurse partners with the patient and brings their personal and professional skills to assist the patient to achieve their goals (Koithan, 1997, McIntyre, 1995). Nurses promote health across the continuum of the health illness experience through: promoting wellness in well populations through prevention of risk, preventing disease, managing acute illness and preventing risk for secondary complications and improving wellbeing in chronically ill populations (Crosby, Kegler & DiClemente, 2009). In addition, nurses promote health of individuals, groups, families, and communities (Crosby, Kegler & DiClemente, 2009). Health promotion activities are typically viewed from a particular perspective (Crosby, Kegler & DiClemente, 2009; Rosa, 2011). While some health promotion perspectives focus primarily on managing the biological facets of the disease process, nurses with a CSS and unitary-transformative perspectives also promote wellness with the chronically ill by modifying the illness experience and managing the disruption of chronic illness (Rosa, 2011). This study was informed by the CSS and unitary-transformative perspectives.
Health Promotion: A CSS and Unitary-Transformative Perspective

Health promotion from the unitary-transformative perspective is an activity that promotes human development and expansion to live without restriction (Koithan, 1997; Pender, Murdaugh & Parsons, 2011). Health promotion has the goal of enabling people to actively discover their potential and become their best person (Koithan, 1997; Pender, Murdaugh & Parsons, 2011). People are complex adaptive systems and as such have an emergent implicate order (Koithan, 1997; Koithan, et al. 2012; Verhoef, et al. 2012) that can be seen as patterns. Disease can be conceptualized as stuckness in repetitive dysfunctional patterns (Koithan, et al. 2007).

When the goal of health promotion is to develop human potential then the nurse becomes a dance partner who facilitates and encourages (Newman, 1992, 2009; Rogers, 1992, 2009; Watson, 1999). Patients and nurses are partners who co-learn and co-develop physical, mental, spiritual and environmental interventions to address existing disease, prevent future disease, encourage growth, develop existing strengths and find meaning in life experiences (Koithan, 1997). Health promotion is the encouragement of evolution and emergence of implicate order of complexity in patterns (Bell & Koithan, 2006). Healthy patterns are patterns of increased flexibility, complexity, cohesion, unstuckness, and positive transformation (Bell & Koithan, 2006; Koithan, et al. 2012).

Nurses partner with patients to increase the complexity of the subsidiary components such as thought patterns and responses and improve the relationships between the facets of a system (integration). The nurse does not control the process, but trusts that the inherent self-organization of the person will lead to non-linear developments that improve overall health. When using the creation of art as a health care intervention nurses trust and encourage the process of the patient creating art. Creating art leads to new ways of thinking and processing that
can unstick the patient from previous patterns and allow them to develop new and healthier patterns (Grey, 2001; McNiff, 1992; Rockwood Lane, 2005b; Rockwood Lane & Graham-Pole, 1994; Thompson, 2009).

**Art as a Health Promotion Modality**

The process of creating art within the context of chronic illness has been linked conceptually to integrated wholes, relationship building, self-organization and non-linear change. Creating art is a whole person intervention that engages a person’s mind body spirit and has the goal of healing the whole person rather than addressing a specific symptom (McNiff, 1992; Rockwood Lane, 2005b; Monti, et al. 2006; Stucky & Nobel, 2010; Watson, 1999; Wood Molassiotis, & Payne, 2011). Creating art increases the complexity and emergence of relationships between aspects of the self; soul, identity as a patient, strengths, communal energy (Dufrene & Colman, 1994; Grey, 2001; McNiff, 1992; Rockwood Lane, 2005a; Watson, 1999) as well as building social relationships (Collie & Kante 2011; Haltiwinger, Rojo & Funk, 2012; Stucky & Nobel, 2010).

Self-organization is also conceptually linked to creating art. People who create art learn from the process and outcomes of art and are able to change in complexity and increase their variety of responses to illness (Collie & Kante 2011; Marxin, 2011; McNiff, 1992; Rockwood Lane, 2005b; Watson, 1999). Finally, the change people experience when creating art is a non-linear positive transformation in perceptions and behaviors (Collie & Kante, 2011; Corley, 2010; Grey, 2001; Magis, 2010; Maguire & Cartwright, 2008; Monti, et al. 2006; Rockwood Lane, 2005a; Rockwood Lane, 2005b; Rockwood Lane & Graham-Pole, 1994; Stuckey & Nobel, 2010; Visser & Op’t Hoog, 2008; Watson, 1999; Wood, Molassiotis & Payne, 2011).
The creative process itself is practice for being creative in other avenues of life. Taking risks with creating art creates movement (i.e., new and different ways of expressing oneself and seeing the world) (Rockwood Lane, 2005b; Rockwood Lane & Graham-Pole, 1994). For example, as an artist creates a piece it develops differently than the vision in the artist’s mind and as the artist works they develop a tolerance for imperfection and ambiguity (Thompson, 2009). Tolerance for imperfection and ambiguity as well as the ability to creatively work with a changing piece of art are skills that transition to the life experience of the chronically ill and help develop the skills of resilience.

Creating art is also a way for people to observe their life process and reframe their situation. Artists observe who they are and their illness in a way that allows them to tell and re-tell the story of their illness in a way that changes the story (Grey, 2001; Haltwinger, Rojo & Funk, 2012; Marvin, 2011; Monti, et al. 2006; Rockwood Lane, 2005b). For example breast cancer patients can re-tell their lived body experience of surgery and mastectomy through art that makes their scars a beautiful part of who they are. Through re-framing their situation they create alternate futures (healthier patterns) that can serve as an attractor (Grey, 2001; Thompson, 2009, Watson, 1999). The creative process develops the movement needed for change and the product and interaction with the product of art are a representation of a new, and possibly healthier, pattern of being with a chronic illness. Nurses use creating art as an intervention to assist patients to unstick from old unhealthy patterns and develop new patterns thereby providing opportunities for positive transformation and development of human potential.

While there appears to be a wealth of literature that conceptually links healing promotion and healing in chronically ill populations, there has been little research as to the key components of the intervention. The knowledge gaps will be discussed below.
Art as Intervention: Knowledge Gaps

While the prevalence of art interventions in the context of chronic illness has not been clearly established in the literature, a Google search for art and cancer yielded 262,000,000 results. Major cancer centers such as the Virginia G. Piper Cancer Center in Phoenix, Arizona offer art programs to patients (Scottsdale Healthcare, 2012). They are not alone, and it appears that art interventions for cancer patients and mentally ill populations are common (The Arizona Wellness Community, 2012; Blue Sky Healing Arts, 2012; Creative Arts in Healing, 2012; Johns Hopkins Medicine, 2012; University of Michigan Comprehensive Cancer Center, 2012; University of Southern California, San Francisco, 2012). Not only is this intervention popular, it also has the potential to be a valuable whole person healing modality.

However, art is often conceptualized as a nebulous commodity rather than a very specific healing intervention. Few studies have systematically studied outcomes and processes associated with art as an intervention used to promote health, well-being and quality of life in chronically ill populations. Further, there have been no studies that compare the effectiveness of art interventions to other healing interventions with similar goals. This may be due, in part, to the lack of understanding about the nature of the intervention itself.

While there is theoretical literature (complex systems, positivity and nursing) suggesting a possible mechanism of action (i.e., how the intervention actually might be causally linked to improved health and wellbeing) that could be tested, there have been no studies that identify specifics about the nature of the intervention that are necessary prior to evaluation of effectiveness as identified by Sidani and Braden (2011). Therefore, this study provides requisite knowledge about the intervention prior to any further development of a program of research.
dedicated to exploring the efficacy and effectiveness of creating visual art to improve health and wellbeing in the context of chronic illness.

Sidani and Braden (2011) propose that intervention theory provides information about the active ingredients of an intervention, modes of intervention delivery, intervention dosing (timing) and dosages, conditions requisite for the intervention to have an effect, outcomes characteristics and qualities, and processes that mediate the intervention and change processes. Intervention theory was used as an organizing framework for this study. The study used a qualitative inquiry method because qualitative inquiry provided the requisite information to address the purpose of this study. Qualitative inquiry provided an avenue for subjective and experiential knowledge (Sidani & Braden, 2011).

Currently there is no quantitative data to collect to determine the best mode of delivery or dosage for creating art. If the intervention were a medication it would be possible to perform laboratory diagnostics to determine blood levels of the medication and correlate the levels to results. When creating art was used as an intervention to promote healing, participant interviews were the most appropriate source of data since they described the experience, the aspects of the intervention and explained the effect of any modifiers. Meaning was then developed through the researcher’s understanding of the phenomenon. In qualitative research “the researcher is the instrument of the perspective or methodology used. It is through the researcher’s thinking and processing that meanings in experience are explicated and more fully and deeply explored and understood” (Munhall, 2007, p 221). This study sought to identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness, and intervention theory was the organizing framework.
Intervention Theory: An Organizing Framework

Intervention theory guided the researcher to examine the client characteristics, intervention facilitator’s characteristics, context characteristics, process and intermediate and ultimate outcomes (Sidani & Braden, 2011) of art as a healing intervention. The goal of this research was to understand the components of the intervention and the relationship between the components. Intervention theory provided a useful organizing framework because intervention theories specifically name aspects of the intervention that must be known in order to systematically construct coherent comparative effectiveness studies as well as other types of intervention studies. These specific aspects must be determined so that researchers can ultimately determine the impact that creating art has on health-related quality of life. Figure 2 is the intervention theory model that was used to organize this study.

FIGURE 2. Intervention Theory Model
The model presented here was modified from the Sidani & Braden (2011) model. Sidani & Braden placed client reactions under process. However, the description of client reactions describes client reactions as immediate outcomes (i.e., what happens while the client participates in the intervention). Therefore client reactions were moved to the outcome column to more accurately reflect the process.

There are three basic components of the intervention theory: structure, process and outcomes. Structure is the elements that “influence the intervention’s implementation, mediators and outcomes” (Sidani & Braden, 2011, p 64). Structural components required for this intervention theory include client characteristics (personal profile, health status, experience with presenting problem and resources), intervention facilitator characteristics (personal attributes, professional qualities) and contextual characteristics (physical and psychosocial features) (Sidani & Braden, 2011). Process is the elements that operationalize the intervention (Sidani & Braden, 2011). Process components include the active ingredients (activity that will bring out intended changes in mediators and outcomes, mode of delivery) and dose (amount, frequency and duration) and the patient enactment and adherence to treatment (Sidani & Braden, 2011). Outcome is what happens as a result of the intervention (Sidani & Braden, 2011). Outcome components include immediate outcomes (patient reactions to treatment), intermediate outcomes (changes that occur as a result of the immediate outcomes) and ultimate outcomes (the final goal of the intervention).

Specific Research Aims

Multiple aspects of creating art as a health care intervention are not well defined or understood. Before proceeding with a program of research that tests the outcomes of or evaluates/compares the effectiveness of an art intervention within the context of chronic illness,
aspects of the intervention need to be clearly explicated. Therefore, the purpose of this study was to identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness.

Eight research questions linked to the aspects of intervention theory that Sidani and Braden (2011) and Rossi, Lipsey & Freeman (2009) identify as requisite prior to testing the effectiveness and efficacy of an intervention designed to improve the health and wellbeing of persons with chronic illness were addressed in this study:

1. What are the characteristics of the people who participate in art as a healing intervention?
2. What facilitator characteristics influenced the participant’s experience with art as a healing intervention?
3. What were the characteristics of the context for creating art?
4. What were the intervention components and dose?
5. How did the participant enact and adhere to the treatment?
6. What were the immediate outcomes of participation?
7. What were the intermediate outcomes of participation?
8. What were the ultimate outcomes of participation?

**Significance**

Chronic illness is widely prevalent in the US, causing major limitations and effecting the HRQOL for millions of people (Blinderman, et al. 2009; CDC, 2012; WHO, 2012). Promoting health for people with chronic illness includes assisting people to modify their illness experience and change patterns of response to more adaptive responses thereby enhancing well-being (Rosa, 2011). Creating art is a widely used intervention for the promotion of positive transformative changes in people’s perceptions and behaviors to improve wellbeing and promote health (Collie
Understanding the structure, process and outcomes of this intervention is key to further research and developing effective interventions. Furthermore, improving understanding could improve intervention development and implementation for an intervention that may be effective for millions of people.

**Conclusion**

Chronic illness affects the well-being of millions of Americans. While chronic illness cannot be cured, it is possible for people to experience well-being even in the context of disease. Nurses have a primary goal of assisting people with health promotion. Creating visual art can facilitate health and wellbeing through a process of re-patterning and positive transformation. Therefore, nurses can use art as an intervention for whole person healing. However, more information is needed to provide the program specifics necessary to the credible design of these studies. The purpose of this study was to identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness. This study developed knowledge that will assist practitioners who use this complex intervention and researchers seeking to test its effectiveness in health promotion and healing in a chronically ill population.
CHAPTER 2: REVIEW OF THE LITERATURE

In the previous chapter, the prevalence and conceptualization of the creation of visual art as a health promotion intervention was discussed, underscoring the need to understand this intervention within the context of chronic illness. This chapter will provide an overview of the literature and discuss what is known about the process of art as an intervention to improve health and wellbeing among those who are chronically ill. Though art can be used as a healing modality independent intervention facilitator guidance (Marxin, 2011), creating art can also be used by nurses as a health promoting intervention. This review will provide a discussion of the state of the science about art as an intervention. This review identified knowledge gaps that guided this research and identified areas for further research.

Health Promotion and Healing in Chronic Illness

Many health promotion initiatives focus on preventing chronic illness through reducing risk factors, thereby reducing incidence (McAlister, Perry & Parcel, 2008). While disease prevention is an important activity, it cannot be the only health promotion activity in the context of chronic illness. Chronic illness is a burden for more than 25 million people each year in the US (CDC, 2012). Therefore health promotion activities should also assist people to live well in the context of chronic illness (Blinderman, et al. 2009; CDC, 2012; Delgado, 2007; Parslow, Lewis & Nay, 2011). Health promotion in the context of chronic illness has traditionally focused on managing symptoms and maximizing functioning. However, chronic illness can negatively affect quality of life even when symptoms are controlled (Blinderman, et al. 2009) and methods that go beyond symptom management are needed.

The absence of disease or symptoms is not in itself health (Pender, Murdaugh & Parsons, 2011; WHO, 2012). Health is “the realization of human potential through goal-directed behavior,
competent self-care, and satisfying relationships with others, while adapting to maintain structural integrity and harmony with the social and physical environments” (Pender, Murdaugh & Parsons, 2011, p 22). Health promotion activities therefore need to assist the whole patient to change patterns and evolve to develop potential (Koithan, 1997).

Many health promotion activities focus primarily on the individual and seek to modify attitudes and behaviors (Crosby, Kegler & DiClemente, 2009). The most complex and successful individually focused health promotion interventions are based in theories that recognize the role of contextual influences on individual behavior (Ewart, 2009; Pender, Murdaugh & Parsons, 2011; Sallis, Owen & Fisher, 2008). Ecological models of health behavior guide interventionists to work to change behavior on intrapersonal, interpersonal, organizational, community and public policy levels (Sallis, Owen & Fisher, 2008). Though the ecological model recognizes the complexity of behavior change, it is a model based in changing a specific behavior: a) smoking, in a specific direction; b) quitting the smoking habit (Sallis, Owen & Fisher, 2008). The interventions based in the ecological model are not interventions with emerging outcomes and not interventions that promote human potential. Therefore even though an ecological model allows for the most complexity in health promotion, the ecological model is not a perfect fit for examining creating art as a health promotion intervention.

Holistic theorists based in the unitary transformative worldview advocate for interventions that encourage emerging outcomes with the goals of maximizing human potential (Pender, Murdaugh & Parsons, 2011). However, those theories do not offer specific guidance on implementing or evaluating health promotion interventions and have been criticized as being difficult to measure and subjective (Pender, Murdaugh & Parsons, 2011).
The critiques are more a reflection of the limitations of intervention evaluation frameworks than of the efficacy of whole person interventions with emerging outcomes.
Evaluation of creating art as a health promotion intervention will require methods that have the capacity to examine pattern and dynamics (Verhoef, et al. 2012). Creating art does not have predetermined linear outcomes with singular causality. Rather it is an intervention with multiple, emergent, complex and interactive outcomes that do not fit with traditional evaluation methods (Bell, Koithan & Pincus, 2012), or with an existing nursing health promotion framework. In the future, health promotion interventions such as creating art may be evaluated using some of the evolving methods from complexity theory. However not enough is known about the intervention at this time for such a study to be conducted. Therefore it is appropriate to ask “what is happening” before asking “how it works” (Verhoef, et al. 2012). This study is a qualitative descriptive study to examine the structure, process and outcomes (i.e., what is happening) of creating art as a health promotion intervention in the context of chronic illness, with health promotion defined as changing patterns to develop human potential. This literature review describes what is currently known about what is happening when art is used as a healing intervention.

Art as a Healing Intervention in Chronic Illness

A literature search on art as healing was conducted using CINAHL, Web of Science databases and by completing a hand search of the researcher’s literature collection. Search terms included ‘healing art,’ ‘art and health care’ and ‘chronic illness.’ A search for general art principles was conducted on Google using the term ‘elements of art.’ Reference lists from identified literature were also used as secondary source for the literature search. Articles that discussed art as a healing modality in chronic illness were included. Articles that focused
primarily on art as therapy for mental illness were not included, since that is beyond the scope of this study. Three types of literature were found: theoretical, program review and research. An overview of the literature is in Appendices A, B, and C. The overall themes of the literature are explored below.

**Art as Intervention: Promoting Health through Art**

Creating art is not a nebulous commodity and therefore may be studied as an intervention. Creating art is a complex intervention with emerging outcomes. The structure, process and outcomes of this intervention will be examined in this study to develop understanding of creating art as a healing intervention.

**Structure.**

The structure of an intervention includes the characteristics of the patient, the intervention facilitator and the context in which the intervention takes place (Sidani & Braden, 2011). Aspects of the structure of creating art as a health promotion intervention as present in the literature is discussed here.

**Patient characteristics.** Patient characteristics impact the planning and implementation of interventions. Patient characteristics include demographic information, general health status, experience of the presenting problem, and resources available to the client (Sidani & Braden, 2011). The most studied population of people who use art as a healing modality in the context of chronic illness has been people with cancer, and of cancer patients who use art, the most studied have been women with breast cancer (Wood, Molassiotis & Payne, 2011). Some women with breast cancer were open to using art as a healing modality because it was accessible to people with poor language skills and a discomfort with sharing feelings (Collie & Kante, 2011).
Art interventions were also an option for those who struggled with integrating a disease process into their identity (Haltiwinger, Rojo & Funk, 2012). Participation in an art group did not require the participant to identify with or discuss their disease (Haltiwinger, Rojo & Funk, 2012). The participant was required to be present for the art activity and actively participate with the group in whatever way they were comfortable (Collie & Kante, 2011, Haltiwinger, Rojo & Funk, 2012). Furthermore, participants felt that art-based interventions focused on their wholeness and strengths rather than on their disease and need for help (Stuckey & Nobel, 2010).

Participants stated varying goals when using art as a healing intervention. In the Collie & Kante (2011) study, participants engaged in art with the goal of experiencing new and happy activities. The participants in the Visser and Op’t Hoog (2008) study stated eight goals for creating art in the context of cancer. The goals from most frequent to least frequent were: discovering and expressing feelings, coping with the disease, contact with fellow patients, developing creativity, personal growth, finding peace and balance, increasing quality of life and discovering techniques/materials (Visser & Op’t Hoog, 2008). The other studies did not address participant goals.

Client characteristics such as socio-demographic characteristics, general health status, experience of the presenting problem, and resources available to the patient (Sidani & Braden, 2011) have not been adequately discussed in the literature. Some studies presented limited information about client characteristics (Collie & Kante, 2011; Haltiwinger, Rojo & Funk, 2012), while others did not discuss the client characteristics beyond a very broad inclusion criteria (Wood, Molassiotis & Payne, 2011; Visser & Op’t Hoog, 2008). From the literature, it is not clear what characteristics were present, and therefore there is an incomplete understanding of how those characteristics may mediate art as an intervention.
**Intervention facilitator characteristics.** Intervention facilitators are the medium through which the intervention is delivered; their characteristics influence the intervention (Sidani & Braden, 2011). Intervention facilitator characteristics include personal attributes and professional qualities. Some of the art as healing literature discussed who should implement art as a health promotion intervention. Though creating art as a therapeutic intervention has been the domain of art therapists, art as a healing intervention has not been solely the realm of the art therapist (Kalmanowitz & Potash, 2010). Art therapists use art as a tool of therapy to diagnose and treat psychiatric disease; art has also been used by non-therapists to promote health (Kalmanowitz & Potash, 2010). Dufrene & Coleman (1994) found that creating art was an intervention used by traditional healers, and in other studies nurses implemented creating art interventions (Rockwood Lane, 2005a, Rockwood Lane & Graham-Pole, 1994).

Kalmanowitz and Potash (2010) stated that all professionals who use art as an intervention should be aware of the ethical implications of art and use the intervention with sensitivity, but did not give specific characteristics. No literature was found that described how the personal attributes of the intervention facilitator influenced the intervention. It would be informative to know what facilitator characteristics patients found helpful or hindering in the art intervention, particularly when designing implementation studies. The researcher must know how and who to select to lead their intervention, in order to validly test the effectiveness of that intervention. Therefore, this study explored intervention facilitator characteristics.

While people use art as a healing modality independent of a facilitator’s involvement, when intervention facilitators are involved they can guide the intervention towards healing. Marin (2011) cited a case where a person who created art as a coping modality independent of an intervention facilitator used art to repetitively relive a traumatic experience. Creating art can
be an attractor for an unhealthy pattern as well as an attractor for a healthy pattern. Assistance from an intervention facilitator may have provided guidance for the artist to create art that developed a new and healthier pattern.

Intervention facilitators have goals when leading art interventions. The facilitator’s goals may be similar to, but more developed than the participant’s goals for creating art to promote health. One stated goal of art interventions was to assist people in connecting with others (Collie & Kante, 2011; Dissanayake, 1995; Dufrene & Colman, 1994; Grey, 2001; Haltwinger, Rojo & Funk, 2012; Kalmanowitz & Potash, 2010; Watson, 1999; Wood, Molassiotis & Payne, 2011). When art interventions were done in groups of people who had similar disease processes, the intent was to bring the people together so they could learn from and support each other. Though talk support groups are the most common therapy for cancer patients, the majority of cancer patients do not participate in them (Monti, et al. 2006). Intervention facilitators provided art interventions as an option to group talk therapy.

Another goal of art intervention facilitators was to provide an outlet for patient feelings (Dissanayake, 1995; Haltwinger, Rojo & Funk, 2012; Marxin, 2011, Rockwood Lane & Graham-Pole, 1994; Thompson, 2009). Art was seen as an effective tool for expressing feelings because it provided an alternative to verbal communication (Collie & Kante, 2011; Haltwinger, Rojo & Funk, 2012; Marxin, 2011). Creating art is a preconscious activity (Tinnin, 1994) that allowed the artist to more directly access feelings than through verbalizations alone. Art was used to empower those whose voice is not always heard (Thompson, 2009). The illness experience has an emotional content, and expressing those emotions through art improved the capacity of people to cope (Dissanayake, 1995; Haltwinger, Rojo & Funk, 2012). Though the goals of the facilitators for the creating art intervention were similar to the goals of the patients
they were not the same. In the future, investigation of the goals of each should be explored for their effect on the implementation of art as a healing intervention.

The personal and professional attributes of the intervention facilitator needed to successfully implement art as a health promotion intervention are not well developed. If people other than art therapists can use art as a healing intervention, what traits and training should they have to be successful? This study was not be able to fully answer that question, but was be able to describe what the participants found helpful or hindering in intervention facilitators.

**Context characteristics.** Context characteristics include physical and psychosocial features (Sidani & Braden, 2011). Most of the art interventions described in the literature took place as part of a comprehensive patient care center, such as a cancer center that offered patient support services (Haltwinger, Rojo & Funk, 2012; Monti, et al. 2006; Rockwood Lane & Graham-Pole, 1994; Visser & Op’t Hoog, 2008). Creating art interventions could have been offered in other settings, however, other settings were not discussed in the literature. It is unclear if including creating art as part of the cancer support services was helpful or hindering to the participants.

A part of context is the resources needed to provide the intervention (Sidani & Braden, 2011). Creating arts programs required raw material resources such as paint or collage materials dependent on the planned arts program, and a space for artists to meet and create. The literature did not discuss how resources were procured, or the cost of the arts programs.

Collie & Kante (2011) specifically discussed how the sociocultural aspects of the relational context within which the intervention took place impacted client participation. Their participants were reluctant to participate in talk based support groups in part because of their marginalized socioeconomic status. However, they were the only researchers to discuss the
psychosocial and socioeconomic factors that influence participation in art as a healing intervention. The other aspect of context missing from this literature review was a discussion of the influence of organizational culture on a healing arts program.

There was very little discussion of how the context, both physical and psychosocial, affected the implementation of creating art as a health promoting intervention. While this research was not able to comprehensively address the aspects of context and its influence on the intervention, aspects of context were described in a way that may be useful to guide practice and intervention research.

**Intervention Process.**

The intervention process includes the components and dose of the intervention as well as the client enactment and adherence. The components of an intervention describe the aspects or ‘active ingredients’ of the intervention and the client’s reaction to the intervention (Sidani & Braden, 2011). The components include the specific activity and the mode of delivery. The components of creating art are multiple, emergent, complex and interactive. Though the components cannot be fully understood independently, and though the components cannot be not be linearly linked by causality to outcomes, they can still be identified, described and explored to increase understanding. In addition to the components of an intervention, the dose of an intervention refers to amount, frequency and duration (Sidani & Braden, 2011).

Enactment and adherence address the level of engagement the client has with the intervention and is important to understand since an intervention that a client does not engage with is unlikely to be successful. It is critical to know how much of an intervention is needed to effect change and how often the intervention should be delivered to initiate the desired change.
Further, an interventionist needs to understand how long the intervention must be continued in order to sustain the desired outcomes (Sidani & Braden, 2011).

**Component: Art activities.** The art activities discussed in the literature varied. The participant in the Haltwinger, Rojo & Funk (2012) study painted an apron, painted watercolors on paper and made mosaic jewelry boxes for her family. Koithan (1994) discussed the use of photography as a creative healing intervention. Marxin’s (2011) participants painted, sculpted, created multimedia installations, and placed healing objects on people’s bodies. Rockwood Lane’s (2005a) participants used drawing, music and dance. Visser and Op’t Hoog’s (2008) participants created with chalk, paint and clay. Textile making, collage and card making were other activities present in the literature (Stucky & Nobel, 2010). The women in Collie & Kante’s (2011) study also gave suggestions of other activities that they thought would be helpful including: painting, sewing, knitting, crocheting, embroidery, pottery, quilting, beading and workbooks. They wanted the opportunity to try new activities, especially fun new activities.

Reflection on the multiple types of art activities used for creating art as a health promotion led to the realization that the types of art activities were not the components of the intervention. Rather, the ‘active ingredients’ were the components of art. The components of art were not discussed in the literature about using art as a healing intervention. The literature gave a general description of the type of art then moved directly to immediate outcomes without a discussion of participant interaction with the components of creating art. Therefore, art resources rather than healthcare resources were used to explore the components of art.

**Component: Elements and principles of art.** The elements of art are: line, shape, space, texture, value and color (Esaak, 2013). The artist uses the elements of art to create pattern, rhythm, proportion, balance, unity and emphasis (Project ARTiculate, 2006) which are the
principles of art. The elements and principles of art will be discussed here to explicate the
language of art, since art is discussed in terms of elements and principles. This discussion will
also further understanding of the active ingredients of art as a healing intervention.

Line is the path of a moving point through space (Esaak, 2013; Project ARTiculate, 2006). Shape is the spatial form usually created by line (Esaak, 2013; Project ARTiculate, 2006). Space is the distance around, within and between the other elements (Esaak, 2013; Project ARTiculate, 2006). Texture is the way a piece of art feels, or the appearance of feeling (Esaak, 2013; Project ARTiculate, 2006). Value is the lightness and darkness of a piece (Esaak, 2013; Project ARTiculate, 2006). Color is the perception of light as it hits the art material and has properties of hue, intensity and value. Hue is the name given to the color, (i.e. blue or green) intensity is the strength or vividness of the color and value is the lightness or darkness of the color (Esaak, 2013; Project ARTiculate, 2006).

Artists combine the elements of art to create pattern, rhythm, proportion, balance, unity
and emphasis (Project ARTiculate, 2006). Pattern is the repetition or recurrence of a design
element (Project ARTiculate, 2006). Rhythm is the suggestion of movement through the
combination of elements (Project ARTiculate, 2006). Proportion is the relationship of the size of
objects (Project ARTiculate, 2006). Balance is the impression of equilibrium (Project
ARTiculate, 2006). Unity is the perception that the components of art are harmonious (Project
ARTiculate, 2006). Emphasis is the center of interest where the eye is drawn to (Project
ARTiculate, 2006).

Participants who use art as a healing intervention use the elements of art to create a
composition. While not all the elements are used in every piece, at least two elements must be
used in order to create a piece of art (Esaak, 2013). For example, a sculptor might not use color,
but must use at least space and texture in order to create a piece. The effect that interaction with and manipulation of the elements of art has on the artist has not been well studied. Of all the elements and principles of art only color has been researched as a healing element of creating art.

Art therapists are well aware of the elements and principles of art and have a variety of tools which they use to analyze the elements of art in order to diagnose patients (Kim, et al. 2012). The analysis of the meaning of color is based in research that has shown that “colors carry meaningful associations that have direct implications for psychological functioning” (Moller, Elliot & Maier, 2009). However very little systematic research has examined hue-meaning association. While there are numerous websites and unfounded theories about the effect of color on emotion and psychological functioning, the research in this area is in its infancy. Therefore, it is not possible at this time to prescribe color as treatment. Since art is an intervention that is self-organizing and has emergent results at this time art facilitators trust the participant to choose the colors that will best work for their own healing. In the future it may be possible for art facilitators to guide participants to colors, or other elements and principles of art that promote healing.

**Intervention dose and dosing.** The literature was not clear on the dose of the creative process needed. Some patients participated in four weeks of hour-long weekly guided art activities (Stuckey & Nobel, 2010), while others participated in eight weeks of hour-long weekly guided art activities (Visser & Op’t Hoog, 2008). No rationale was given for different doses. In addition to the guided activities, some participants continued creating art after the formal intervention was completed (Haltiwinger, Rojo & Funk, 2012), thereby increasing the dose of the intervention.
The timing of the intervention was likewise not discussed. Some participants had finished active treatment and were in remission (Haltiwinger, Rojo & Funk, 2012), others had advanced disease (Monti, et al. 2006; Visser & Op’t Hoog, 2008). Most studies did not discuss the timing of the intervention or the impact the timing had on the patient’s capacity to participate in the intervention, though Monti, et.al (2006) had several participants who were unable to complete the intervention because of complications with their disease. While this study could not by itself adequately address this question, the dose of the intervention was described and may be used as a guideline for further research.

**Client enactment and adherence to treatment.** Enactment and adherence to treatment is defined as performance of the intervention at the recommended dose (Sidani & Braden, 2011). An intervention that the client does not enact is unlikely to be effective. Client reaction to the intervention and the associated positive feelings that engagement (e.g., belonging, support, connection, focus on strengths) may have significant impact both on treatment adherence or continued participation and then eventual achievement of intermediate and long-term outcomes. However, the literature is unclear about these types of outcomes associated with art interventions and what level of enactment is necessary for creating art to have an effect.

The studies discussed exemplar cases, but did not discuss people who minimally participated (perhaps experiencing less engagement with the therapy). It is also not clear how much art needed to be created, or how much the patient needed to interact with others in the group. These questions are fundamental to guide art intervention development and implementation. This study described the adherence participants experienced and the degree to which they found it helpful in achieving long term healing.
**Client reactions.** Client reaction to an intervention is an aspect that can affect adherence to the intervention (Sidani & Braden, 2011). Client reaction is defined as understanding and perception of the treatment (Sidani & Braden, 2011). If patients have a negative reaction to the intervention (they don’t understand it or they perceive that it is too difficult or not helpful) they are unlikely to continue the intervention.

The participants in creating art for healing programs were overwhelmingly positive in their evaluation of the intervention. The participants in Collie and Kante’s (2011) study appreciated the focus on positive aspects and the development of their strengths. They thought that talk therapy would focus too much on their deficits and need for help while creating art focused on talent development. The Haltiwing, Rojo and Funk (2012) participant expressed gratitude for the creating arts program and for her co-participants. Rockwood Lane’s (2005) participants felt that creating art was a valuable part of their treatment. However, the evaluations were a summary of what the patient thought of the creating art intervention, not an assessment of the immediate response of participating in the intervention.

Monti, et al. (2006) had drop outs from their program which they attributed to complications of their illness and worsening disease rather than to dissatisfaction with the program. One of the participants in the Marxin (2011) study did not find a healing pattern, but repeated her pattern of reliving her trauma through creating art about the experience. This may be because the Marxin (2011) research was a review of the lives and work of professional artists who worked with art on their own, rather than with intervention facilitators to help with transitioning to a healthier pattern. Even though the artist did not transition to a different pattern, all of the artists in the Marxin (2011) study thought that creating art was an integral and valuable part of their lives.
Other researchers did not discuss drop outs or any examples of dissatisfaction with creating art as a healing intervention. Drop outs from creating art therapy have not been adequately addressed in the literature. Negative reactions and the possible causes of negative reactions have also not been recorded and described in the literature. Information on why people may have negative reactions to the therapy will be important for program development. This study discussed client reactions as an aspect of adherence to the intervention.

**Outcomes.**

Outcomes are the results of the intervention, and can be immediate, intermediate and ultimate outcomes (Rossi, Lipsey & Freeman, 2004; Sidani & Braden, 2011). Immediate outcomes are what the participant experiences while creating art. Intermediate outcomes are changes that occur as a result of the immediate outcomes, and ultimate outcomes are the final goal of the intervention (Sidani & Braden, 2011).

**Immediate outcomes.** Immediate outcomes were experiences inherent in the creative process. Participants reported experiences that happened during the creative process that were independent of the art format used and were common to using art as a healing intervention. The immediate outcomes or experiences of creating art were: Expression and attention to the here and now.

*Expression.* Some participants used art to express what they were feeling (Disannayake, 1995; Haltwinger, Rojo & Funk, 2012; Monti, et al. 2006; Rockwood Lane, 2005b; Rockwood Lane & Graham-Pole, 1994; Visser & Op’t Hoog, 2008). Their art was an external representation of internal emotions. Rockwood Lane (2005b) found that creating art was especially helpful in dealing with fear. After the participants expressed what they were most afraid of, it was not so fearsome (Rockwood Lane, 2005b). In contrast, one of the artists in Marxin’s (2011) study used
art to continually replay and relive painful experiences. Though art has the potential to relieve feelings through tangible expression and externalization, it also has the potential to be an attractor that repeatedly cycles the participant through familiar negative emotional responses.

Art is also used as a way to escape from feelings (Disannayake, 1995). Rockwood Lane (2005b) and Stuckey and Nobel (2010) found that cancer patients used the creation of art as a refuge from intense emotion. The participants in the Collie and Kante (2011) used art creation as a distraction from their feelings. The participants alternately used art as a refuge from feeling and as an expression for feeling. Both methods of dealing with emotion were helpful in dealing with living with chronic illness.

In addition to being a vehicle to express feelings, art can be a way to express things that are difficult to put into words (Koithan, 1994). Creating art is way to express unconscious or difficult thoughts through symbolism (Disannayake, 1995). The marginalized women in Collie and Kante (2011) study were reluctant to share their cancer experience in traditional support groups for multiple reasons including cultural factors and poor literacy. They found that creating art allowed them to express things that they were unable to verbalize. For them, creating art was a preferable alternative to talk therapy. The participant in the Haltiwinger, Rojo and Funk (2012) study was reluctant to be identified as a cancer patient and had a difficult time speaking about her experience. She found that creating art allowed her to express experiences more adequately than words. Creating art empowers those whose voice is not always heard (Thompson, 2009).

Art does not need to be realistic to be expressive. Hesse, as cited in Marxin (2011), used abstract art to express her experiences as a holocaust survivor and a cancer patient. Some of the artistic expressions were not able to be translated to verbal expression. The meanings of some pieces of
abstract art are so deeply non-verbal, that though the artist could explain the product of art the meaning can only be grasped through interaction with the piece of art.

Attention to the here and now. Creating art is a meditative process. When creating art, artists are selective in focus and concentrate their attention on the process of creating (Koithan, 1994). In this way, creating art becomes an act of meditation (Grey, 2001; McNiff, 1992). While making art, there is a movement with rhythm intensity that becomes a meditation much like a walking meditation (Rockwood Lane, 2005a). The participants found that the creative process was a way of being in the moment and finding beauty in the moment (Rockwood Lane & Graham-Pole, 1994). In the meditative state of creation, the artist learned to trust oneself and instinct (Rockwood Lane, 2005a). Through creating art people develop an increased tolerance for imperfection and ambiguity (Thompson, 2009). During the creative process when the piece of art does not develop exactly as first envisioned by the artist, the artist learns interaction and adjustment (Grey, 2001). Grey (2001) stated that the process of creating art is a meditative and mindful practice where he enters into the activity and loses track of self and time. Mindful practices increase the capacity of individuals to be present in a particular moment, and being present is the first step in being able to change (His Holiness The Dalai Lama & Cutler, 1998; Wilber, 1986).

Intermediate outcomes. Though the ultimate goal of creating art as a health promotion intervention is to assist people to change patterns of living with their illness to a pattern that helps them maximize their potential, intermediate outcomes are realized before the ultimate outcome. Intermediate outcomes are outcomes that arise from the experience of the process of creating art. The intermediate outcomes of art creation are the aspects of the experience that last beyond the lived moment. Intermediate outcomes may be attitudes or behaviors that affect the
long term outcomes. Intermediate outcomes lead to the ultimate outcomes through building a new attractor. Artists are drawn to the intermediate outcomes, and through interaction with the intermediate outcomes are able to transition to a new pattern. The goal is that the new patient pattern is a pattern that enhances well-being through modifying perceptions and behaviors in a way that will facilitate human fulfillment. Intermediate outcomes in the literature include: the piece of art, making the ordinary special, non-mediated genuine observation, created meaning and connection to self and others.

**Piece of art.** The most obvious intermediate outcome of the creation of art is the piece of art created. Some practitioners of art therapy have argued that the value of art lies wholly in the process of art, not in the product of art (Thompson, 2009). However, creating art is not simply the process of playing with materials, but a discipline of bringing one’s vision to light. Disciplines require practice, the building of skill, and refinement of process (Grey, 2001). In order for the product of art to be a true representation of expression, connection, attention and observation, then a developed discipline around the process is essential. The more the artist is able to produce a piece of art that is a true symbolic representation of internal processes, feelings, life events and hopes and dreams then the more beneficial interaction with the piece of art is (Grey, 2001). The artists in Marxin (2011) and Rockwood Lane’s (2005b) studies felt that creating art allowed them to see their lives in a different way. The piece of art was a representation of self and situation that allowed the artist to more honestly observe themselves (Rockwood Lane & Graham-Pole, 1994).

**Making the ordinary special.** The piece of art the participant makes becomes a symbol of a part of their life. Through focus, attention and the devotion to create a piece of art about an aspect of their life the artist makes that part of their life important and special (Dissanyake,
Making everyday occurrences special is important because it brings into focus life events that may have otherwise been unexamined and marks them as important; something to pay attention to (Dissanyake, 1995). Haltiwinger, Rojo and Funk’s (2012) participant created small pieces of art about ordinary events of her life to give to her family. Dufrene and Colman’s (1994) and Rockwood Lane’s (2005a, 2005b) participants created art to witness and memorialize life events. Monti, et al.’s (2006) participants created art to represent what they were experiencing in the course of their illness and in doing so marked it as deserving attention and focus.

Non-mediated genuine observation. Focus and attention on the here and now leads to non-mediated genuine observation of self and situation (Grey, 2001; McNiff, 1992). Non-mediated observation is observation that does not go through the usual interpretations of language and conscious thought, but is directly observed. Non-mediated observations lead to insights outside the reasoning mind. Creating art is non-mediated observation because art is a non-verbal experiential expression. Haltiwinger, Rojo and Funk’s (2012) participant was able to observe the effects that cancer had on her body, emotions and spirit through creating art. When she created art, she was able to non-judgmentally and genuinely observe and represent her experience. Rockwood Lane’s (2005b) participants also stated that they were able to use art to step outside themselves. Creating art became a way of seeing (Grey, 2001). For example, Grey’s (2006) Sacred Mirrors focused on the spiritual energy of people and illuminated aspects that cannot be seen or understood through ordinary senses.

Art reveals what is hidden. While people are always whole they have aspects that are implicit (hidden or undeveloped) and explicit (apparent and developed). Creating a piece of art externalizes internalized processes (Rockwood Lane, 2005b). Through the act of creation the hidden is illuminated (Grey, 2001; McNiff, 1992; Rockwood Lane, 2005b; Rockwood Lane &
Graham-Pole, 1994). In Rockwood Lane’s (2005a) program nurses created art that illuminated what they do. They made hidden aspects of nursing visible to themselves and others. Grey (2001; 2006) also used art to explore the implicit and unexpressed aspects of being.

For the Native Americans in Dufrene and Colman’s (1994) study, creating art was a way to symbolically represent and make concrete the abstract aspects of life. In Marxin’s (2011) review, Spence’s photography about her breast cancer was a documentation of the experience of cancer beyond the physical aspects. She specifically used art as a way to witness the events of her life and make those events more accessible to herself and others. Monti, et al. (2006) also found that participants valued making their experiences concrete through artistic representation.

Creating meaning. For the artists one of the benefits of creating art was the ability to engage with the piece of art (Haltiwinger, Rojo & Funk 2012; McNiff, 1992; Monti, et al. 2006; Rockwood Lane & Graham Pole, 1994; Stucky & Nobel, 2010; Wood, Molassiotis & Payne, 2011). When internal processes are made evident and separate from the artist, it allows the artist to engage with the content and discover expressions, connections and facets of self and situation that were not apparent with rational thought (Dissanyake, 1995; McNiff, 1992; Tinnin, 1994).

Art is also used to represent a vision of what might be (Grey, 2001; Marxin, 2011; Watson, 1999). Art of what might be is a concrete expression of hopes and dreams, and an attractor for a different way of being. For example: Spero’s work, as cited by Marxin (2011), recast oppressed women as powerful rather than victims as a way of starting a change from victim to powerful survivor, and enabled people to see themselves as powerful as a first step to becoming powerful.

The artists created art that was a non-verbal symbolic representation of their experience or hopes, and then engaged with the product of art to create meaning for that experience. For the participants in the Haltiwinger, Rojo and Funk (2012), Monti, et al. (2006), Rockwood Lane and
Graham Pole (1994), Stucky and Nobel (2010), and Wood, Molassiotis and Payne (2011) studies creating and then engaging with their created art allowed them to re-define the meaning of their life to include cancer. In all the studies the concrete external representation of experience allowed participants enough separation from the experience to explore it in different ways than talking or thinking about it had. The products of art are symbols because they represent something else (Dissanayake, 1988).

Symbols are a vehicle for expression and the way that the unconscious, which has no words, can speak to the consciousness (Jung, 1958; Campbell, 1949). Though some symbols are universal, people can create personal symbols that have deep meanings (Campbell, 1949; Jung, 1958). The symbols in art contain a multitude of truths and meanings (Grey, 2001). The meanings of symbol are richer and more nuanced than non-symbolic communications and are best understood with a whole gestalt. The Native Americans in the Dufrene and Coleman (1994) study use art to create a symbolic world which can be interacted with in different ways than the experienced world. They manipulated the symbolic world in ways that changed their experience and therefore changed the experienced world.

Connection to self and others. In the literature, participants spoke of art as beneficial because it allowed them to connect with themselves and develop an identity beyond their disease or limitations. Creating art helped people integrate a disease process such as cancer into their identity (Stucky & Nobel, 2010). The participant in Haltwinger, Rojo and Funk’s (2012) study was unable to continue working because of cancer, and was shaken by the changes in her body. She coped with her loss of identity as a working adult by getting into bed and limiting interactions with people to the absolutely necessary for her treatment. Though she was resistant to participate in talk therapy, she was willing to participate in an art group. Through creating
together she first found camaraderie and acceptance. She redefined who she was as a creative person who had value even though she had disease related limitations. She then was able to participate in activities that she valued. The women in Collie and Kante’s (2011) study stated that creating art focused on their strengths and helped them see themselves as people with something to offer rather than people with a weakness who needed a support group. They were able to see the strengths in each other and form supportive relationships within the art group. This study described the intermediate outcomes and examined some of the mediating factors for the intermediate outcomes.

*Ultimate outcomes.* The ultimate outcome of creating art is health promotion. In the context of chronic illness health promotion can be focused on well-being. People with chronic illness will not be cured from their disease, but they can adapt to their disease and realize their human potential (Koithan, 1997; Pender, Murdaugh & Parsons, 2011). Creating art is an intervention that can have the ultimate outcome of maximizing potential and improving well-being in the context of chronic illness. Creating art can assist people to transform their perceptions and behaviors from an unhealthy to healthier pattern and facilitate transformation and fulfillment.

A transformative response to a stressor is the ability to become something qualitatively and fundamentally different than before (Corley, 2010; Magis, 2010; Maguire & Cartwright, 2008). Transformation is a creative response demonstrated by a non-linear change. Transformation is a leap in development rather than orderly growth to predictable level. Positive transformation is the optimal response to a stressor because it is the most effective response to “an environment characterized by change, uncertainty, unpredictability and surprise” (Magis, 2010, p 401).
Positive transformation can be understood in the context of complexity theory. As discussed in the previous chapter, people are complex systems capable of non-linear change. People can become stuck in patterns, attracted to suboptimal responses to life challenges (Koithan, et al. 2007). A new attractor can cause movement and cause a pattern to change (Koithan, et al. 2007). In the literature creating art created movement (Rockwood Lane & Graham Pole, 1994). The intermediate outcomes of art; connection to self and others, the product of art, and created meaning, allowed people to envision other ways of responding to life challenges and increased the complexity of their responses. Complexity encourages the quantum change of positive transformation and the accompanying changes to attitudes and behavior (Reniscow & Page, 2008). “Health promotion occurs as meanings unfold, human purpose is examined and illuminated, and alternatives take wing” (Koithan, 1994, p 250).

Creating art is a behavior that transforms human consciousness (Grey, 2001). The participant in the Haltiwinger, Rojo and Funk (2012) study found that her behaviors, attitudes and way of being in the world as well as her way of dealing with her cancer changed dramatically. She was more accepting of herself and others and more able to participate in her life and interact with loved ones in a deeper more meaningful way. Several of the artists in the Marxin (2011) study positively transformed pain and suffering and recast themselves as empowered people rather than victims. Rockwood Lane (2005a) found that art changed attitudes, emotional states and perception of pain. The participants in Rockwood Lane’s (2005b) study described creating art as a form of transcendence. The studies that did not cite positive transformation as an outcome of creating art did discuss outcomes of improved coping, reduced stress, and improved quality of life (Collie & Kante, 2011; Monti, et al. 2006; Stuckey & Nobel, 2010; Visser & Op’t Hoog, 2008; Wood, Molassiotis & Payne, 2011). The participants in these
studies may have experienced positive transformation, however the term may not have been used by the researchers when describing the changes the participants made. The participants in all of the studies described participation in creating art as an experience that improved their well-being. This study described the ultimate outcomes and examined some of the mediating factors for the ultimate outcomes.

**Knowledge Gaps**

Though there is an increasing body of literature about art as intervention that improves wellbeing among people with chronic illness, there are significant gaps in the literature about intervention specifics that prohibits the study of creating art in the context of chronic illness. This section discusses the gaps in the literature and suggests research to address those gaps.

The literature does not provide a clear picture of the structure of the intervention. The characteristics of the patients, intervention facilitators or context that impact the intervention have not been well defined. After review of the literature, questions remained about the characteristics of people who would be most likely to participate and benefit from creating art, as well as what characteristics are important in the intervention facilitators and what are the components of the intervention. This study described the structure of the intervention in order to create a framework for further research in this area.

The intervention components or ‘active ingredients’ of the components of art have not been well explored for their healing properties and it is not well understood how they could work to promote healing. In addition, the needed dose and timing of the intervention were not adequately explored. It is unclear how many weeks of how much time per session is needed to have an effect. Some studies had four week participation while others had eight. Is four weeks sufficient, or is eight better? In addition the level of participation during the sessions or the
amount of art a person needed to create to have an effect was not explored. This study explored and described the dose from the perspective of the participant.

The client enactment and adherence, including aspects of the intervention that encouraged or discouraged participation, also need further investigation. Overwhelmingly positive responses to creating art were described in the literature however; negative reactions and dropouts were not well discussed. Though art may be an overwhelmingly positive experience, it is unlikely that there were no negative reactions or drop outs, and the reasons for these needs to be explored. The aspects of enactment and adherence may be related to patient characteristics, which is another area that is underdeveloped and affects further testing of this intervention. This study described factors that encouraged and discouraged enactment of and adherence to the use of art as a healing intervention.

In addition, the role of the health care practitioner in administering and monitoring the implementation of the intervention was not clear. Marvin’s (2011) described a person who created art about her trauma, but was not transformed. It was not clear if the artist experienced all of the process as described above and if she was unable to do so why not, and would working with an intervention facilitator have been beneficial? This study explored and described characteristics of the health care practitioner that the participants found most helpful.

Immediate outcomes of expression, and attention to here and now were fairly well described in the literature. Intermediate outcomes of the piece of art, making the ordinary special, non-mediated genuine observation, created meaning and connection to self and others have been fairly well explored in the literature. The ultimate outcome of health promotion have been well explored. This research explored the immediate outcomes and the factors that mediated the achievement of the immediate outcomes.
The literature focused on the positive aspects of creating art as a tool to express feelings and deep unconscious thoughts, but there was very little discussion of the possible negative effects and no discussion of guidelines for the use of creating art as a healing intervention. Grey (2001) experienced negative effects when he created art from an interaction with preserved deformed bodies. He found that because he created the art without respect and as an experiment in creating shocking images that creating art was damaging to his psyche. One of the artists in Marin’s (2011) study used art to repeatedly cycle through negative aspects of her experience. For her, art was an attractor that held her to unhealthy pattern.

Both the above examples of negative effects were with people who created art as an independent healing modality. No negative effects of creating art as part of a facilitator guided intervention were found in the literature. However, making difficult life events special through focusing on them in art could be difficult on participants. Though the literature did not state any negative effects from connecting with self and others, changing one’s identity and the process of self-discovery could be disorienting (Rosa, 2011). It could also be frightening, particularly when navigating destructive or negative aspects of self. Creating art is a powerful intervention and may stir memories and emotions (Deaver, 2011). The current literature did not clearly indicate if people need support through this process and if so what kind of support would be most helpful. Discussing creating art had the potential to lead the participant to recall difficult memories or emotions; however, the participant had the opportunity to process these memories and emotions during the art intervention prior to this research study. No participants in this study described negative effects from art as a healing intervention.

Though positive transformation is a possible outcome of creating art, it was not clear in the literature how often positive transformation was the outcome for people who create art.
Marxin (2011) described an exemplar of someone who was not transformed by creating art. If creating art is to be used as a modality to encourage positive transformation and health then the parameters of when and why this happens need to be explored. This study described the ultimate outcomes of art and the mediating factors for achieving the ultimate outcomes.

Summary

Creating art is a health promotion intervention that can assist people to develop their potential and create well-being in the context of chronic illness. As an intervention creating art can be examined for structure, process and outcomes. Though research has explored the intermediate and ultimate outcomes of art, the structure and process of creating art as an intervention has not been well developed. This research explored and described the intervention of creating art for health promotion with the goal to identify and describe various key components of the creation of visual art as a healing intervention in the context of chronic illness.
CHAPTER 3: METHODOLOGY

Multiple aspects of creating art as a health care intervention are not well-defined or understood. Before proceeding with a program of research that tests the outcomes of or evaluates/compares the effectiveness of an art intervention within the context of chronic illness, aspects of the intervention need to be clearly explicated. Therefore, the purpose of this research study is to identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness.

The following research questions have been identified for this study and are linked to the aspects of interventions as described by the intervention theory proposed in Chapters 1 and 2:

1. What are the characteristics of the people who participate in art as a healing intervention?
2. What intervention facilitator characteristics influenced the participant’s experience with art as a healing intervention?
3. What were the characteristics of the context for creating art?
4. What were the intervention components and dose?
5. How did the participant enact and adhere to the treatment?
6. What were the immediate outcomes of participation?
7. What were the intermediate outcomes of participation?
8. What were the ultimate outcomes of participation?

Research Design

The creation of art as a healing modality for people with chronic illnesses is best investigated through qualitative research. Qualitative researchers ask questions to develop empirical knowledge about a human phenomenon when depth of understanding would be helpful, but measurement inappropriate (Thorne, 2008). The aims of the research and the
questions derived from the conceptual framework are questions that must be explored with the research participants in order to make the implicit explicit and develop knowledge and understanding (Munhall, 2007). They are not questions that can be answered through quantitative measurement. In fact, measurement at this point would be impossible as there is no creating art intervention theory that could be used to identify or develop outcomes measures or develop an appropriate intervention design. Qualitative research is the preferred method for discovering the unforeseeable knowledge that may be the most relevant to practice (Beista, 2009) and for understanding a human phenomenon (Cresswell, 1998). Therefore qualitative research is the most appropriate research for this topic.

**Qualitative Description Design**

The literature review of visual art as a healing modality revealed that this intervention has not yet been well defined. Though the intervention components, intermediate and ultimate outcomes have been suggested in the literature, many questions remain about client characteristics, intervention facilitator characteristics, content characteristics, dose, client reaction and client enactment and adherence to treatment. Understanding these aspects of the intervention will allow for further exploration of facilitators and barriers for the use of creating art as a healing intervention. In addition, understanding aspects of the intervention may guide the development of art interventions that are more effective in obtaining the ultimate goal of pattern change and health promotion.

Qualitative description is a methodology used to identify and describe human experience in applied practice (Thorne, 2008). Qualitative description is a research methodology based in naturalistic inquiry. The researcher describes what is going on in a natural environment using everyday language (Sandelowski, 2000). The data are then analyzed and interpreted to develop
an understanding of the phenomenon, describing it in a way that is useful for practice, as well as further research and theory building (Thorne, 2008). The goal of qualitative descriptive research is to understand the phenomenon of study from the perspective of the person who lived it (Thorne, 2008).

This study used a qualitative descriptive design to examine art as a healing intervention in chronically ill adults. Interviews and observation of participant created visual art were used as data sources. Data was analyzed using content and matrix analytical methods to identify, describe, and explain the parameters of the use of art as a healing intervention and to further delineate an intervention model that can be used to eventually test the effectiveness of this intervention.

**Data Sources**

In all types of qualitative research, data may be obtained from multiple sources (Corbin & Strauss, 2008; Denzin & Lincoln, 2005). In this study, data was collected using interviews conducted with individuals who had participated in creating visual art during chronic illness. Interviews are an appropriate data source because the focus of this study is to understand creating art as a healing intervention, and the individual who participated is the best source for these data (Thorne, 2008). Participants were also asked to share pictures of their art, either electronically or by mail. Structured observations of these pictures helped to structure the interview. Interviews were focused on the time surrounding the creation of these products of art, what the experience was, what barriers existed and what the meaning of the experience was in the context of the participant’s chronic illness experience. In this way, the interviews were easier for the participant and the researcher since it is easier to describe abstract ideas when focusing on a specific activity or behavioral instance (Spradley, 1979; Thorne, 2008).
Population, Sample and Sampling

The creation of art for healing is currently being used by populations with chronic illness (Collie & Kante, 2011; Corley, 2010; Haltiwinger, Rojo & Funk, 2012; Marxin, 2011; Monti, et al. 2006; Rockwood Lane, 2005a; Rockwood Lane, 2005b; Rockwood Lane & Grahm-Pole, 1994; Stuckey & Nobel, 2010; Visser & Op’t Hoog, 2008; Wood, Molassiotis & Payne, 2011). For this study, chronic illness was defined as an illness with a long duration and slow dynamic progression (Burton, 2000; Corbin, 1991; Halcomb & Davidson, 2005; WHO, 2012). Therefore, adults (those over 18 years of age) with a diagnosed illness that had been present longer than twelve months who engaged in art as a healing modality were the population of focus for this study.

Inclusion Criteria

The inclusion criteria for this study were persons who were:

1. English speaking.

2. Had access to a phone or computer for the interview.

3. Living with a chronic illness that was not primarily psychiatric for at least 12 months.

4. Participated in the creation of visual art as a healing intervention in the past 24 months.

5. Created at least one piece of art.

6. Willing to share a picture of the participant created art with the researcher.

7. Able to participate in an audio-recorded interview lasting approximately 1-2 hours.

8. Able to have insights into behaviors and responses.

9. Eighteen years old or older.
Exclusion Criteria

This research study did not include people whose chronic illness was primarily psychiatric for several reasons. Discussion of illness and art may bring up difficult issues and cause increased psychological distress that would have required additional psychiatric intervention that the researcher was not prepared to offer. Additionally, primary psychiatric illness may have limited the participant’s ability to be sufficiently self-reflective, a quality needed for the in-depth data collection required by this design. People who were currently enrolled in hospice were also excluded from the study. These persons were at a particularly vulnerable stage in their life, and this interview topic may have been particularly difficult.

Recruitment Procedure

Adults (n=20) who had used visual art as a healing modality for their chronic illness were recruited for this study using a network recruitment strategy. Network sampling was used to recruit participants. Network sampling is defined as recruitment of potential participants through a network of persons known to the researcher who could then recruit potential participants (University of California, Irvine, 2010). The researcher contacted professionals who used art as a healing intervention and requested that they recruit research participants (Appendix D – email to professional and personal contacts). The researcher also had the option to submit paid ads to be posted on the websites of professional groups that may have professionals who use art as a healing modality with chronically ill patients, including the Society for Arts in Health Care and the American Holistic Nurses Association (Appendix E – sample ads). These ads would have encouraged nurses and group facilitators to display recruitment materials where art groups meet and distribute recruitment materials to potential participants. These recruiters, similar to a cultural broker in an ethnographic study (Creswell, 1998; Wolfe, 2007), were instructed by the
primary investigator to use the script in Appendix C when forwarding recruitment materials to others. Similar to a cultural broker, these network contacts knew the population of interest, had key contacts within that population, and were able to facilitate the recruitment process. This method of network sampling method resulted in a convenience sample. Convenience samples are appropriate for descriptive studies (Thorne, 2008).

The potential participants who contacted the researcher either by phone or by email were screened over the phone prior to enrollment in the study. The researcher read a screening script (Appendix F) describing the research, explaining what the participant was expected to do and asked questions to determine if the potential participant met the inclusion criteria. The sample (n=20) was a convenient sample; those volunteering to participate and who met the inclusion criteria, were enrolled.

**Enrollment**

Potential participants were screened and those meeting the study criteria were enrolled in the study (n=20). An explanation of the research (Appendix G) and research disclosure form was read over the phone (Appendix H). The researcher obtained verbal assent for the interview. In addition, the researcher requested a photograph of participant created art to be mailed or emailed to the researcher. The participants were instructed to send the photograph to the researcher by attached document (jpg or PDF) via email to the researcher. All participants were able to send photographs of their art electronically. Upon receipt of the photograph the researcher made an appointment to interview the participant by phone or by Skype, whichever the participant preferred. Once verbal assent was obtained, the research disclosure form was mailed or emailed to the participant.
Data Collection Methods

Two primary forms of data collection were used: observation of the photographed participant-created piece of art and participant interviews. Each is discussed in this section.

Observations

Prior to the interview, the researcher examined the photograph of the piece of art submitted by the participant and noted observations about the content and impact of the piece using an art assessment tool (Appendix I) (Rancour & Barrett, 2011). The observations were made to orient the researcher to the piece of art prior to the interview. While art can be examined to analyze the creators of the art and make clinical diagnoses (Fenner, 2011), this study used observation and interview together to determine what the piece of art meant to the participant who created it. Therefore, questions and observations about artwork were recorded during the observation period so that appropriate questions could be formulated for the participant interview where the experience was queried. The goal of this process was to understand the experiences of creating art in a more nuanced way than words alone can capture (Harper, 2005). The photographs of the created art were included in the analysis of the data as visual references to the verbal interview content.

Individual Participant Interviews

Open-ended interviews were used to explore the parameters of the structure, process and outcomes of creating art as a healing modality. While structured interviews with pre-identified questions would not have had the flexibility needed to gather data about a poorly understood phenomenon, open-ended interviews had a higher probability of collecting the important and pertinent data about the phenomenon (Fontana & Freay, 2005). Though open-ended interviews do not have a set of pre-identified questions, they do have a specific purpose; to gather data to
answer the research questions (Spradley, 1979). Therefore, it was appropriate to have an interview guide (Appendix J) to assist the researcher to ask questions to elicit the responses that answered the research questions (Patton, 2002).

In addition, questions that probed more deeply into rationale, explanations, circumstances, and responses for the specific piece of art created were used. For example, participants chose to discuss how a particular medium contributed to healing. Therefore, the interview questions in Appendix J were modified with greater specific detail based on the observations of the participant-created art made prior to the interview. Following initial questions, the researcher followed the participant’s lead and asked more questions that probed understanding, meaning, and specific descriptive elements. Thus, open-ended questions allowed the researcher to stay on-topic while encouraging the participant to discuss what the participant felt was important (Munhall, 2007; Patton, 2002).

The researcher began by asking a few demographic questions to establish a background. These questions are outlined in Appendix J and noted as demographic questions. The researcher then asked a grand tour question “tell me about the artwork in the picture you sent” to help position subsequent questions (Munhall, 2007). Asking the participant to focus on a particular work of art enhanced their memory and gave the interview a concrete starting point (Munhall, 2007; Spradley, 1979; Thorne, 2008). This grand tour question was followed by questions to elicit information to identify, describe and explain the use of visual art as a healing intervention in the context of chronic illness.

The interview continued with the researcher asking the participant to describe the structure, process and outcomes of using art as a healing intervention. Questions were asked to describe client characteristics, intervention facilitator characteristics, content characteristics,
dose, client enactment and adherence to treatment, intervention components, immediate, intermediate and ultimate outcomes – all important to understanding aspects of the intervention. The interview guide (Appendix J) provides examples of questions that were used to prompt the participant during the interview.

The interviews were conducted over the phone or by Skype, as selected by the participant. The participant remained in their familiar setting during the interview, and the researcher was uninterrupted during the interview in a private location. All interviews were digitally audio recorded.

Observational notes were made to describe observations that could not be recorded in the interview transcripts (Patton, 2001). In this study, facial expressions for the participants who were interviewed through Skype and emotional tone of the participants were observations that were recorded. The observations were noted with an ON for observational note. These notes were added to the transcript and included as data in the analysis.

Field Notes

The researcher took field notes during and after the interview. After the interviews, methodological notes were be made. Methodological notes were used as reminders about procedural aspects of the research, for example to highlight points in the interview that were particularly pertinent for answering the research question (Corbin & Strauss, 2008). Methodological notes were noted with an MN and the notes were not be used in the data analysis as the purpose of the methodological notes was to assist the researcher to organize the collected data. In this study, methodological notes were be used to improve the rigor of the study by creating an audit trail for the dissertation chairperson and the examination committee.
Theoretical notes were made to record the researcher thoughts about the data (Corbin & Strauss, 2008). Theoretical notes were noted with a TN and were used to assist the researcher to start more in-depth memos about the data for data analysis. The theoretical notes were a way to capture thoughts about the data that may occur at any time in the data collection (Corbin & Strauss, 2008). In qualitative descriptive research the analysis of the data is concurrent with data collection, and theoretical notes help develop the research from simple description to description that explains the phenomenon (Thorne, 2008).

**Data Management**

All interviews were digitally recorded and transcribed in compliance with IRB regulations to assure human subjects’ protection. Transcriptions were electronically filed as password protected encrypted MS-Word documents and imported to Atlas.ti (Version 6.2). The actual interview recording files were destroyed upon completion of the research.

Observational data collected on the form in Appendix I was transcribed. Transcriptions of the observational data are attached to the individual interview files then electronically filed as password protected encrypted MS-Word documents and imported to Atlas.ti (Version 6.2). Field notes were also be transcribed. Field note transcriptions were attached to the individual interview files then electronically filed as password protected encrypted MS-Word documents and uploaded to Atlas.ti (Version 6.2).

All information was kept confidential. Pseudonyms were not used; participants were identified in the final report by a randomly assigned subject number. Ethical treatment and compassion for the participants was also extended to the products of art which were treated as extensions of the participants (Deaver, 2011). Photographs that included art images that could be identifying were digitally altered before analysis by the research team or inclusion in the research
results (Deaver, 2011). In this study the identifying aspects of the art were the artist’s signature or initials. The signature or initials were digitally blurred to prevent identification of the participant.

**Data Analysis**

In qualitative interpretive descriptive studies, data are analyzed in an inductive manner. Inductive data analysis is particularly helpful when there are no explanatory concepts for observed behaviors (Meleis, 2007; Peterson, 2009). The researcher develops an observation and interpretation from observed or experienced data (Chinn & Kramer, 2008; Walker & Avant, 2005). In this study, the researcher analyzed the data to determine the structure, process and outcomes of using art as a health promotion intervention. Inductive reasoning was used to build explanatory concepts from these observed phenomena and the participants’ description of structure including: client, facilitator and context characteristics; process including: intervention components and dose and outcomes including: immediate intermediate and ultimate outcomes. Knowledge was developed from specific to generalizable and thus the analysis moved between the micro and macro data, focusing on the research questions, the big picture, and the explanatory model for the intervention (Dombro, 2007).

Study data was first theoretically coded using the research questions as the organizing code book. The data was fractured into manageable pieces that corresponded to the research questions. The data was then sorted into groups (i.e. ‘dose’ and open coded) to determine characteristics. Open coding is an *emic* type of coding whereby fragments of the transcribed data are assigned codes that describe the data, and a code book was built from the developed codes. *Emic* codes arose from the data and were an inductive way to allow meaning to arise from the participants understanding of the experience (Charmaz, 2006; Kalwinsky, 2007). The data are
coded to fracture the data into meaningful units, organize the data into concepts and categories and to describe the dimensions of the phenomenon of study (Miles & Huberman, 1994).

The researcher and the chair theoretically coded the first two interviews together. The researcher bundled and sent the first two coded interviews to the chair for comparison. Then the researcher then theoretically coded three more interviews. One of the codes in the etic code book was an ‘other’ code. Data that did not fit with any of the established codes was coded as other. Every five interviews the ‘other’ codes was opened, coded and the codes were added to the code book for further interview analysis. The chair and the researcher met every five interviews to review codes and discuss data analysis. After five interviews were coded, the researcher and the chair met to perform a coding abstraction.

Once all of the transcripts were theoretically coded, a code report was created for each of the theoretical codes. The “other” code was examined first to determine if additional codes should be identified prior to additional coding. Once that was complete, the researcher began open coding each of the code reports, and met with the chairperson during this open coding process. Excerpts of coded text were dual coded by researcher and chair to improve the credibility of the final results.

Once each of the codes was open coded, the coding moved from emic to etic coding. Etic codes are deductive codes that are developed by the researcher that conceptually are aligned and repeatable across participants. These etic codes were used to populate the analytical matrices that were developed to address the interview questions. During etic coding the research moved into the phase of analysis that built in depth understanding of the data (Charmaz, 2006). The codes for this analysis may be seen in Appendix K.
Following completion of the coding process, matrix analysis was used to analyze the data and present it in an understandable format (Averill, 2002). Matrices are data displays that can be used to compare and contrast qualitative data for different groups of people and/or for people with different characteristics (Averill, 2002; Miles & Huberman, 1994). Four levels of matrix analysis may be used: First level to identify themes in the data per participant, second level to identify themes in the data across participants, third level to develop a model of how the intervention works, and fourth level to build an overarching theory of the phenomenon (Averill, 2001; Miles & Huberman, 1994). In this study, only first, second, and third level matrices were constructed based on the research questions.

First level separate matrices were developed for each of the study participants clearly identifying their characteristics, the characteristics of the facilitators they worked with to create art, the characteristics of the context, the intervention components and dose, their reactions and treatment enactment, and intermediate and ultimate outcomes. Thus, a composite “picture” of the use of art as intervention by each participant was developed. Second level matrices were constructed for each of the research questions, summarizing the findings across participants to identify the client characteristics, the characteristics of the art intervention facilitators, the characteristics of the context, the intervention components and dose, treatment enactment and intermediate and ultimate outcomes associated with an art intervention across all study participants. Third order analysis was then constructed to compare and contrast these factors based on participant characteristics, including diagnosis, art experience and other characteristics identified during the research process so that a comprehensive description of this intervention was obtained. The matrices included the researcher critical reflections to facilitate the development of meaning (Averill, 2002) and the photographs of the participant created art.
The outcome of this analysis process was an in-depth description of the structure, process and outcomes of art as a healing intervention. The final outcome of the research was concept maps that support the construction of an intervention model to describe the structure, process and outcomes of the creation of art as a healing intervention. The concept maps will structure further research and be useful to nurses who would like to develop or refine art creative art interventions with the chronically ill.

**Protection of Human Subjects**

Approval for this study was obtained from The University of Arizona’s College of Nursing’s Departmental Review Committee and The University of Arizona’s Human Subjects Protection Program (HSPP) prior to the recruitment of participants and the collection of data.

All participants participated on a voluntary basis. Informed assent was obtained (Appendix H). Participants were informed of the right to refuse to answer any question or withdraw from the study at any time without penalty.

While there were no anticipated physical, psychological, social or economic risks identified for this study, the participant could have experienced concern or strong emotional responses when reflecting and recalling difficult aspects of their life and illness experiences. In addition, participation in the interviews may have precipitated self-discoveries that are difficult to reconcile. No participants in this study reported experiencing any negative responses. If participants had reported negative responses they would have been referred to their primary care provider for follow-up.

There were no immediate physical benefits to participation in this study. There was no compensation for participating in this study. However, participants may have benefited from the process of self-discovery and may have gained a deeper understanding of the importance that art
had had for them within the context of their chronic illness. They may also have gained a sense of satisfaction by participating in a study that helps improves nursing’s understanding of the health benefits of art during chronic illness.

**Maintaining Rigor in Qualitative Research**

The rigor and trustworthiness of qualitative research lies in credibility, dependability and confirmability (Lincoln & Guba, 1985). In this framework, the criteria for determining the trustworthiness of quantitative research is analogous with the criteria for quantitative research: (a) truth value corresponds with credibility and validity, (b) applicability corresponds with transferability or representativeness, (c) confirmability corresponds with dependability and reliability, and (d) confirmability corresponds with neutrality and the lack of researcher bias.

Credibility is assured by examination of methods. The qualitative researcher must collect data that has depth in order to have confidence in the truth of the data. Prolonged engagement, persistent observation and triangulation are methods for ensuring credibility (Lincoln & Guba, 1985). Researchers should spend a considerable amount of time with data collection to be sure that they deeply examine the data and are not sidelined by surface concerns (Lincoln & Guba, 1985). Persistent observation is evidenced by continued questioning and conduction of research. It should be evident that the researcher did not merely observe, but asked in-depth questions (Lincoln & Guba, 1985) and did not reach conclusions too quickly (Hall & Stevens, 1991).

Triangulation is the use of multiple data sources, result checks with other researchers, comparison with other research on the subject and examination of data in multiple ways. These techniques are used to ensure that the data is truthful to the phenomenon of study (Lincoln & Guba, 1985; Russell & Gregory, 2003).
For this study prolonged engagement began with the in-depth observation of participant-created art. This engagement continued with 1:1 interviews with participants that lasted 1-2 hours. In addition, interviews, observational notes and field notes were be read and re-read while listening to the recorded interviews. This helped to assure that engagement was complete. Two data sources were used in this study; further improving credibility of the final results of this study.

While qualitative research is not meant to be generalizable, it may be transferrable. Transferrable research is research that can be used in similar populations (Lincoln & Guba, 1985; Maxwell, 1992; Russell & Gregory, 2003). Qualitative research should be applicable outside the research situation and meaningful to outsiders (Strubert & Speziale, 2002). Transferability is assured when the researcher provides a thick description and gives the widest possible range of information so the consumer of the research can determine if the research is transferrable (Lincoln & Guba, 1985). The determination of research transferability is the responsibility of the research consumer since they understand the context in which the research is to be applied. The qualitative researcher is responsible to make sure that the research is as true as possible for the sample group.

Transferability of this research was addressed through providing a thick description of the structure, process and outcomes of creating art as an intervention. Demographics and description of participants were included so the research consumer may determine if their population is similar enough to the participants of this study to make this research transferable to their population.

Quality research is always evaluated for consistency in the data collection and analysis process and is typically measured by repeatability of results (Tronchim & Donnelly, 2008). In
qualitative research, it is understood that context is continually changing, so consistency is not completely possible. Therefore qualitative research is evaluated for dependability. The research is dependable if the data are a true reflection of the phenomenon. The primary method for ensuring dependability is the data audit. The researcher asks other researchers to determine if the interpretation is consistent with the data (Lincoln & Guba, 1985).

In this study, dependability was addressed through the audit trail. Transcripts and field notes were sent to the dissertation chair as soon as they were available. The chair reviewed the transcripts and the codes and parallel coded portions of the transcripts. Periodically, the dissertation chair and the researcher met to discuss the emerging concepts, their relationships and the overall meaning of the data.

Finally, qualitative research should be confirmable. Qualitative researchers believe that all research has inherent bias. The goal in science, therefore, is to strive to understand the researchers’ own biases and to mitigate the effects of those biases in order to allow other voices to be more purposefully heard (Hall & Stevens, 1991; Koch & Harrington, 1998). In order to assure confirmability, the researcher continuously monitors their biases during data collection and analysis, de-briefs with others on their research team, and conducts member checks to confirm that the data is representative of the participants’ experiences (Lincoln & Guba, 1985).

In this study, the researcher used the transcripts and photographs of art as the basis for all interpretations. The dissertation chair reviewed the interpretation of the data in an ongoing manner to ensure that the final interpretation was true to the data. The chair de-briefed with the researcher to assure that the coding was completed without bias.
Conclusion

The results of this study identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness. The structure process and outcomes of art as a healing modality were explored and visually represented. The structure included client, facilitator and context characteristics; the process included the intervention component and dose, and client adherence and enactment; and outputs included immediate, intermediate and ultimate outcomes. This description of the components of art as an intervention as well as the modifiers to the components and the relationship of the components to each other will allow further research to be appropriately focused. In addition this research increased the understanding of the use of art as a health promotion intervention and may assist practitioners to more efficiently develop and implement art programs in the context of chronic illness.
CHAPTER 4: STUDY PARTICIPANTS

Twenty people were interviewed by phone or computer between August 2012 and December 2012. The participants submitted a digital photograph of a piece of art they had created within the past twelve months prior to the interview. This chapter provides a summary of the sample as well as an individual account of six representative participants accompanied by the photographs of the participant’s art. The participants are presented by their level of art experience.

This descriptive study presented a description of the aspects of art as a healing intervention. These photographs and stories present the aspects of art as a healing intervention as understood by the participants. The research participants were assigned random numbers by the principle investigator and any signatures on art were blurred to protect participant identity.

Sample Description

Four men and sixteen women participated in this study. They ranged in age from 44 to 78 with a mean age of 59. The participants had a wide variety of illnesses and most participants had multiple co-morbidities. The participants had been ill from six months to fifty years with the mean illness duration of 16 years. All but one of the cancer patients had illness duration of less than ten years.

There were three different levels of art experience in the participants; six people were art beginners who had never made art before becoming ill, seven people were art discontinuous and had been involved in art in the past, but had not made art for years before becoming ill, and seven people were art continuous and had made art continuously throughout their lives. The representative art and stories presented here include two art beginners, two art discontinuous and two art continuous participants. The sample description is summarized in Table 2.
<table>
<thead>
<tr>
<th>Participant number</th>
<th>Age</th>
<th>Gender</th>
<th>Illness</th>
<th>Illness Duration</th>
<th>Art Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>66</td>
<td>Female</td>
<td>Bladder Cancer</td>
<td>8 months</td>
<td>Beginner</td>
</tr>
<tr>
<td>15</td>
<td>52</td>
<td>Female</td>
<td>Fibromyalgia</td>
<td>3 years</td>
<td>Discontinuous</td>
</tr>
<tr>
<td>19</td>
<td>64</td>
<td>Female</td>
<td>Cardiomyopathy, Congestive Heart Failure</td>
<td>8 years</td>
<td>Discontinuous</td>
</tr>
<tr>
<td>22</td>
<td>69</td>
<td>Male</td>
<td>Multiple Sclerosis</td>
<td>18 years</td>
<td>Discontinuous</td>
</tr>
<tr>
<td>26</td>
<td>60</td>
<td>Male</td>
<td>Multiple Myeloma</td>
<td>4 years</td>
<td>Beginner</td>
</tr>
<tr>
<td>27</td>
<td>55</td>
<td>Female</td>
<td>Breast Cancer</td>
<td>5 months</td>
<td>Beginner</td>
</tr>
<tr>
<td>28</td>
<td>59</td>
<td>Female</td>
<td>Fibromyalgia</td>
<td>10 years</td>
<td>Continuous</td>
</tr>
<tr>
<td>32</td>
<td>64</td>
<td>Female</td>
<td>Cardiac Disease, Diabetes, Chronic Obstructive Pulmonary Disease,</td>
<td>15 years</td>
<td>Discontinuous</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Osteoarthritis, Complicated Bone Fractures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>66</td>
<td>Male</td>
<td>Multiple Myeloma</td>
<td>5 years</td>
<td>Beginner</td>
</tr>
<tr>
<td>42</td>
<td>64</td>
<td>Female</td>
<td>Fibromyalgia, Chronic Fatigue</td>
<td>20 years</td>
<td>Continuous</td>
</tr>
<tr>
<td>54</td>
<td>57</td>
<td>Female</td>
<td>Diabetes</td>
<td>50 years</td>
<td>Continuous</td>
</tr>
<tr>
<td>57</td>
<td>64</td>
<td>Female</td>
<td>Thyroid Disease, Pernicious Anemia</td>
<td>1 year</td>
<td>Continuous</td>
</tr>
<tr>
<td>60</td>
<td>72</td>
<td>Female</td>
<td>Breast Cancer</td>
<td>4 years</td>
<td>Beginner</td>
</tr>
<tr>
<td>64</td>
<td>44</td>
<td>Female</td>
<td>Autoimmune Disease</td>
<td>26 years</td>
<td>Continuous</td>
</tr>
<tr>
<td>72</td>
<td>78</td>
<td>Female</td>
<td>Breast Cancer</td>
<td>14 years</td>
<td>Continuous</td>
</tr>
<tr>
<td>78</td>
<td>68</td>
<td>Female</td>
<td>Breast Cancer, Osteoarthritis, Diabetes</td>
<td>3 years</td>
<td>Beginner</td>
</tr>
<tr>
<td>82</td>
<td>63</td>
<td>Male</td>
<td>Multiple Sclerosis, Complicated Bone Fractures</td>
<td>20 years</td>
<td>Discontinuous</td>
</tr>
<tr>
<td>88</td>
<td>62</td>
<td>Female</td>
<td>Multiple Injuries</td>
<td>46 years</td>
<td>Continuous</td>
</tr>
<tr>
<td>92</td>
<td>67</td>
<td>Female</td>
<td>Fibromyalgia, Chemical Sensitivity, Reactive Airway Disease</td>
<td>24 years</td>
<td>Continuous</td>
</tr>
<tr>
<td>99</td>
<td>51</td>
<td>Female</td>
<td>Rheumatoid Arthritis, Colitis</td>
<td>50 years</td>
<td>Discontinuous</td>
</tr>
</tbody>
</table>
Representative Participants

Participant 11

FIGURE 3. Participant 11 Art
Participant 11 was a 66 year old woman who was diagnosed with cancer eight months before the interview. She was still working at a demanding job that she enjoyed. She described herself as a perfectionist in her job stating: “if I can't do it perfect I just usually don't end up doing it. I'm that a-way about my job I'm a perfectionist about my job. And I will work with the client until it's perfect for them.” When she was diagnosed with cancer she did not seek any assistance beyond physical treatments because she didn’t think she needed it. She also did not want to discuss her illness and symptoms with other people. “I don't want to tell people oh I'm having a real bad day I'm in pain.” As her illness progressed she sought help at the cancer center:

*When I was first diagnosed and I had my first surgery and then my second surgery and I thought you know I'm gonna be fine. I don't need others to tell me about the cancer journey. I've read on it. I've looked it up on the Internet umm I've researched it, I'm fine. But then as I kept getting in more pain and I realized I'm not fine, emotionally I wasn't dealing with it, so that's when I contacted P. at the cancer part of [the hospital] and she put me into all of this. And I went to her first support group when I was diagnosed with two more tumors.*

One of the support groups offered by the hospital cancer center was a group for creating art. Participant 11 was very nervous about creating art. She described herself as “petrified” to start art “I just was almost shaking.” Participant 11 stated that she did not think that she would be able to do art because she couldn’t draw and was told as a child that she should not pursue art. She was very concerned with not being able to do art ‘right’ and so she was very reluctant to come to the day of art:

*I've never been able to draw. I've always been self-conscious about drawing, especially in front of people because it's kind of like umm. When I was a child, I*
know I can't sing, I have a horrible voice, I love music, but I know I can't sing so I stay away from choir, choirs or anything like that. And I was told this in grade school you know you should never sing in public...you know so I kind of felt you know that was in the first grade and that never left my mind. So whether I could have learned to sing, it was in my subconscious that I couldn't and I think I was told about the same time or a couple years later to stay away from art so I was very, very nervous about trying to draw something when I'm 66 years old that I've never been able to draw.

Participant 11 decided to try creating art at the hospital cancer center because the cancer center employee P. had recommended it. Participant 11 had worked with P. before and trusted her and decided that she would try all of the activities offered to cancer patients at least once. She was also glad the P. was present at the art activity since it was reassuring to see a known and trusted face.

She appreciated that the activity was with other cancer patients. “It was just easy conversation and I think a lot of it was because everyone there except for the professional artist and the workers were cancer survivors and so we all had something in common so I think that made it easier too.” Participant 11 was further calmed by the courtyard garden setting for the art activity. “It, just being out in the fresh air, not being stuck in a building, with all the plants and just the fresh air, even though it was a little cool early it's got very pleasant as the day went on and it was just, the sunshine, the brightness I don't know the smell of outdoors.”

Though the setting and the cancer group calmed some of Participant 11’s apprehension she still needed reassurance and instruction from the facilitators to start creating her own piece. She didn’t know how to use the materials or what to do to get started. The facilitators provided
books of art made by other cancer patients to serve as inspiration. Participant 11 used the books for ideas and found them overwhelming since she did not feel her skill was equal to the task of creating. “I just felt like I was in this vast vacuum that I didn't know what I was gonna do until I started looking at pictures and then I thought well I can't do any of these, these are too fancy you know I didn't feel like I could do anything that was in those books.” At the urging of a facilitator Participant 11 found a picture that she thought could serve as a starting place for her own creation.

The facilitator assisted Participant 11 with the basic skills of painting. “She kind of showed me how to draw the flower on the piece of paper and an angel and just kind of said you know do this and then we’ll help you pick out the colors.” The specific instruction, coupled with reassurance and encouragement enabled Participant 11 to start painting. Participant 11 worked with the colors and the topic she chose to create a painting:

It is playing with it because that's what we did with my painting. Because when you think about it, a flower should not be on blue, it should be on the dirt or the grass or something like that, but we didn't make it like that. I didn't make it like that, I didn't feel like it should be green, I felt like everything in the background should be blue, shades of blue, and that's, I don't know why. But when you look at the picture you'll see that it doesn't look like it's in dirt... It looks like it's just floating in water... so there's so many ways you can look at that flower and it's out of the ordinary, it's not sticking in a pot of dirt or a vase so I think that's what I liked about it, 'cause you could look at it different ways and that's the way I think life is.
As Participant 11 was creating art she became very frustrated when her lack of skill prevented her from being able to create a painting that looked like what she had envisioned. She needed the facilitator, in this case the primary investigator, to assist her with the skills of painting:

Because I had made those lines and I was very upset with myself. I take everything very personal, so that’s my personality. So when I couldn't cover it no matter how much oil I was putting on it I was getting more frustrated. And then when you came over uh and just started showing me how to do the acrylcs and it started working ... You just made me feel like it’s okay, just do this, here you go and you just made it easy... I felt like I took all your time, but you made me just realize I could do it and once I started relaxing I did.

Though she had very low expectations Participant 11 found that she was able to compose a painting that was her own. Though the painting in the book that inspired her was also of a sunflower, Participant 11’s sunflower was different. “When I saw the book yeah I saw the picture, it wasn't, like I said it was a picture of a sunflower that looked totally different.” She appreciated instruction that assisted with the skill of art while allowing her to make her own piece. “It wasn't, it wasn't like oh you're doing this wrong or you need to do that. I just felt you were talking me through what I was doing and I just did it and you were giving me you know ideas and I, it just came together and now I think I can do it on my own, where I didn't think I could do it on my own before.”

Her composition was centered around her cancer experience “my illness, and when you see the leaves that are falling and the, the three leaves say I think: love, hope, and courage because it does take courage to go through this… The angels I just felt like were hovering over
just watching, just watching, just keeping watch because I feel like I have Angels that follow me sometimes.”

When Participant 11 had mastered rudimentary skills of painting she lost herself in the process:

*I wasn't thinking of it being good and then when it started looking good I just got lost in it... It was almost like an adrenaline thing that you’re thinking about something else so intensely that you forget everything else around you. And I knew you were there talking to me and other people talked to me but I was just so intent on that picture... I don't know the day was gone before I even realized it. It was totally, I mean I got there about 10:30 and when 2:30 was there it felt like I had just arrived. I'd lost myself in the day.*

With all her attention absorbed in creating art Participant 11 stopped thinking about her worries and the stress of being ill while she was painting. “It was just trying to do something different than thinking about all my problems.” Yet at the same time she was using the art to express herself:

*I think I brought out my true inner feelings from the painting because I wanted it to look bright and sunny and happy and with hope. That's what I want for, and I think anybody that's going through cancer, I don't want it to be sad. I don't, because I'm not sad, but I'm scared, but I think the hope is there.*

When she was concentrating on painting Participant 11 found that her body rested. “The art just made me feel so restful even though I was tired, it just calmed me.” While she was rested and creating art she forgot her pain. “I was also in a lot of pain when I got there... I was worried
about that but I didn't want to drive with it so I didn't take a pain pill. But I did not hurt while I was drawing… I just didn't realize my pain… I never felt the pain until I left the garden.”

Participant 11 felt very free while making art. She contrasted art to her work life. “Art is something you can do freely and just do what you feel” while her work life was exacting and stressful. She found that the freedom of art was an emotional release. “It releases all that fear and anger and, and everything that's going on with you because you can express that I think in art, I didn't think you could, but I, now I do.” Participant 11 stated several times that making art was an enjoyable experience. “I was sad and nervous when I went there, but I was so happy and full of joy when I left…I just felt good by the time I left.”

Participant 11 was very happy to have a piece of art at the end of the day, and very excited that she had made it. “I just still cannot believe I did it and it made it exciting for me and that picture making it pop out at you.” Participant 11 felt that she accomplished something she could be proud of. “I am very proud, I don't know why I am so proud of it but I am.” She takes pleasure in looking at the painting she painted. “I saved my picture on my phone as my background so that a-way every time that I want inspiration I look at it just to feel good. It just makes me feel good and look at it.” She also enjoyed sharing her painting with others. “I thought other people enjoyed it and I have shared it with everybody on my texting (laughter).”

While she was creating the painting Participant 11 thought the painting was about flowers and angels. Upon reflection she realized that the painting was a symbolic representation of herself and her values:

*I don't think it necessarily represent me but it represents my outlook on life that I do think that the skies are blue and I do think that the flowers are beautiful and smell good and that the angels are looking out for me and, and I do have hope*
and courage and faith and the love of all my family. I really do, without that, that, that flower would be wilted so I guess maybe it is me, maybe it does represent me because I felt like that was a strong flower.

As Participant 11 reflected on her piece of art and thought about the process she had gone through in creating it she had an ‘ah ha’ moment where she realized that she didn’t have to do everything perfectly. “I've always been like this perfectionist, if I do something it has to be done right. And it, and I'm thinking you know, you can fix things. You don't have to, if you mess up you can fix it. You can go on. It's not like you have to be stuck on that for days thinking what a mistake you made.” She stated that she was going to try to incorporate that realization into her everyday life, but admitted that changing will be difficult.

The product of art was also a tool for communication. Participant 11’s painting was hung in the hospital oncology center for six months and she wanted it to communicate hope to other people. “Well I'm gonna let them hang it for a while because I'm so proud of it I want other people to see it. I hope they feel what I do when I look at it, that you do feel courage and hope because that's what I feel when I look at it and I think that, one leaf should of said strength because that's what it represents too.” The painting also gave her a topic of conversation and a commonality with her son. “My son came by and talked to me because he is artistic and I had sent him the picture and he came by specifically to talk to me.”

Participant 11 had made her first piece of art one week before being interviewed for this study. She was planning on making art at her home. She had a list of supplies to buy, planned on asking her son if she needed assistance and thought about taking art classes in the future. “If I feel good enough I would love to go to some small art classes just to learn more techniques and
stuff, and more skill, because I think it would be, and especially if I have to retire my job or go part time, I think it would be a wonderful pastime.”

Participant 11 wanted to do art in her home because she wanted to feel as good as she felt the day she created art at the hospital oncology center. “Everybody tells me you don't look sad, you look happy, well I was happy. My day was the best day I've had in forever. If I could do that [make art] for a living I would do it for a living because it felt good.” She thought that if she painted on a daily basis that she may be able to use fewer pain medications since she had not felt pain while she created art. Participant 11 also thought that making art would give her something to look forward to if her health declined. “Because if I get really sick from these treatments and when I'm recuperating I think it will give me something to look forward to just sitting in the sun and doing that, and just putting my feelings on canvas.”

Participant 26

FIGURE 4. Participant 26 Art
Participant 26 was a 60 year old man who had lived with cancer for four years. He struggled with a disease process that had severe exacerbations which reminded him of his mortality:

*I went through uhh, umm, stem cell transplant uhh, in February and spent some time home recuperating and of course my wife became the caregiver and that uhh, and now I'm, I'm able to, well it's only been the last few months that I was finally able to really get out and do things, and again umm, uhh needed that working on myself and looking at uhh, umm, the, the how much they say, the severity of the, of the uhh, from the treatment this time. Umm things are getting a little more serious so, umm, I mean you never know, you know, how much time you have left anyways, even for those who are not diseased and that stuff, and I always try to remember that, and my wife always reminds me of that too. But that's still you know in the back your head you know that says, yeah okay but you know kind of like out there, ace in the hole it says that you got a better chance of, of having short life than somebody else.*

Participant 26 was no longer working, which was a financial strain. He was reluctant to share his illness story with others because he feared that “telling your story and them to come back and feeling sorry for you, pitying you and then wanting to do things for you.” He feared that if people did things for him they would eventually grow tired of him and stop visiting. He also feared that by dwelling on his illness he would start feeling sorry for himself. “You know you don't want to dwell on it so much that you're going to start feeling sorry for yourself again.”

Participant 26 had done some carpentry and knitting in the past, however he did not consider himself to be artistic or creative. He enjoyed looking at other’s paintings and had two
grown daughters who created art. When he was offered the opportunity to create art through a cancer center program he tried painting because he thought it would be fun and “it was an opportunity that I’d never had before.” He would not have tried art on his own because he felt he needed instruction to start and because of the expense involved. He was reluctant to spend money on an activity that he didn’t know if he would enjoy.

The cancer center offered multiple different mediums, and he chose painting because “because I wanted to try what I consider to be real painting.” He was happy that the center provided the needed supplies. “They had plenty of acrylics and they had brushes and they had umm everything you needed, and it, it, it didn't cost anything.” He also appreciated that the facilitators not only taught him how to use the supplies, but allowed him to create his own art. They provided “help with maybe a little bit of how you do this or how you do that, but noth, no real instructions it was basically you, you, they gave you the paints and they, they told you to paint how you felt.”

Participant 26 created art with other people with cancer. He enjoyed the shared illness experience and the positive attitude of the participants and facilitators. “When I was doing the painting and that umm, the people there were all positive. Uhh, you hear, they, you could hear people talking in groups and you’d hear their experiences and umm, it helped you to understand more fully that you're not alone.”

For Participant 26 the idea for the piece of art “comes just straight out of out of your head, or out of your heart.” He depicted his cancer journey in a landscape and used color to explore the emotions. He had not used color when thinking about his cancer prior to the art experience, but found it very helpful in depicting his story:
I guess when I was originally diagnosed umm, it didn't hit it first, but then it started digging its way in and it was kind of like umm, being in a black zone. And then umm, as I was coming out of that it went into like uhh, I guess I would consider I would consider it like a yellow red zone because I was umm starting to get angry uhh, everything was frustrating and and then I started then I started feeling sorry for myself and, umm took a while to get past all that and then I kind of started getting into a blue-green zone I guess where I finally faced everything and said well you know this is not gonna to get the better of me I will not let it get the better of me and that's done and over with it and so I that out of the slump and started, started getting umm, more into what can I do in life now.

He found using the materials of art enjoyable because it was a hands-on experience.

Participant 26 felt like he was doing something real when he was creating art. “Anytime I can do stuff with my hands is like okay I'm fighting inadequacy. I'm, I'm, I can do something for real.”

He enjoyed putting the paint on the canvas and when he later took a class in glasswork he enjoyed manipulating the glass.

Participant 26 found the experience of expressing himself in paint “exhilarating.” He felt that his skill level was low, but that painting was the best medium for expression because he could represent his cancer journey in symbols. It was important to him that he was able to express himself, and felt that painting was the best medium to do so:

“I think that in my case painting would've been the only way that I could have expressed that. I don't know how way I would've been able to express that any other way. So, I mean even though my painting, I don't think my end product is that great, I think they, the painting itself umm, was, was the goal... it gave me an
outlet umm, which I really didn't have uhh, before that. It gave me an outlet to, to express how I felt and, and, and what I went through.”

His emotion went out into the paint “when I express myself in that fashion, umm, my exhilaration at, at the, what I had done uhh, was because I was able to get it out of my system.” As he expressed himself he felt an emotional release “I was able to umm, it was like, it was like a big weight being lifted. Umm, I mean I feel like I wasn't under that dark cloud anymore.”

While Participant 26 enjoyed painting for the representational aspect of his creation, he didn’t enjoy the medium as much as he hoped. He was frustrated with his lack of skill and inability to paint what he had envisioned. He took other art classes. Those art classes were not illness based and he took them to explore other media and to have fun. He found working with glass was especially pleasurable. “I think whereas uhh, getting into the other mediums and that stuff you can do stuff that, that umm you can play with it. You can, I would play with glass, uhh, getting back to the glass again. We played with the glass, we made uhh, different things, did beads did pendants did things like that and umm.”

When Participant 26 was learning new art techniques he did not think about his problems, he just thought about the art. “You can concentrate on something else and block everything out.” He sought opportunities to keep learning more media or more techniques to keep the creation of art challenging and absorbing. “You can just delve right in experiment and, and lose yourself in into, into the art.” The physicality of creating art also helped him stay focused on art. “You know painting you’re stroking you’re moving. Umm, the glasswork umm, you’re moving there too, constantly moving and you're constantly having to pay attention to where your hands are because you got a torch there and it's and if you have it too close you’ll burn yourself.”

With the painting and the glass work he felt that he had accomplished something.
“Things that you can do with your hands still show that you can do something.” He made glass pendants for himself and for his daughters. He looked forward to creating more art. “I want to continue delving into different mediums in the long-term. And I think that through that umm, uhh, you know, you know just extend umm, the feelings I have now, it’ll keep it, keep me going.”

Though he preferred glass, Participant 26 valued his painting. One of the reasons he valued it was because of the meaning he saw in the painting. He recognized what he was going through when he looked at his art work. “I think the recognition of, of what was going on in my head through, through the painting was, was doing something like that uhh, helped quite a bit too…What I did do was, was terrific because it help me get closer to what I am today.” Though the glass work did not have explicit symbols he still found meaning in his creations:

“I think what you'll end up doing is you'll end up expressing to some uhh, to some point in there because you're going to do it subconsciously. Though you know, consciously you're not thinking about it… When I completed the pendant I took a real good look at it and found it was a close representation of what I have become to believe. That is life is clear and clean with the occasional bump or hidden peril/surprise.”

With the art as an outlet for all his feelings he was able to communicate with others in a lighter way than he had been able to prior to expressing himself through art. “I kind of like I can talk about it [cancer] in a pleasant sort of way, sometimes even in a joking sort of way.” Art was used as a way to communicate with others without eliciting pity. The symbols of art gave Participant 26 some distance from the viewer. “In the art you're anonymous. Verbally you’re no longer, you're not anonymous you’re, they see you, they know you.” When he shared his art he
could control how much of his illness story he would verbalize. He sought some distance from his illness and thought that he could build a social group around art. “Maybe you, you, you have, uhh, if you find medium that you're good at, and you get with a group you’ve got something more in common than just, just disease.”

The excitement and exhilaration of creating art lasted beyond the time of making art. “For me it lasted a few months umm, maybe a year uhh, and then uhh, everything kind of subsided.” Because he enjoyed art so much Participant 26 wanted to create art more often. He wanted to do more glasswork and maybe try some different mediums. He had not attempted to create art on his own and was limited in how many classes he could afford. He wished that he had created art earlier in his illness since creating art helped him manage his emotions:

*At the very beginning that I would say to people what people wanted me to say, not how I really felt umm. And I think that's what I mean by true, umm, no holds barred, no holding back, umm, everything, the anger, the, the feeling sorry for yourself, the black hole umm, for my, my, my umm for me that my anger and, and feeling sorry for myself cost a umm, uhh a good paying job. And umm, and so that, I mean, it might, uhh, learning how to control that before cost you anything like that ... And so you have that opportunity to express everything, get it off your chest and hope maybe, umm, start umm, meeting life head-on with a better attitude.*

The art experience has made Participant 26 appreciate his life more. “I think I think it [creating art], it helped prepare me to uhh meet life uhh, head on now umm. I think since then, and still is life is a ride right now. I have, umm, we get out and do a lot of things maybe a little bit more than we did before. Umm, it helped me to appreciate uhh, umm, the time I can do it.”
Participant 15

Participant 15 was a 52 year old woman who had lived with fibromyalgia for three years. Her ability to participate in activities was severely limited by ongoing pain and fatigue. Pain was a particularly troublesome ongoing aspect of her illness “that's what I do all day is manage my pain.” She tried a number of different pain medications under her doctor’s supervision, but was not happy with any of the medication regimens:

*The medications all had side effects that umm one I gained a huge amount of weight on that I'm still working on trying to get rid of, one I, I had liver issues, enzyme issues that became an issue for me so I had to go off of it. One I had high umm cholesterol issues and one just plain didn't work and, and the others that had the other side effects they weren't that effective on the pain.*
Even though she struggled with her illness, Participant 15 felt it was important to have a positive outlook. She felt that her positive outlook helped her avoid depression “I don't think I've experienced depression like a lot of people do. Umm I won't say that I don't ever experience depression because I do. Umm, I do experience depression from now, from time to time umm I'm human. But I don't get into depths of depression for long periods of time.” In order to maintain a positive outlook she avoided illness based groups because she didn’t want to focus on being ill:

*I tried to be around the social circle that is sick. I tried to be around the social circle that are around health, health that are fibromyalgia groups and umm I find myself being drawn back down because they focus on being sick and I don't want to focus on being sick... umm I, and I've seen people with chronic illness around me and in the group that just seem to be depressed a lot or have sour faces. I try to have smiles on my face a lot and I find that I do have smiles on my face a lot.*

Work had been the major focus of Participant 15’s life for the twenty years before she became ill. She had always enjoyed art, and had taken classes when she was younger. She described herself as having a lifelong passion for art. “Art’s always been a big deal to me.” She created her own art, enjoyed looking at the art of others, and owned many paintings. However because of a 40 to 60 hour work week she had been unable to regularly create art in the 15 to 20 years before becoming ill. She had created art for a short while in those years to deal with a difficult divorce, but did not maintain it because of the demands of work. She turned again to creating art as soon as she became ill. “I started not being able to do things and I had to reduce my hours at work umm after my eight days in hospital and, and reducing umm time, time at work I just picked up my paints and I started painting again... when this happened it was just a natural,
that just where I went was to my art. And I didn't know where else to go.” When she stopped working she started creating art on a daily basis.

When she started making art again Participant 15 took classes to build her skill. She appreciated instructors who assisted her with technique while letting her create her own work. “The [best part about the] instructors was availability to my questions and umm meaning about my art work and not taking over my art work, allowing me to have my own work in my art work.” She also enjoyed the other students in the classes. “You know just, camaraderie that we each, respectfulness, professional respect for each other's artwork, nonjudgmental.” When her skills became more advanced Participant 15 stopped taking classes and created art alone in her home. She prepared to paint through interaction with nature:

*I observe. I umm go outside and I observe and I dream and I think. Umm so like this one in front of us what I've done is I've thought a lot about the different umm sunsets and sunsets and sunrises that we've seen and all the different colors that, uh the Arizona sun skies have in them and then I also think about all the different umm colors that come out in the spines of the cacti... and then I just bring that out in my paintings so I'm an observer rather than taking it off of a photograph.*

Participant 15’s content for her paintings was the world she observed. She spent a great deal of time in nature observing and just being outside. Observing nature was a spiritual experience. “I just put a prayer up to God and say ‘Lord how beautiful those are and how you designed them’ and, and that's what I'll do. Or the skies or the mountains and, and just talk to God as I look at, at nature and observe it and the details that he puts on them, umm I just talk to God as I look at those.” As she prayed she took in all the details of the form and the color through observation. “I see the little details and, and I observed the cactus and all their little, you
know how they go up skinny on the top and then they come down and they get thicker towards the middle and then they start thinning out and then they get thicker down at the bottom.”

Participant 15 was not concerned with exactly replicating what she saw. “I like to make my paint just kind of ebb and flow and do that and then see how I can make my spines create even more of that as I put them on top of the, on top of some of those shadows to make that happen.” When she painted she put layer on layer and allowed the painting to develop in an ongoing manner. “You don't have to process it. You sit down in front of the paper and you just, your, your what you envision comes out in your hands.”

The movement of the paint and the process of applying the paint was an emotional experience:

It's just like the background and the movement of the painting and the process of doing the painting umm it's just the whole process of doing the painting itself. Of the movement of the paint umm the background is, is a lot of movement that I work on and umm in many layers and it’s a lot of emotion for me while I'm doing it... Just the process of umm of thinking it through and umm I think the outcome of having something else coming out of my body other than umm numbers and people is an emotional process also.

The colors she used engendered an emotional response as she put them on the canvas. “I love this yellow and orange put together. It just makes me feel good. But yet when I look over to the left I love that purple and blue put together.” Some colors, like yellow and orange were more activating “the yellow and orange is bright and cheery and ooo just makes you want to get up and dance”, while the blues and purples were more calming. Participant 15 spent a great deal of time thinking about and working with color.
The movement of the paint and the interaction with color helped Participant 15 work through the emotion of loss, especially of the loss of her career. “I'm able to work through issues of acceptance and umm the emotions that I feel of loss.” While she was painting she did not think of the losses she had experienced. “I just found it relaxing and therapeutic and being able to just kind of lose myself into not thinking about what I couldn't do in my career”. Instead of thinking she lost herself in the process of painting. “I lose myself into the painting. Umm I get into the details of the painting and lose myself in the details of the painting umm it's meditating, meditative almost.”

When she was lost in the process Participant 15 felt a relief from tension and a physical relaxation. “Tension comes out of your body which is a big part of the fibro and the migraines. So you know your body relaxes during that time.” With the release of tension she also experienced a relief from her pain. “While I'm doing it I forget get my pain umm and so my pain level goes down it does give me some relief for my pain… so that's comforting and I'm doing something enjoyable while I’m having that relief from my pain.”

She used the time she was out of pain to talk to God. “My mind’s being freed my pain’s being freed so it frees me up to just talk to God in that time.” Through observing nature closely enough to paint it she felt a connection to a higher being. “If there's time and energy put into that kind of detail in nature than what time and detail is there put into me from uh a higher being?” The experience of prayer through painting was calming and peaceful.

After the time of creating art Participant 15’s pain would come back. “My pain level will come back up and so I will have to stop and take breaks and umm rest and so it's not like I can ignore my pain forever.” However, Participant 15 was able to manage her pain without medication. “I actually am still using art, but I'm not using medication.” Participant 15 also
experienced pain from working on pieces that were small and detailed such as etchings. She continued to make art that she knew would make her pain worse afterword because it was important to her to create those works and because she felt she would be able to manage the pain through meditation.

Participant 15 was happy to have a piece of art to show for the time she invested. “It's not a matter of making a living it's just a matter of there's some productivity off of it.” She enjoyed looking at her completed paintings. “I’ll often set them up in an area where that, where I’ll be sitting like in my family room and I'll look at them afterword and to make sure that I feel that they’re you know complete and I just enjoy them.” She also enjoyed sharing her art in a co-operative gallery and was very happy when people liked her art enough to purchase it.

Working with the cooperative gallery allowed Participant 15 to use her business skills in a new way. It also gave her an opportunity to develop a new social circle around a shared interest in art. “It’s a social circle that isn’t sick. And even though I'm finding out a lot of people in that social circle they have really bad arthritis or they’ve got some other illnesses too, but we’re not there because we have illnesses we are there because we do art.”

Participant 15 was grateful for the opportunity to create art. “Through this process of art I realized that I'd given up so much of my art that this is really a gift. I'm able to, through this illness to focus on art.” Even though she was no longer able to work, being able to create art made Participant 15 feel like a productive member of society. Participant 15 sold her works of art. However the income was not enough to live on and did not replace the money she was able to make when she was working. She still felt productive because she did something with her art creations.

The ability to create art gave Participant 15 and enjoyable life full of meaning:
God in some twisted way has allowed me to do that at this time in my life and I, I there's got to be a reason for that. There's got to be a purpose for that. And so I keep thinking okay God there's a reason you're bringing this into my life now with this, this pain in this other part that comes along with it And I, I just that's part of the spiritual part of it. It just fills part of me, it’s, I believe God enjoys beauty in everything and art is beauty.

Participant 64

FIGURE 6. Participant 64 Art

Participant 64 was a 44 year old woman who had lived with an autoimmune disease for 26 years. Over the years her health deteriorated and she experienced significant issues with balance, pain and ambulation. She had episodes when she was bedridden and depressed “not being able to do things and not having, there's something about being stuck in bed all day and not really having anything else to do that is extremely depressing.” Five years before the interview
she had a particularly bad exacerbation of her disease and was unable to continue working. Participant 64 was a self-taught artist. She had tried to be a full time artist years before becoming so ill, but had been unable to make it work as her business. She went back to work, but was unable to work and create art at the same time because of time constraints. When her health deteriorated she returned to art. She thought that working with art would give her the flexibility to take care of her health.

Participant 64 took some art classes to build her skills in order to turn her passion into a job. During a class the instructor “held up my work as an example of what not to do…and I was crushed.” She was afraid to take another class and unsure if she should pursue art as a career. “I sort of didn’t know what to do next because I didn't want to, I was afraid to put a financial investment in supplies if what I was doing wasn't right.” Participant 64 was very concerned with doing art the ‘right’ way. She sought help from her uncle who had pursued his love of art after his retirement:

*He looked at my work and he said ‘this is not what not to do, it's not what she was teaching but there's nothing wrong with what you did’. And so we looked through a couple more of my paintings and he said you know maybe that's just not your style, maybe you just need to experiment and find your own style. And it was the encouragement and the experimentation that was what I needed. To know that there weren't, there weren't specific rules I had to follow because I had, I’d gone through school and had a Master’s degree in business in healthcare administration. So everything there is very follow the rules and all of that... this is outside of that box and there was something freeing about his words that just*
helped me to be able to take the next step and just keep trying and just keep playing.

Participant 64 tried multiple different art mediums and then turned primarily to fiber art. She was inspired by the landscape around her home and by trips to the mountains and the ocean. The piece above was a “desert landscape uh, sort of the desert sunset image.” She also used her dreams as inspiration. When she went into her studio with her ideas Participant 64 treated creating art as play. She played music and had a “creative mess” of fabrics of different colors around her studio.

Her inspiration was translated into color and form. “I use a lot of color in my art, a lot of color. Umm and I prefer to work with a lot of color and in fact all of my art has a ton of color and I rarely use a lot of black and if I do it's a base or it’s, it’s umm a framing color most of the time I'm using bright, bright colors and many of them at once. “She described the colors in her work as “playful.” Much of her work was abstract, based on the way the fabrics went together. “I tend to work very intuitively so I don't do a lot of fore planning and because of that the work develops based on my mood or what's going on around me… I tend to work a lot with shape and form and there's just something about balancing line and shape that umm that I find playful and its fun.” She described herself as tactile and felt “connected to the fabric.”

The majority of art creation took place in a studio in Participant 64’s home. The studio provided her with the opportunity to tailor her activities to her physical needs and thus be able to create art on a daily basis. “When I'm working with my hands I don't necessarily need to have all of the ability to walk around a lot. If I'm, if I’m having a day when the vertigo's bad I can still do hand stitching. I maybe don't want to be using my sewing machine because that movement will sometimes set me off, umm if I'm sort of teeter tottering on the edge of vertigo.” Though she
most often created art alone in her studio Participant 64 sometimes created with other artist. “We get together and we'll dye silk scarves together or paint silk scarves and I'm showing them how to, how to do some things they actually umm had never done any fiber art until we started getting together.” Working with the group was enjoyable and also provided the opportunity for feedback:

*If we get stuck and we say you know somebody, one of us says to the other ‘I don’t quite know where this is going’, or ‘I’m not sure about this piece’, someone else will look at it with fresh eyes and either make a suggestion to make it better or may say ‘you don't need to do anything else to that’. Here’s, ‘here's what I see in that’, or ‘here’s I think that's going to be perfect just the way it is.’*

The experience of creating art was a comforting escape from the pressures of daily life “into the safe cocoon of creating art.” The materials and the activity of creating art were enjoyable. “The colors make me smile. And it’s really hard to be depressed when you've got a lot of color staring at you in the face all the time. And so my studio is a very bright place with a huge window and different colors of fabric all over it… it just makes me happy to just do it.” The free flowing way she created art was comfortable and enjoyable to Participant 64. In contrast to the rules and pressure she felt while working, Participant 64 found creating art a freeing experience. “I'm very free when I do it.” She did not put pressure on herself to create art “right” she just stepped into the process. “The movement of the color helps me to think about movement in life and what's next. I'm always looking for what's the next thing I'm gonna do with this piece, piece of fabric or which piece of fabric am I going to touch next and turn into something.”

During the process of creating art Participant 64 experienced a separation from her daily life. “I sort of step out of myself when I'm creating something, it's like a piece of me ends up in
the artwork and so I sort of go beyond umm my physical health and just sort of feel like I'm in this other place… it sort of physically takes me out of myself into the act of creation.” She described watching the needle go in and out of the fabric as a “meditative process.”

The ability to lose herself in creating art helped Participant 64 manage her physical issues. “Just by taking my brain out of, out of it and just focusing on something other than myself and other than what's bothering me physically. Sometimes the pain dissipates and sometimes the vertigo dissipates, just because I'm not focusing on it anymore.” She worked on the more creative aspects of fiber art when she was not feeling well in order to be taken away from her symptoms. The more “persnickety” aspects of assembling purses or piecing other works she did on days that she was feeling better.

Participant 64 enjoyed looking at her art. “I love to be able to look at my art afterword.” The pieces of art were symbols of her life and herself. By viewing the progression of art over the years Participant 64 had the opportunity to see her progression. “I can see a progression of, of how I'm growing in my art and also a progression of how I'm growing as a person, emotionally and physically. And it just helps me to sort of have sort of a journal of who I am and how my life is going without actually creating a physical journal.” Interacting with her art was a source of insight for Participant 64:

One of those images that came to me was about building foundations. And so, and I didn't know what it was about until after I created what had been in my mind. And once I created it I understood that, sort of all the things in my life have been building blocks leading me to who and what I am now and that's what this quilt ended up showing. And I don't know that, I think intuitively I knew that, but I don't think I ever realized that my subconscious was telling me that I'd come to this
point until I looked at it and I saw the finished piece and I went ‘okay I see that now’. [Piece not pictured here.]

Because Participant 64 created art from travel experiences, the pieces of art became a way of extending and savoring those experiences. “To be able to take photographs and drawings that I've done on a trip and turn them somehow into a piece of fiber art something that's longer-lasting and that’s out there and on my wall or on the gallery wall it, there's, it lengthens the amount of time and helps me to relive that moment over and over again.” She also prolonged feelings of happiness and joy through creating art that was happy and joyful. Interacting with the piece of art was an opportunity to feel those feelings again.

Having a piece of art also made Participant 64 feel, “like I'm accomplishing something.” She wasn’t just lying in bed, but was able to make something even though she was ill. “Even though I'm not feeling well I can still do something and still feel like I can accomplish something… when I'm not feeling well I sort of feel like I'm not contributing to my own life. But when I can create something I feel like I've contributed.” She used her management experience to help with two co-operative galleries in which she also displayed art. The involvement in the galleries allowed her to feel like she was using her education and contributing, and also gave her a group of artists to interact with.

The effects of creating art lasted beyond the time that Participant 64 was actually creating art:

*If I'm focused on pain or vertigo then that effects my sleep pattern, it effects my emotions, it effects my relationship with my husband, it effects my relationship with myself. And if I'm focused on other things, the creating the, whether it's creating umm a meal or it's creating a piece of art there's a, there's a sense of*
accomplishment and a sense of something outside of myself that just helps me overall. And I think that that long-term helps not just my mood but also helps me physically. Because I just don't think that there's that much separation between the physical and the mental. I think they're incredibly connected.

Participant 64 overcame multiple challenges in her life and her art became a metaphor for building something good out of the circumstances of her life “I've taken snips and snippets and pieces from those experiences and turned them into something else… I altered, it's just my way to take something and alter it and turn it into something else.” The overall focus of her life was art. “I'm not focused on what's wrong in my life. I focus on what's right.” Through creating art she found life full and enjoyable. “I actually know what my life is like without it [art] and it's not a happy place. It's a place that focuses on the negative. I don't know that it would be today that way, but I don't know that I would've gotten to where I am today if I hadn't been doing the art.”

Participant 42

![Participant 42 Art](image)
Participant 42 was a 64 year old woman who had suffered from chronic fatigue 20 years ago and had developed fibromyalgia secondary to the chronic fatigue. During the worst phase of her illness she experienced significant disability. “I lost the ability to talk, to walk, to cook. I had to relearn every time I had a setback, I had to relearn everything. It was like having a stroke.” Though the worst of the chronic illness faded, Participant 42 still had times when she was ill enough to be in bed for a week. With the fibromyalgia she was in pain most of the time. She found that she became very absorbed in her illness experience and disease process. “When you're chronically ill you have a tendency to sort of be self-absorbed with every little ache and pain and tiredness and inability.”

Participant 42 had always been creative and saw the world differently than other people. “I see things umm in uh multi-levels versus just seeing oh that's red or that’s green or that's brown or it's round or it’s square, I, I see multilevel concepts and so for me it just seems that that part of my brain works a whole lot better than the analytical you know umm reading something and trying to remember.” She was dyslexic and struggled throughout school with academics. Art became her refuge. “I also was fortunate clear back in like middle school to have a person who is now a museum quality very well-known artist umm as my junior high or middle school art teacher and you know she really encouraged me, inspired me to do what’s different.” She majored in art in college and pursued an art career. Participant 42 continued to develop her skills throughout her life through taking master art classes and collaborating with other artists. “I collaborate with a number of different people... I collaborate with several other artists in making pieces together.”

She developed ideas for art through sketching, looking at images on line and researching glasswork methods. Part of everyday was spent in her home studio creating beads with glass
torch work. The glass pieces were small and allowed Participant 42 to do work that was not physically draining.

A major part of creating art was the interaction with color. She had a nuanced understanding of color. “When I talk about colors with my husband I'll say that's a blue green or a red gray, and he'll go what the heck are you talking about (laughter).” Participant 42 had specific colors that she preferred to work with. “Those colors umm the purples the blues and the that kind of sagey green flowing together uh there's something about that color tone that I can't get myself away from (laughter).” In addition to the color itself she worked with the way the glass changed color:

*When you heat glasses of different colors umm they turn different colors than what they are actually going to cool as... a lot of times you're doing things in reverse of what the expected outcome’s gonna be. The colors, for instance if I do a black bead with red dots I'm, I'm having to focus really hard on where I'm putting those red dots because the red glass turns black so I, it looks like I'm dotting black on black. When it cools these nice little red dots pop out.*

In addition to the color, the beads had a form that was a balance between symmetry and asymmetry. A symmetrical base bead was used and then asymmetrical decorative beads were added. “I like the controlled shape I guess, umm and most of what I do are either lentils which are you know flat, flat and round kind of domed beads, and round beads and then you know try and do something wild and crazy on the outside of that base bead.” Each bead was a creation, and then she combined beads to create jewelry. Participant 42 was very involved with developing her craft. “Normally I do a lot of umm art, fine art festivals umm and shows umm this year I decided to pull back and kind of fine tune and umm you know master my craft of little
bit more rather than pushing to have inventory ready for shows.” She had developed tools for creating beads and had experimented with kiln processes.

Creating art was a “peaceful” activity for Participant 42. She enjoyed the process and was excited by the development of the glass. “It's exciting umm, at times it’s exciting. It depends on if I'm uh you know trying something new… it's kind of an adventure.” Part of what made the process so enjoyable was the feeling of control. “Watching the flame and watching the glass go from solid to a fluid and back to a solid again and being able to manipulate that there's a certain sense of control of something.”

Participant 42 was able to become completely absorbed in her art work:

*It takes me to a whole 'nother place you know that doesn't matter what else is going on in my life, it doesn't matter how much I hurt that day umm you know I just, I'm not it's like I'm not in the room (laughter) or not in my body, I'm someplace else... the torch work is what really umm is what I call my therapy (laughter). Because I can be doing that and somebody can be standing there talking to me and I don't even know they're in the room... There's this kind of mesmerizing umm almost to me I, I don't think I've ever been hypnotized, but that's kind of what it feels like. Like your being sucked out of yourself into some other place, you know realm, I don't know how to explain that, umm it's peaceful."

When Participant 42 was totally absorbed in her art work she was able to forget her pain. “I hurt most of the time, and when I do my torch work and I go into that other level I don't feel any of that hurt.” The relief from pain allowed her body to relax and rest. “I get some down time where my brain is working but my body is resting.” She did torch work daily as part of her pain
control regimen. “It's not an obsession it's uh something, it's like being without food, it’s like I feel like I'm on a diet sort of thing [when I can’t do art].”

She enjoyed the process and the results of her work. Having a piece of art gave Participant 42 joy; “The joy that you get out of not only doing the process but the finished product and how that affects the people around you.” The piece of art gave her admiration from people who came to buy her beads. “There's accolades people coming by for two and three days at a time and crowding around your booth and going ‘oh my gosh this is so gorgeous’.” She was happy that interacting with her art work brought other people joy. “That's important to me to be able to share the feel-good part of life.”

Participant 42 also interacted with other artists. She belonged to a group of bead makers and collaborated with others on projects. She found collaboration enjoyable because of the artistic and social elements:

I just did this a couple weeks ago with the gal that wants to collaborate on a piece for the society of international bead makers for next year and we’re finishing each other’s sentences and sometimes you just get like really pumped up you know like you're not having to struggle to explain to somebody what it is that you can see in your head because they can see it too. You know so it, it that, that's umm you know always inspiring to me and exciting and gives me energy.

Collaborative efforts were also an opportunity for making a difference. Participant 42 worked with a charitable group, Beads of Courage, which is an organization that works with hospitalized children. Participant 42 made beads and went into the hospital to distribute beads to ill children. Her volunteer work inspired her and made her feel like she was contributing to society.
Reflecting on the process of creating art gave Participant 42 insight into her life. She recognized that she struggled with issues of control. Creating art gave her an opportunity to work on changing the need for control. She tried to let go of the need for tight control and symmetry in her art. “I've always been kind of I guess A type personality, so controlling, having the shapes be umm it's symmetrical or balanced umm I kind of fight with that all the time because as an artist I sort of would like things to go more free flow. Umm, but I have a really hard time pushing into that area.” She pushed herself to loosen control in art and worked to translate changes in control into other aspects of her life. As she modified her need for control Participant 42 also found satisfaction and inspiration in her mastery of her art. “Having control of something when you have no control of what goes on with your body umm was something that umm gave me strength… having control over my work gave me inspiration to try and take control back of my life.”

The ability to create art gave Participant 42 something to look forward to when she was ill and was a motivation for getting better:

I know if I keep my mind going you know and keep from being depressed about it umm that I will you know get the energy back and then you know I, I kind of look back on it like okay I had all this time bed and I could think about what I want to do when I get out of bed and then when I, when I have energy then I’m ready to go and I'm okay I've got all these things that that I’ve got to go try now.

The ability to sell art at shows and participate in a charitable activity helped Participant 42 perceive herself as a contributing member to society. Participant 42 decided to focus on the positive in her life, and creating art helped her to maintain that attitude. “I turned 60 and I said I'm going through this portal of I'm not putting up with umm negative umm things that are not
joyful to me anymore umm I learned from being in bed for a long time that you know it's only
the positive that feeds me.” She felt that her life was positive and felt that her illness was under
control. “I kind of consider myself not too ill anymore”. She attributed her ability to deal with
chronic illness to her positive attitude and felt that creating art was a big part of maintaining a
positive attitude.

Participant 88

FIGURE 8. Participant 88 Art

Participant 88 was a 62 year old woman who had suffered a series of injuries and
accidents beginning 46 years ago that had left her with ongoing disabilities. Her back issues
worsened as she aged and she frequently experienced pain. She had not worked outside the home
for 10 years both because of her health and because she was the caretaker for her mother.
Living a purposeful life was important to Participant 88 “I have to be purposeful, and there's a big definition to, to me to what purposeful is umm so it's not like, you know a lot of people say oh I you know they have a living making a job that they do and that's their purpose. Me, my purposeful stuff can be defined in a lot of different ways, but it's like doing something of value you know 24/7.” Her sense of purpose was tempered with a lively sense of humor. “My sense of humor is fully engaged in all this stuff too… I have to find my humor in it and have a good laugh at myself (laughter)”. She saw having fun as a “birthright” and worked to make life enjoyable for herself and for those around her.

Participant 88 described herself as creative and artistic. She was passionate about making her own art and about fostering a sense of art appreciation in the community. For Participant 88 creating art was just a natural activity. “I just think it's natural.” She had created art all her life and had tried multiple media. She took classes to learn different media and explore new techniques. She appreciated the input from the class instructors. “I think the most helpful thing is that she is a very pleasant person who is very allowing… She's very compassionately smart and allowing, and very, very gently encouraging.” Participant 88 used the term ‘allowing’ to describe instruction that assisted in skill building while encouraging the students to create their own art.

The medium that she worked in most at the time of the interview was digital art. Sometimes Participant 88 created art from photographs she had taken. The photograph was the starting point for a creative process. She would then change the photograph with digital tools. Often she created abstract art that was a product of her imagination. She described the process of creating the piece above: “I started seeing something in my mind’s eye… I started visualizing umm all kinds of colors… I looked at this and I closed my eyes and I, actually what came in my mind’s eye was all the little squares.”
Participant 88 used different digital paint brushes to create different effects. She appreciated the digital medium for its wide variety of forms and combined those forms to create different effects. She played with the tools and let the piece of art develop. “It just started to play and it started to happen.”

Oftentimes uh squares just uh, do something fun especially this. This is a particular paint brush that has a series of these built into it and, and I love these little tiny squares. They just, they’re just so whimsical and so much fun and I look at them and I can even visualize them being manifest in like a bookshelf unit and I put all kinds of interesting fun things in the little cubicles that they would create. It just, it’s a very fun shape to me and especially you know just whatever the fact that it has all the colors in it.

For Participant 88 colors were representations of chakras. “I work a lot with the energy centers that you know, often referred to as the chakras and there's colors and things and there's seven, seven basic ones, and there's colors associated.” She worked with colors in order to influence different energy centers. “I just kept working those colors and I just really felt like umm they were just sort of balancing the energies in my body and just sort of you know, creating a sense of well-being for me.” She also simply enjoyed different colors and the impact of different colors next to each other. The colors in Participant 88’s work were often worked in layers to create texture. ‘I can create the, the look of texture upon texture like the purple background it sort of looks wet… I just love things that look like its texture.”

Participant 88 created art “most days”. On days that she was unable to create art she was preparing to create art. She imagined art or developed ideas for pieces of art when she was in situations that were boring or tedious. “When it gets slow and they do very methodical very slow
elderly thinking kind of things I sit there and I go okay here's my own pocket sketch book. I'm, I'm creating art now (laughter).”

Creating art is something that she enjoyed doing because “it feels good to do… peaceful, and, and very soothing”. Creating art was also fun. “And there's just something fun about the little black sort of you know whimsical little feathery thing that, that I popped in the middle (laughter). I don't know where that came from, it just came and I said ooh I like it, let's leave it (laughter).” The colors themselves evoked pleasure and relaxation. “I started to work with it and the more I worked with the layers and colors and translating that, not only from the the piece of art to the colors umm it just, it just started to work through the diff, you know the different energy centers of my body and I just started to feel the sense of release.”

Participant 88 got lost in the process of creating art and was able to distract herself from her pain:

*If I'm experiencing some kind of pain umm, if umm, once I, once I get in my element umm, I can usually distract myself from the pain. If it does, if it's not going away immediately I can sort of distract myself from feeling it so intensely, and then, and to me that gives my mind a rest. And I feel like when my mind is resting and not focusing on ‘oh my gosh I hurt so bad, why does it hurt so bad? What can I do?’ All the why stuff, all the questioning stuff, and I just let it be and I do something that gives me pleasure on a different level. My body will start to relax and then it will do what everybody can do naturally and that is to start to heal itself or start to release the intense pain sensations, and when you start releasing that then you, it it's a combination of you're mentally releasing it and*
then you physically release it and things will shift. And you, to me, I always end up feeling better.

Participant 88’s art was also a way for her to express herself. Though her art was abstract the symbols represented aspects of self. “Once somebody sort of gets to know who I am and the world you'll see these little signature things that pop up and this, this is very strong umm, I'm such a duality on so many levels of living. Umm, very freeform, very space cadet very out there, and also very logical very structured, very methodical…and so squares umm, appeal to me and I have this constant running joke about I can't smash this round peg in any square hole (laughter).” She also created pieces that represented her beliefs. Being able to express herself engendered well-being. “It feels good to do in you’re being self-expressive that just sends energy throughout your whole body and the whole your whole conscious your subconscious everything you are that just feels right. And feeling good and feeling right just, just sponsors umm well-being.”

The good feelings were brought back when Participant 88 viewed her finished work. “And every time I look at this piece it just, it takes me to that feeling of where I, when I looked at it and I was completely finished with it I just felt good all over.” While she worked to improve her skills Participant 88 tried to not be too self-critical and to appreciate her work for how it looked and for the process she experienced while creating it. Remembering the feeling of creating art helped motivate Participant 88 when she was ill. “Well okay I don't feel great but I can get up and I can go do a little bit of something for a while and kind of get back in the mode again and start you know helping my body get over this.”

Participant 88 socialized with other artists and worked with them on projects to promote art in her community. She enjoyed the company of other creative people and felt that stimulating art based conversation kept her mind nimble. She participated in community board for public art
and had created a doodle art mural project to encourage people to create art. “The doodle up thing it's just a connection for people to get in touch with their inner artist or their inner playful person, to have fun and to also connect them to, to art on all levels that, that sense of personal uh expression is extremely important to everybody on some level.”

Art was a central part of Participant 88’s life. She used art as a tool to treat her symptoms and maintain her health. Creating art was also a method for expanding her consciousness. “I learn new things and expand my, my consciousness of the world and cultures and people in it that I'm, may not be directly healing but it's certainly umm, expanding who I am and, and how I think and feel about things.”

**Summary**

Twenty participants who had created art in the context of chronic illness were included in this study. The participants submitted photographs of art work they had created. They were then interviewed about aspects of art as a healing intervention. During the interview the participants described the piece of art they had submitted and discussed the process of creating art. They also answered questions designed to elicit information about the use of creating art as a healing intervention. This chapter presented exemplar cases from each of the three levels of art experience: art beginner, art discontinuous and art continuous. The exemplar cases illuminated the different facets of art as a healing intervention.
CHAPTER 5: RESULTS

Intervention theory guided this examination of client characteristics, intervention facilitator characteristics, context characteristics, intervention components and dose, enactment and adherence, immediate outcomes, intermediate outcomes and ultimate outcomes of art as a healing intervention. The goal of this research was to describe the components of the intervention and the relationship between the components. Intervention theory provided a useful organizing framework to systematically understand the aspects of art as a healing intervention. In the future this information may be used to construct coherent comparative effectiveness studies as well as other types of intervention studies.

A qualitative descriptive design was used to explore the structure, process and outcomes of creating art as a healing intervention. Art works were observed and interviews were conducted to develop depth of understanding of the components of the intervention. Results of the data analysis process will be presented in this chapter. The components of the intervention are described here in a way that is useful for practice, as well as further research and theory building.

Twenty interviews with accompanying photographs of art were analyzed. The participants described their pieces of art, the processes of making the art, what the art meant to them and their experience of art as a healing intervention. The exemplar cases in Chapter Four provided a thick description of the experience of using art as a healing intervention. The exemplar cases were chosen because they were representative of the data and art as an intervention used in chronic illness. In this chapter, data are analyzed across all 20 participants in this study to determine the characteristics of participants, characteristics of intervention facilitators, characteristics of context, characteristics of enactment and adherence, components
and dose, immediate, intermediate and ultimate outcomes. These findings will facilitate the development of art interventions in clinical care settings and clinical research.

**Characteristics of Participants**

The first research question was: What are the characteristics of people who participate in art as a healing intervention? Data generated from this first question will help to identify the types of persons most likely to engage in art as a healing intervention and those persons most likely to be positively affected by the creation of art during chronic illness.

The characteristics of participants are defined as the qualities of the participant that affected the use of art as a healing intervention. Characteristics of the participants were identified from the interview data using content analysis and include: the illness experience, art experience and attitudes towards art.

Further content analysis was conducted to identify aspects of the illness experience, art experience and attitudes towards art. The illness experience includes: physical, mental, emotional, social and spiritual aspects. Specific physical aspects of the illness experience include: physical symptoms and treatment issues. Specific mental aspects of the illness experience were identified from the interview data using content analysis and include: illness awareness and illness obsession. Specific emotional aspects of the illness experience include: sadness, anger, fear and frustration. Specific social aspects include: illness invisible, reluctant to share about illness, unable to work and financial worry. Specific spiritual aspects include: facing mortality and questioning the meaning of life. Three levels of art experience were identified from the interview data: beginner, discontinuous and continuous. Three specific attitudes toward art were identified from the interview data: appreciation, passion, and nervous.
Figure 9 summarizes the results of this analysis which helps to identify the characteristics of chronically ill people drawn to creating art as a healing modality and for whom the experience was a positive healing modality.
FIGURE 9. Characteristics of Participants
Illness Experience

The illness experience is the lived experience of functioning with a disease process for those people who used art as a healing intervention. The illness experience in people who use art as a healing intervention was explored in order to better understand the aspects of the illness experience that may be addressed by art as a healing intervention.

Five facets of the illness experience were identified from the interview data using content analysis and include: physical, mental, emotional, social and spiritual aspects. The facets of chronic illness as experienced by the participants of this study are examined here to provide a framework for understanding the illness experience that can be modified through using art as a healing intervention. People with these characteristics may be most likely to be aided by creating art as a healing intervention.

Physical aspects of the illness experience.

Physical illness experiences were bodily aspects of the illness experience. Two specific aspects were identified: physical symptoms and treatment issues.

Symptoms. Symptoms were aspects of the illness that the participant experienced with their bodies. Three symptoms that were concerns to participants who created art as a healing intervention were identified from the interview data using content analysis and include: pain, decreased energy and functional limitations (Table 3).
TABLE 3. Illness Experience – Physical Symptoms

| Symptom                  | Definition                                      | Example                                                                 
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>Definition: unpleasant physical sensations</td>
<td>42:084 I hurt most of the time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22:299 The pain will get to the point where I'm in tears</td>
</tr>
<tr>
<td>Decreased Energy</td>
<td>Definition: limited capacity to engage in activity</td>
<td>19:127 With my heart I get tired umm pretty, pretty early</td>
</tr>
<tr>
<td></td>
<td></td>
<td>22:332 I've been in bed for a week at a time where I'm too tired to get up and do anything</td>
</tr>
<tr>
<td>Functional Limitations</td>
<td>Definition: Inability to do desired activities</td>
<td>15:327 I can't work like I used to outside of the home, I can't make the funds that I used to make, which isn't that important. I can't, which I've come to realize is not that important. I can't hold my grandchildren and take care of them like I wanted to at this time of my life. I can't, there's so many I can't.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>99:229 I can't sit at the computer and I can't sit for long periods of time, and I can't use my hands like that with the computer, I get numbness and tingling if I umm (clears throat) work on a computer for any length of time.</td>
</tr>
</tbody>
</table>

*Exemplars of symptoms.* Participant 15 experienced physical symptoms from her illness. She spent her days managing her pain. “That's what I do all day is manage my pain” 15:243. The experience of decreased energy limited the amount of time during the day that she was able to be active. “I know that I have a two-hour window every day that I, I’m healthy that I can do things” 15:203. She experienced functional limitations that affected her professional and personal life. “I started not being able to do things and I had to reduce my hours at work” 15:071.

Participant 82 had balance issues which contributed to a bad fall that caused a complicated leg fracture. He experienced pain. “I uh took a fall and broke my leg severely and one leg is knock kneed and shorter and that causes a lot of problems. Umm you know, you know with, with pain and whatever” 82:055. He had decreased energy and had learned to incorporate naps into his daily routine. “I learned that while I was at work and everything I closed my door and took a nap. When I get really tired, take a nap” 82:179. Participant 82 was slowly losing motor control and the loss of motor control caused functional limitations. “With MS, what, what goes you know, like my balance is terrible” 82:143.
The effect of diagnosis on symptom experience. During the initial analysis, an additional question surfaced: Is there a difference in the types of physical limitations experienced by people with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 4).

<table>
<thead>
<tr>
<th></th>
<th>Pain</th>
<th>Decreased Energy</th>
<th>Functional Limitations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n=1; 14%</td>
<td>n=2; 29%</td>
<td>n=1; 14.2%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n=4; 100%</td>
<td>n=4; 100%</td>
<td>n=4; 100%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n=6; 67%</td>
<td>n=5; 56%</td>
<td>n=5; 56%</td>
</tr>
</tbody>
</table>

All participants with fibromyalgia (100%) experienced pain, limited energy and functional limitations. Participants with other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) experienced decreased energy and functional limitations to a lesser degree (56 & 67%). Among those participants with cancer, these experiences were even less frequently identified (14 & 29%).

Exemplars of the effect of diagnosis on symptom experience. Participant 27 had cancer. She still had the energy and the functional ability to work a full time job and did not discuss pain as a significant concern with her illness experience. “If I don't pick up it means I'm at work because sometimes I do and sometimes I don’t depending on what, I'm in medical billing and coding so I can't always pick up” 27:800.

Participant 42 had fibromyalgia. Pain was a significant part of her illness experience “I hurt most of the time” 42:084. She experienced times when she had so little energy that she was exhausted by routine activities. “I literally would walk out of the shower and get back in bed soaking wet because I was too tired to dry myself off” 42:316. Participant 42 experienced times when she was unable to perform activities of daily living. “I lost the ability to talk, to walk, to cook” 42:136.
Participant 19 had cardiac disease. She had struggled with pain as the medical team worked to address her cardiac issues. “I used to be in constant uh pain, in chest pain” 19:63. Her cardiac issues contributed to decreased energy. “With my heart I get tired, umm pretty, pretty early” 19:127. Participant 19 had been very physically active before contracting the virus which caused her cardiac disease. She was acutely aware of the functional inabilities that her disease had caused. “I can't do a lot of sports because of the defibrillator umm there's a lot of things that you don't even think about that I can't do. That I would like to do, you know I have a bucket list just like everybody else. Umm, there's a lot of things I want to do before I go but I can't do it. You, you can't uh imagine the things I think of doing. I can't snow ski anymore, I can't water ski, I can't do uh any active sports that would hurt me”, 19:187.

*Treatment issues.* Participants experienced treatment issues. Treatments issues are defined as actions taken to cure a disease or alleviate the symptoms of a disease that did not work as intended in people who used art as a healing intervention. Aspects of treatment issues that were concerns to participants who created art as a healing intervention were identified from the interview data using content analysis and include: medication ineffectiveness and side effects (Table 5).

**TABLE 5. Illness Experience – Physical Treatment Issues**

<table>
<thead>
<tr>
<th>Medication Ineffectiveness</th>
<th>Definition: medications did not adequately relieve symptoms</th>
<th>15:251One just plain didn't work and, and the others that had the other side effects they weren't that effective on the pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side Effects</td>
<td>Definition: unpleasant unintended effects of a treatment</td>
<td>26:289I have a hard time with words and that, the medications really do a job on you (laughs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>78:169 And side effects from all the medications and stuff like I've got osteopenia now and I'm on medication for that, I'm 3 inches shorter. Well I'm 2 3/4 inches shorter</td>
</tr>
</tbody>
</table>
**Exemplars of treatment issues.** Participant 15 experienced treatment issues. She was unable to find a pain medication that was effective. She was also concerned with the long term effects of the medications. “The medications all had side effects that umm one I gained a huge amount of weight on that I'm still working on trying to get rid of, one I, I had liver issues, enzyme issues that became an issue for me so I had to go off of it. One I had high umm cholesterol issues and one just plain didn't work and, and the others that had the other side effects they weren't that effective on the pain” 15:25.

Participant 32 experienced treatment issues. While participant 32 found pain medications to be effective for the pain from her complicated bone fractures she found the side effects unbearable. “While I was taking it uh, I didn't like who I was. It made me just really hateful and I felt like I was watching somebody else from a movie” 32:217.

*The effect of diagnosis on treatment issues.* During this analysis, an additional question surfaced: Is there a difference in the treatment issues experienced by people with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 6).

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Medications Ineffective</th>
<th>Side Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n=0; 0%</td>
<td>n=3; 43%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n=2; 50%</td>
<td>n=2; 50%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n=3; 33%</td>
<td>n=4; 44%</td>
</tr>
</tbody>
</table>

Those participants with fibromyalgia appeared to experience issues with medication ineffectiveness (50%) and side effects (50%). Participants with other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) experienced issues with medication ineffectiveness and side effects to a lesser degree (33-44%). Among those participants with cancer, these experiences were even less frequently identified (0-43%).
Exemplars of the effect of diagnosis on treatment issues. Participant 28 had fibromyalgia. She struggled to manage her symptoms because the medications she was prescribed were not effective to treat her pain and had side effects. “The first three years I just was drugged up. I mean I was a mess and I, I mean there had to be another way. Especially when you find out that all this stuff is hurting your liver and hurting your, your kidneys and, and it’s not really taking away all the pain, I still have a certain degree of pain to live with” 28:291.

Mental Aspects of the Illness Experience

Participants experienced mental aspects of the illness experience. Mental aspects of the illness experience are defined as ways of thinking about the illness experience in people who used art as a healing intervention. Two specific aspects of the illness experience were identified from the interview data using content analysis and include: illness awareness and illness obsession (Table 7).

TABLE 7. Illness Experience – Mental

| Illness Awareness | Definition: attention to the illness and symptoms | 33:255 I went to a uhh, cancer retreat uhh, called real recovery last week. And there we, uhh, a number of people with uhh, recovering from cancer came and we spent a, a weekend uhh, uhh discussing cancer and issues related to cancer, but also umm, umm spent a lot of time fishing. So we combined the two and uhh and I think that it was uhh, very informative
57:227 I knew I was sick, I knew there was something wrong with me because I just kept having less and less and less energy |
|-------------------|--------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Illness Obsession | Definition: absorption in the illness experience to the extent that it dominates the participant’s thoughts | 26:101 You don’t go very very long without it [thoughts of illness] creeping back
92:279 I’m self-focused a lot, you know focused on me in my pain and what I can’t do |
Exemplars of mental aspects of illness experience.

While Participant 22 was working with the medical team to find a diagnosis he became obsessed with his illness. “There were years umm where I had all of these symptoms and I went to all sorts of doctors and naturopaths and allopathic doctors… I started making the mistake of oh reading some medical books. And I decided that I had a central nervous system cancer and that I was doomed. And so I was really getting into, into uh dark areas” 22:115. When he was diagnosed with multiple sclerosis he was very relieved that he didn’t have a terminal disease and his thought process changed from obsessed to aware. He maintained enough awareness of his disease to manage his illness, but no longer obsessed about his illness experience. “I'm also taking care of my health I go to, to OHSU on a regular basis. I'm taking medications” 22:123.

Participant 72 worked with the medical team on a treatment to control her stage four breast cancer. “I'm doing chemo but umm, it stopped progressing” 72:140. She sometimes found herself absorbed in thinking about her cancer. “You know this cancer; sometimes you know it’s right in front of my face” 72:124.

The effect of diagnosis on illness obsession. During the initial analysis, an additional question surfaced: Is there a difference in the experience of illness obsession by people with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 8).

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Illness Obsession</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n=5; 71%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n=3; 75%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n=1; 11%</td>
</tr>
</tbody>
</table>
Those participants with cancer or fibromyalgia appeared to experience illness obsession (71-75%). Participants with other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) experienced illness obsession to a lesser degree (11%).

**Exemplars of the effect of diagnosis on illness obsession.** Participant 26 had cancer. He had a difficult time not thinking about his illness. “It's hard to get the uhh, your condition or your situation out of your mind” 26:097.

Participant 72 had fibromyalgia. She obsessed with her illness and symptoms when she was alone. “When you're alone a lot and you're in pain a lot I'm self-focused a lot, you know focused on me in my pain and what I can't do and you know there's a lot of having to self-focus which does not feel good, I don't really want to do that” 92:279.

**Emotional Aspects of the Illness Experience**

Participants experienced emotional aspects of chronic illness. Emotional aspects are defined as facets of feeling and affect in people who used art as a healing intervention. Four specific emotional aspects of the illness experience were identified from the interview data using content analysis and include: sadness, anger, fear and frustration (Table 9).

**TABLE 9. Emotional Aspects of the Illness Experience**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Definition</th>
<th>Sample Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sadness</strong></td>
<td>Definition: melancholy affect</td>
<td>33:047 I uhh, came away from the stem cell transplant, uhh, uhh, in kind of a blue, blue funk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64: 283 I was extremely depressed from my disease process</td>
</tr>
<tr>
<td><strong>Anger</strong></td>
<td>Definition: strong feeling of displeasure at illness experience</td>
<td>26: 357 At the very beginning that I would say to people what people wanted me to say, not how I really felt umm. And I think that's what I mean by true, umm, no holds barred, no holding back, umm, everything, the anger</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27:240 Was I going to end up with this stupid picture with all this black stuff on it you know from the anger</td>
</tr>
<tr>
<td><strong>Fear</strong></td>
<td>Definition: apprehension about the future</td>
<td>11:163 I'm scared, but I think the hope is there</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60:284 You are afraid of a recurrence and this sort of thing</td>
</tr>
</tbody>
</table>
TABLE 9. - Continued

<table>
<thead>
<tr>
<th>Frustration</th>
<th>Definition: exasperation with dealing with illness</th>
<th>28:251-259 As long as you can keep lifting your arms (laughter) then you're good, but once you can't do that then you're kind of you're at the mercy of whatever’s gonna happen for the next few days…or how, how, however long it is…It's very frustrating, very frustrating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>72:329 How frustrating it is to whatever, like I told you waiting is such a frustration for me, it just drives me crazy</td>
</tr>
</tbody>
</table>

Exemplars of emotional aspects of the illness experience.

Participant 11 described feeling sad about her cancer. “I get depressed and sad” 11:159. She was afraid of her treatments and of her prognosis. “Because I'm afraid, you know I don't like being put to sleep” 11:427.

Participant 99 had a recent new complication of her illness and was frustrated with the long process of attaining a diagnosis. “I mean who knows which one’s secondary to the other? But umm I also even after they found this I was still sick and they couldn't find out, they couldn't find, they couldn't find (pause) they couldn't find out what was still making me sick.” 99:661.

The effect of diagnosis on emotional aspects of the illness experience. During the initial analysis, an additional question surfaced: Is there a difference in the emotional illness experience in people with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 10).

TABLE 10. Illness Emotional Experience and Type of Illness

<table>
<thead>
<tr>
<th></th>
<th>Sadness</th>
<th>Anger</th>
<th>Fear</th>
<th>Frustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n=6; 86%</td>
<td>n=4; 57%</td>
<td>n=6; 86%</td>
<td>n=2; 29%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n=2; 50%</td>
<td>n=0; 0%</td>
<td>n=0; 0%</td>
<td>n=1; 25%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n=3; 33%</td>
<td>n=1; 11%</td>
<td>n=2; 22%</td>
<td>n=3; 33%</td>
</tr>
</tbody>
</table>

Those participants with cancer appeared to experience sadness (86%), anger (57%) and fear (86%). Further, cancer did not seem to be related to frustration (29%). Fibromyalgia was
related to sadness (50%), but did not seem to be related to anger (0%), fear (0%) or frustration (25%). Other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) did not seem to be related to sadness (33%), anger (11%), fear (22%) or frustration (33%).

Exemplars of effect of diagnosis on emotional aspects of the illness experience.

Participant 72 had cancer. She experienced sadness anger, fear and frustration. “There are times when I'm by myself and very down and I don’t, uhh, I don't know that if I'm depressed or not, but at least sad. And I guess I have plenty of reason to be sad” 72:188. She created a painting about the experience of cancer and found the painting to be an angry painting. “It came out red and kind of angry” 72:136. She was fearful of how her illness might progress. “I don't know what's going to happen to me” 72:180. Dealing with medical appointments and lab results was very frustrating for participant 72. “Waiting is such a frustration for me, it just drives me crazy” 72:329.

Participant 15 had fibromyalgia. She experienced sadness when she had to leave her job and was not able to be as active. “To sit back and do nothing is depressing for me” 15:207.

Social Aspects of the Illness Experience

The experience of chronic illness had social aspects for the participants. Social aspects are defined as how participants who used art as a healing intervention interacted with other people and with society. Four specific aspects were identified from the interview data using content analysis and include: illness invisible, reluctant to share about illness, unable to work and financial worry (Table 11).
### Exemplars of social aspects of the illness experience.

Participant 92 felt that her illness was invisible to others. “I don't really have a name like cancer or multiple sclerosis or Parkinson's disease a lot of people don't believe this is real and so you know it'll look like I'm being lazy or complaining when I can't do things” 92:271. She was reluctant to communicate with others about her illness even when she had to close her business and stop working. “When I closed my art store in Atlanta and they didn't know how sick I was. I didn't want to tell people because I had a lot of very, very wealthy clients and I just didn't feel like talking to them about it”, 92:347. Participant 92 had struggled financially all her life, and closing her business increased her financial worries. “When you have disabilities and you, you don't have any other great income. I mean I’ve got a little bit of Social Security” 92:195.
Participant 99 felt that her illness was invisible to others and she was reluctant to share about her illness. “Colitis and arthritis to a certain extent are, are invisible diseases you know. I mean everybody knows that I, I look a little crooked and that I've walk a little funny you know, but colitis is invisible and how you feel at that moment is, is pretty invisible and I've become a professional at not showing it” 99:401. She was also unable to continue working. “I had quit to court reporting because I basically couldn't physically do it anymore” 99:465.

**The effect of diagnosis on social aspects of the illness experience.** During the initial analysis, an additional question surfaced: Is there a difference in the social aspects of illness experienced by people with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 12).

**TABLE 12. Diagnosis and Social Aspects of the Illness Experience**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Illness Invisible (5)</th>
<th>Reluctant to Communicate (8)</th>
<th>Unable to Work (4)</th>
<th>Financial Worry (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (7)</td>
<td>n=0; 0%</td>
<td>n=3; 43%</td>
<td>n=0; 0%</td>
<td>n=1; 14%</td>
</tr>
<tr>
<td>Fibromyalgia (4)</td>
<td>n=1; 25%</td>
<td>n=2; 50%</td>
<td>n=1; 25%</td>
<td>n=1; 25%</td>
</tr>
<tr>
<td>Other (9)</td>
<td>n=4; 44%</td>
<td>n=3; 33%</td>
<td>n=3; 33%</td>
<td>n=3; 33%</td>
</tr>
</tbody>
</table>

Fibromyalgia seemed to be related to reluctant to communicate (50%). Fibromyalgia did not seem to be related to illness invisible (25%), unable to work (25%) or financial worry (14%). Cancer did not seem to be related to social aspects (0-43%). Other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) did not seem to be related to social aspects (33-44%)

**Exemplars of the effect of diagnosis on social experience.** Participant 42 had fibromyalgia. She did not communicate with others about her illness. “I mean when it was most severe, umm there, I don't remember talking about it a lot because most people didn't get it anyway. Cause like how can you have the flu for 12 years?” 42:192.
Spiritual Aspects of the Illness Experience

The experience of living in the context of chronic illness had spiritual aspects for the participants. Spiritual aspects are defined as how living with chronic illness affected the existential experience in people who used art as a healing intervention. Two specific spiritual aspects were identified from the interview data using content analysis and include: facing mortality and questioning the meaning of life (Table 13).

TABLE 13. Illness Experience – Spiritual

<table>
<thead>
<tr>
<th>Facing Mortality</th>
<th>Definition: Confronting the fact that one will die</th>
<th>33:047 There was this Damocles sword hanging over my, my head, and would be from now on</th>
<th>78:369 I thought wow, am I going to die?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questioning Meaning of Life</td>
<td>Definition: Struggling to find value in life accomplishments</td>
<td>92:355 I always feel like I'm not useful</td>
<td>99:601 when I stopped being a high-powered executive and kind of a big fish in a small pond as, as a court reporting firm owner in Houston and then, and then working nationally and being you know. I mean people knew my name and, and to being retired, then who are you, you know?</td>
</tr>
</tbody>
</table>

Exemplars of spiritual aspects of the illness experience.

Participant 33’s cancer diagnosis focused his attention on his own mortality. “I'm coming to grips with uhh you know my uhh, umm, mortality” 33:135.

Participant 92 was so ill at the time of her diagnosis that she thought she was going to die. “I felt like I was dying. And I kept telling everybody I'm gonna die” 92:171. She sometimes felt as if her life has no value. “I feel like I'm useless when I'm so sick all the time” 92:355.

The effect of diagnosis on spiritual illness experience. During the initial analysis, an additional question surfaced: Is there a difference in the spiritual aspects of illness experienced by people with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 14).
Cancer was related to facing mortality (71%), but did not seem to be related to questioning meaning of life (43%). Fibromyalgia did not seem to be related to spiritual aspects (0-25%). Other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) did not seem to be related to spiritual aspects of the illness experience (11-22%).

**Exemplars of the effect of diagnosis on spiritual experience.** Participant 26’s cancer diagnosis made him think of his own eventual death. “Things are getting a little more serious so, umm, I mean you never know, you know, how much time you have left anyways, even for those who are not diseased and that stuff, and I always try to remember that, and my wife always reminds me of that too. But that’s still know in the back your head you know that says, yeah okay but you know kind of like out there, ace in the hole it says that you got a better chance of, of having short life than somebody else” 26:325.

**Art Experience**

Art experience is defined as the level of involvement that participants had in creating art prior to illness in people who used art as a healing intervention. Three levels of art experience were identified from the interview data using content analysis and include: beginner, discontinuous and continuous (Table 15).

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Facing Mortality</th>
<th>Questioning Meaning of Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (7)</td>
<td>n=5; 71%</td>
<td>n=3; 43%</td>
</tr>
<tr>
<td>Fibromyalgia (4)</td>
<td>n=1; 25%</td>
<td>n=0; 0%</td>
</tr>
<tr>
<td>Other (9)</td>
<td>n=2; 22%</td>
<td>n=1; 11%</td>
</tr>
</tbody>
</table>
TABLE 15. Art Experience

<table>
<thead>
<tr>
<th>Level</th>
<th>Definition</th>
<th>Exemplars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>Definition: never created art before becoming ill</td>
<td>60:071 I had never held a brush in my hand before (laughter)</td>
</tr>
<tr>
<td></td>
<td>78: 449 I never painted I couldn't draw. I couldn't draw to save my life. My stick people look worse than a two-year-old</td>
<td></td>
</tr>
<tr>
<td>Discontinuous</td>
<td>Definition: created art in the past, but had not made art for years before becoming ill.</td>
<td>15: 067 the last mmm 15, 20 years of my life have really been career oriented and family oriented and so I haven't really been able to do a lot of art</td>
</tr>
<tr>
<td></td>
<td>82:059 I was trained in art uh you know growing up and when I got out into the real world they said well if you really love it don't do it for a living. And I thought about it and yeah that kind of made sense so I did other things… you know I let art go for 35 years</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>Definition: created art throughout life without significant pause in engagement</td>
<td>28:067 I've always participated, been an artist, I mean I went to college and my major was art and then I became a schoolteacher and I was an art teacher in high school umm. It's always been a part of my life.</td>
</tr>
<tr>
<td></td>
<td>92: 215 People are always asking me that kind of question about when did you start doing it and when did you learn to do it. When I asked my mom one time she said from the time I could hold something in my hand I was always making art</td>
<td></td>
</tr>
</tbody>
</table>

Exemplars of art experience level.

Participant 26 was an art beginner. He started creating art “uhh, about a year after I was diagnosed” 26:049.

Participant 22 was art discontinuous. “I began painting, I, I, when I was in the umm when I was in junior high school I had won a uh summer arts scholarship and uh that some recognition that I got that I had some kind of talent and before then I, I always uh kind of had the uh the uh fantasy that maybe I would be an artist some day and, and I was considered somewhat talented when I was a kid. And then I uh I got into graduate school and went in a professional direction in terms of my uh, what I refer to as my day job and umm just dropped the art altogether uh, uh for years” 22:95.

Participant 54 was art continuous. “I've always drawn ever since I’m really young … I just always was an artist” 54:147.
The relationship of diagnosis and art experience. During the initial analysis, an additional question surfaced: Is there a difference in art experience by participants with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 16).

TABLE 16. Diagnosis and Art Experience

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Beginner</th>
<th>Discontinuous</th>
<th>Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (7)</td>
<td>n=6; 86%</td>
<td>n=0; 0%</td>
<td>n=1; 14%</td>
</tr>
<tr>
<td>Fibromyalgia (4)</td>
<td>n=0; 0%</td>
<td>n=1; 25%</td>
<td>n=3; 75%</td>
</tr>
<tr>
<td>Other (9)</td>
<td>n=0; 0%</td>
<td>n=5; 55%</td>
<td>n=4; 44%</td>
</tr>
</tbody>
</table>

Eighty-six percent of cancer patients were art beginners. Seventy-five percent of fibromyalgia patients were art continuous. Fifty-five percent of participants with other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) were art discontinuous.

Exemplars of the relationship of diagnosis and spiritual experience. Participant 11 had cancer. She was an art beginner. “I've never been able to draw” 11:091.

Participant 19 had cardiac disease and was an art discontinuous participant. “I took a lot of art classes in college. I took jewelry making and I enjoyed it you know and always enjoyed art. Uh I loved going to, to art shows and that, and uh museums and that type of thing that I, I never pictured myself doing art” 19:095.

Participant 42 had fibromyalgia and was an art continuous participant. “Lisa: Have you made art your whole life then? 42: Yes, I was an art major at the University of Washington” 42:066-068.

Art Attitude

Participants had attitudes toward art. Attitude toward art is defined as the general feeling about art in people who used art as a healing intervention. Three specific attitudes toward art
were identified from the interview data using content analysis and include: appreciation, passion, and nervous (Table 17).

**TABLE 17. Art Attitudes**

<table>
<thead>
<tr>
<th>Attitude</th>
<th>Definition</th>
<th>Example</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Appreciation</td>
<td>admiration for works of art</td>
<td>26:241 I've always enjoyed looking at paintings</td>
<td>28:331 I love looking at other people's art. I mean I could just sit there and stare at other people's art</td>
</tr>
<tr>
<td>Passion</td>
<td>feeling that art is an essential part of life</td>
<td>15:075 it's just part of my soul, part of who I am</td>
<td>22:111 I could really describe it as a passion</td>
</tr>
<tr>
<td>Nervous</td>
<td>anxiety about art skills</td>
<td>11:591 I just I was almost shaking. I thought I don't know what to do you know when you've never drawn that's kind of overwhelming</td>
<td>99:733 you feel really insecure and you feel really you know scared to put it out there and some days you don't think it's good enough</td>
</tr>
</tbody>
</table>

**Exemplars of art attitudes.**

Participant 19 appreciated art. “I loved going to, to art shows and that, and uh museums and that type of thing that” 19:095. She was nervous about her art skills and did not like other people to watch her while she created art. “It irritates me if other people are around. Not that they ask questions or anything, but maybe because I'm inferior (laughter) you know if they see me erasing everything and starting over or getting my water and my soap and cleaning the whole page I might be embarrassed (laughter)” 19:259.

Participant 82 had an attitude of art passion. “I think if out of all the things that you know that I could do or have been able to do in my life I think art is one of the best things in the world. I wouldn't trade that one, I wouldn't trade my talent” 82:151.

Participant 60 was art nervous. “It's was just the unknown of what to do with the materials and how to make anything come out looking like anything” 60:099.
The relationship of art attitude and art experience. During the initial analysis, an additional question surfaced: Is there a difference in art attitudes in participants with different art experience who used art as a healing intervention? A third order data matrix was developed to address this question (Table 18).

TABLE 18. Art Experience and Art Attitude

<table>
<thead>
<tr>
<th>Art Experience</th>
<th>Art Appreciation</th>
<th>Art Passion</th>
<th>Art Nervous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=2; 33%</td>
<td>n=0; 0%</td>
<td>n=3; 50%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=3; 50%</td>
<td>n=4; 66%</td>
<td>n=4; 66%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=2; 25%</td>
<td>n=6; 75%</td>
<td>n=1; 13%</td>
</tr>
</tbody>
</table>

Art beginner experience was related to the attitude of art nervous (50%), but does not seem to be related to art appreciation (33%) or art passion (0%). Art discontinuous experience was related to art appreciation (50%), art passion (66%) and art nervous (66%). Art continuous experience was related to art passion (75%) but does not seem to be related to art appreciation (25%) and art nervous (13%).

Exemplars of relationship of art experience and art attitude. Participant 60 was an art beginner and had an attitude of art nervous. “And the first time I went I was umm what you want to call it, a reluctant umm uncomfortable, out of my umm what do you want to call it, comfort zone person” 60:087.

Participant 15 had a discontinuous level of art experience and an attitude of art appreciation. “I've always appreciated art. I love other people's art, I have a ton of other people's art in my house” 15:327.

Participant 22 had a discontinuous level of art experience and an attitude of art passion. “I was doing nothing but thinking about it [art] really for years” 22:111. He also had an attitude of art nervous. “I feel like I'm out ranked in a lot of ways. I've never had any formal training you know” 22:087.
Participant 28 had a continuous level of art experience and an attitude of art passion. “I mean my master bedroom does not have a bed or a dresser or anything, it has a studio and we sleep in (laughter) one of the spare bedrooms because this is such an important part of my life” 28:267.

Summary

Participants reported specific physical, mental, emotional, social and spiritual aspects of the chronic illness experience that affected their use of art as an intervention.

The illness experience included the physical aspects of symptoms: pain, limited energy and functional limitations. All participants with fibromyalgia experienced pain, limited energy and functional limitations. Participants with other illnesses experienced decreased energy and functional limitations to a lesser degree. Among those participants with cancer, these experiences were even less frequently identified.

The illness experience included the physical aspects of and treatment issues: medication ineffectiveness and side effects. Those participants with fibromyalgia appeared to experience issues with medication ineffectiveness and side effects. Participants with other illnesses experienced issues with medication ineffectiveness and side effects to a lesser degree. Among those participants with cancer, these experiences were even less frequently identified.

The illness experience included the mental aspects of illness awareness and illness obsession. Those participants with cancer or fibromyalgia appeared to experience illness obsession. Participants with other illnesses experienced illness obsession to a lesser degree.

The illness experience included the emotional aspects of: sadness, anger, fear and frustration. Those participants with cancer appeared to experience sadness, anger and fear.
Fibromyalgia was related to sadness. Other illnesses did not seem to be related to emotional aspects of the illness experience.

The illness experience included the social aspects of: illness invisible, reluctant to communicate, unable to work and financial worry. Fibromyalgia seemed to be related to reluctant to communicate. Cancer and other illnesses did not seem to be related to social aspects of the illness experience.

The illness experience included the spiritual aspects of facing mortality and questioning meaning of life. Cancer was related to facing mortality. Fibromyalgia and other illnesses did not seem to be related to spiritual aspects of the illness experience.

Participants had three levels of art experience: art beginner, art discontinuous and art continuous. Eighty-six percent of the participants with cancer were art beginners. Seventy-five percent of the participants with fibromyalgia were art continuous. Fifty-five percent of participants with other illnesses were art discontinuous.

Participants discussed three art attitudes: art appreciation, art passion and art nervous. Art beginner experience was related to the attitude of art nervous. Art discontinuous experience was related to art appreciation, art passion and art nervous. Art continuous experience was related to art passion.

Data will help to provide a framework for understanding what aspects of the illness experience can be modified through using art as a healing intervention. Data will assist in furthering program development, further research and theory building.

**Characteristics of the Intervention Facilitator**

The second research question was: What intervention facilitator characteristics influenced the participant’s experience with art as a healing intervention? Data will help to identify the type
of facilitator necessary to carry out art as a healing intervention. From the initial interviews, it was evident that although healthcare professionals could facilitate art as a healing intervention, other types of professionals and personnel are also successfully involved. Therefore, the characteristics of any person who facilitated using art as a healing intervention are included here. Intervention facilitator characteristics are defined as the qualities of the art facilitator that affected the use of art as a healing intervention. Characteristics of the intervention facilitator were identified from the interview data using content analysis and include: accessibility, demeanor and instruction.

Further content analysis was conducted to identify aspects of accessibility, demeanor and instruction. Specific aspects of facilitator accessibility include: relationship and availability. Specific aspects of facilitator demeanor include: positive emotion, encouraging, and non-judgmental. Specific aspects of instruction include: material support, skill building and allowing.

Table 19 summarizes the results of this analysis which helps to identify the characteristics of the intervention facilitators who assisted chronically ill people to create art as a healing modality and for whom the experience was a positive healing modality (Figure 10).
FIGURE 10. Characteristics of the Intervention Facilitator

Facilitator Accessibility

Participants discussed the need for facilitators to be accessible to encourage art creation.

Accessibility is defined as the open interaction between participant and the intervention facilitator. Two specific aspects of facilitator accessibility were identified from the interview data using content analysis and include: relationship and availability (Table 19).

TABLE 19. Facilitator Accessibility

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Definition: connections that were broader than the art experience</th>
<th>19:099 she [my sister] told me you know, I think art would help you</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>60:119 He [my son] was in the hospital two months and I think I went [to the day of art] after that because I know P. [the intervention facilitator] was a huge help during that</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Availability</th>
<th>Definition: easy to reach for help</th>
<th>26:289 I mean, yeah I think they have to spread themselves out between everybody but you have somebody to ask questions to immediately and you get them and they can show you and that sort of thing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>27:336 I think of you getting up and going and helping someone else but then coming back to check on us again</td>
</tr>
</tbody>
</table>
Exemplars of facilitator accessibility.

Participant 11 had a relationship with the person who offered art as an intervention. The art intervention facilitator was part of the cancer center team. “I contacted P. at the cancer part of [the hospital] and she put me into all of this” 11:143. When Participant 11 went to the day of art she appreciated the availability of the facilitators. “I felt like I took all your time” 11:379.

The facilitator who offered art as an intervention to Participant 60 was part of the cancer center team and had assisted her with other issues. “I don't know what we would've done without her umm she, when my son was umm in the coma umm she came up and sat in, in the intensive care room with me” 60:470. When Participant 60 went to the day of art she appreciated the availability of the facilitators. “R. was there and she was very helpful” 60:103.

The relationship of art experience and facilitator accessibility. During the initial analysis, an additional question surfaced: Do people with different art experience levels require different accessibility in those who facilitate art as a healing intervention? A third order data matrix was developed to address this question (Table 20).

<table>
<thead>
<tr>
<th>Art Experience Level</th>
<th>Relationship</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=5; 83%</td>
<td>n=5; 83%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=1; 16%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=0; 0%</td>
<td>n=1; 13%</td>
</tr>
</tbody>
</table>

The participants who characterized their art experience as beginner appeared to require facilitator accessibility with aspects of relationship (83%) and availability (83%). Participants who characterized their art experience as discontinuous or continuous did not see to require facilitator accessibility in order to create art (0-16%).

Exemplars of the relationship of facilitator accessibility and art experience level.

Participant 26 was an art beginner. He used art as a healing intervention at the cancer center. “It
was offered through [the hospital]” 26:057. He appreciated the availability of the facilitators. “You know somebody to ask [how to create art]” 26:289.

Participant 78 had an ongoing relationship with the members of her cancer team who offered art as a healing intervention “I have like people who really care when you're doing this.” 78:249. She appreciated help from the artists who volunteered. “You have artist there and they come by” 78:185.

Demeanor

Participants stated that the demeanor of those who helped with art creation was important. Demeanor is defined as personal manner. Three aspects of intervention facilitator demeanor were identified from the interview data using content analysis and include: positive emotion, encouraging, and non-judgmental (Table 21).

TABLE 21. Facilitator Demeanor

<table>
<thead>
<tr>
<th>Demeanor</th>
<th>Definition</th>
<th>Exemplars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant Attitude</td>
<td>Definition: positive manner</td>
<td>26:169 They were nurses and so umm, it it was a lot of, like I said it was a lot of positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88:191 I think the most helpful thing is that she [the facilitator] is a very pleasant person</td>
</tr>
<tr>
<td>Encouraging</td>
<td>Definition: emboldening others to create art</td>
<td>11:195 You just made me feel it’s okay we're going to make this work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64:135 When he saw that I had an interest in these things he was just very supportive and encouraged me and it's really thanks to him that I'm still doing this [creating art]</td>
</tr>
<tr>
<td>Non-Judgmental</td>
<td>Definition: non-derisive</td>
<td>22:135 The critique is real critique it's not criticism</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27:476 You can put down what you're thinking or feeling with nobody judging you</td>
</tr>
</tbody>
</table>

Exemplars of facilitator demeanor.

Participant 26 appreciated that the people who worked with him to create art had a pleasant attitude. “The people there were all positive” 26:165
Participant 92 appreciated encouragement to create art “When you're isolated doing art it umm, you get too isolated so when you’re in a group of artists oh my goodness you encourage each other” 92:251.

Participant 15 appreciated the facilitator’s non-judgmental demeanor. “Camaraderie that we each respectfulness, professional respect for each other's artwork, nonjudgmental” 15:155.

The relationship of art experience and facilitator demeanor. During the initial analysis, an additional question surfaced: Do people with different art experience require a facilitator with a different demeanor? A third order data matrix was developed to address this question (Table 22).

<table>
<thead>
<tr>
<th></th>
<th>Pleasant Attitude</th>
<th>Encouraging</th>
<th>Non-Judgmental</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Beginner (n=6)</td>
<td>n=4; 66%</td>
<td>n=2; 33%</td>
<td>n=2; 33%</td>
</tr>
<tr>
<td>Art Discontinuous (n=6)</td>
<td>n=1; 16%</td>
<td>n=1; 16%</td>
<td>n=2; 33%</td>
</tr>
<tr>
<td>Art Continuous (n=8)</td>
<td>n=1; 13%</td>
<td>n=4; 50%</td>
<td>n=0; 0%</td>
</tr>
</tbody>
</table>

Those participants who characterized their art experience as beginner appeared to require a facilitator whose attitude was classified as pleasant (66%). Further, those who had a beginning level of art experience did not seem to be as helped or motivated by facilitators that were characterized as encouraging (33%) or non-judgmental (33%). Those participants who had a more discontinuous experience with art did not appear to be affected by the demeanor of their facilitator (16-33%). Those with continuous art experience found facilitators who were encouraging (50%) to be most helpful.

Exemplars of the association of facilitator demeanor and art experience level. Participant 27 was an art beginner. She appreciated that the facilitator who helped her create art had a pleasant attitude. “She talked to me and we laughed” 27:340.
Participant 64 had an art continuous level of experience. She appreciated encouragement from the facilitator who helped her create art. “It was the encouragement and the experimentation that was what I needed” 64:143.

Instruction

Participants described requiring instruction from the facilitator. Instruction is defined as teaching how to use art as a healing intervention. Three aspects of instruction were identified from the interview data using content analysis and include: material support, skill building and allowing (Table 23).

<table>
<thead>
<tr>
<th>Table 23. Facilitator Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material Support</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Skill Building</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Allowing</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Exemplars of facilitator instruction.

Participant 19’s sister provided the materials she needed to create art. “My sister had to go buy me a bunch of uh horse anatomy books so I would know which way that the knee joint bent” 19:111. Her sister also assisted her to build her art skills. “I don't know what I’d do if I didn't have her to look at it. I'd be, I’d think something's wrong but I don't know what it is you know?” 19:271.
Participant 92 sought facilitator instruction to build her skills. “She [a professional artist] taught me what she learned… she was great with colors so she got me really looking at color” 92:223.

Participant 64 appreciated instruction that allowed her to build her own style “He said you know maybe that's just not your style, maybe you just need to experiment and find your own style” 64:143.

*The relationship of art experience and facilitator instruction.* During the initial analysis, an additional question surfaced: Do people with different art experience require different facilitator instruction? A third order data matrix was developed to address this question (Table 24).

**TABLE 24. Art Experience and Facilitator Instruction**

<table>
<thead>
<tr>
<th>Art Experience</th>
<th>Material Support</th>
<th>Skill Building</th>
<th>Allowing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=3; 50%</td>
<td>n=3; 50%</td>
<td>n=4; 66%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=2; 33%</td>
<td>n=3; 50%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=1; 13%</td>
<td>n=4; 50%</td>
<td>n=3; 38%</td>
</tr>
</tbody>
</table>

Art beginners appeared to require material support (50%), skill building (50%) and allowing (66%) instruction. Participants with other levels of art experience appeared to require skill building (50%), but not require material support or instruction that was allowing (13-38%).

*Exemplars of the relationship of art experience and facilitator instruction.* Participant 26 was an art beginner. He appreciated the material support. “They had umm everything you needed, and it, it, it didn't cost anything” 26:069. He appreciated instruction to build skill. “You visualize what you want, what you want to paint or, in anything you visualize what you want the end the piece of art to look like, but getting there is, is something that is totally, uhh, foreign if you don't, if you never been or never tried that medium before, or you don't have help, you know somebody to ask” 26:289. He appreciated that the instructors assisted him to paint, but allowed
him to create his own work. “They gave you the paints and they, they told you to paint how you felt” 26:169.

Participant 32 appreciated instruction to assist her to learn a new medium. “She said well have you tried scemo and sculpy and I'm going ‘no’; she told me about these things and then she kept coming back and checking on me” 32:353.

Summary

The characteristics of the intervention facilitator that encouraged participant use of art as a healing intervention discovered in the data are: accessibility, demeanor and instruction.

Accessibility included aspects of relationship and availability. The participants who characterized their art experience as beginner appeared to require facilitator accessibility to create art. Participants who characterized their art experience as discontinuous or continuous did not seem to require facilitator accessibility in order to create art.

Demeanor included aspects of: pleasant attitude, encouraging and non-judgmental. Those participants who characterized their art experience as beginner appeared to require a facilitator whose attitude was classified as pleasant. Further, those who had a beginning level of art experience did not seem to be as helped or motivated by facilitators that were characterized as encouraging or non-judgmental. Those participants who had a more discontinuous experience with art did not appear to be affected by the demeanor of their facilitator. Those with continuous art experience found facilitators who were encouraging to be most helpful.

Instruction included aspects of: material support, skill building and allowing. Art beginners appeared to require material support, skill building and allowing instruction. Participants with other levels of art experience appeared to require skill building, but not require material support or instruction that was allowing.
Data will help identify the type of intervention facilitator necessary to carry out art as a healing intervention. Data can be used to guide program development, research and theory development.

**Characteristics of Context**

The third research question was: What are the characteristics of the context for creating art? Data will help to identify aspects of the context of art creation that promote the use of art as a healing intervention.

The context for creating art is defined as the circumstances in which participants created art. Characteristics of context were identified from the interview data using content analysis and include: with whom art created and environment. Further content analysis was conducted to identify aspects of with whom art created and environment. Specific aspects of with whom art created include: solitary and in groups. Specific aspects of solitary art creation include: always alone and sometimes alone. Different types of groups for art creation include: illness based social support, enjoyment and instruction. Specific aspects of environment include: relaxing surroundings and modified work space. Figure 11 summarizes the results of this analysis which helps to identify the characteristics of context for creating art as a healing modality.
With Whom Art Created

With whom art created is defined as the people with whom the participants actively engaged in the creative process of making art. Two specific aspects of with whom art created were identified from the interview data using content analysis and include: solitary and in groups.

**With whom art created: Solitary.**

Solitary art creation is defined as making art when alone. Two specific aspects of solitary art creation were identified from the interview data using content analysis and include: always alone and sometimes alone (Table 25).
 TABLE 25. With Whom Art Created: Solitary

<table>
<thead>
<tr>
<th>Always Alone</th>
<th>Definition: the creation of art as only a solitary endeavor</th>
<th>19:259 By myself I've got to be, I've got to concentrate you know 82:247 My ideal time is in the evening when there's no one around, no distractions and you know I'll just sit down and paint.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes Alone</td>
<td>Definition: art creation with others at times and alone at times</td>
<td>42: 112 My studio is in my home 42:380 A bunch of us get together and we go to a studio together where they have a bunch of torches and we do nothing but purple hearts 72:104 I just get out the paint. Actually, now that I'm alone I just leave them out 72: 297 I mean I paint purposely on Saturday morning with a group of women, and I also paint on Tuesday afternoon at a club a local club here.</td>
</tr>
</tbody>
</table>

Exemplars of with whom art created: solitary. Participant 15 only created art alone.

“Lisa: so do you ever paint with other people? 15: no, I don't” 15:137-139.


The relationship of art experience and with whom: solitary. During the initial analysis, an additional question surfaced: Is there a difference in with whom art created: solitary, for people with different art experiences who use art as a healing intervention? A third order data matrix was developed to address this question (Table 26).

TABLE 26. Art Experience and With Whom: Solitary

<table>
<thead>
<tr>
<th></th>
<th>Always Alone</th>
<th>Sometimes Alone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=0; 0%</td>
<td>n=0; 0%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=3; 50%</td>
<td>n=3; 50%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=1; 13%</td>
<td>n=7; 88%</td>
</tr>
</tbody>
</table>

Art beginners did not seem to create art alone (0-16%). Art discontinuous participants created art always alone (50%) and sometimes alone (50%). Art continuous participants created art sometimes alone (88%).
Exemplars of the relationship of art experience and with whom: solitary. Participant 82 was art discontinuous and created art always alone. “my ideal time is in the evening when there's no one around, no distractions and you know I'll just sit down and paint” 82:247.

Participant 99 was art discontinuous. She created art sometimes alone. “I basically took my own money umm and, and gave myself a budget and built this studio” 99:691. Participant 99 also created art in classes “I probably travel twice a year uh to take umm glass classes” 99:645.

Participant 88 was art continuous. She created art sometimes alone. “I woke up this morning and went to my computer” 88:103. She also created art with non-illness based groups. “I do meet up groups [to create art]” 88:375.

With whom art created: Group.

With whom art created: group is defined as making art with others. Three different types of group purposes were identified from the interview data using content analysis and include: illness based social support, enjoyment and instruction (Table 27).

TABLE 27 With Whom Art Created: Group

<table>
<thead>
<tr>
<th><strong>Illness Based Social Support</strong></th>
<th>Definition: purpose of the group is to support people with the same diagnosis</th>
<th>27:556 I go to the cancer center. I like painting and I'm with people that know and have been through it</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>78:145 I go into Phoenix to the wellness Center and I do clay there with other cancer patients.</td>
</tr>
<tr>
<td><strong>Enjoyment</strong></td>
<td>Definition: purpose of the group is to have fun making art</td>
<td>64:207 we get together and we'll dye silk scarves together or paint silk scarves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>72:112 I belong to a watercolor club… We just sit and paint</td>
</tr>
<tr>
<td><strong>Instruction</strong></td>
<td>Definition: purpose of the group is to build art making skills</td>
<td>22:095 I took an art course</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28: 151 I've taken workshops but they, they're more just about umm, sharpening my craft</td>
</tr>
</tbody>
</table>

Exemplars of with whom art created: group. Participant 11 created art at the cancer center in an illness based group where the other artists were also cancer survivors. “She [the
intervention facilitator] kind of introduced herself made me relaxed; told me she was a cancer survivor” 11:191.

Participant 92 enjoyed painting in a group with other artists “When you’re in a group of artists oh my goodness you encourage each other, you get to see their work and every person does art differently even if they're all doing the same thing, they all look different and I just love the fellowship of other artists” 92:251.

Participant 32 took art classes to learn new skills. “We took umm an introduction to sculpting class” 32:345.

The relationship of art experience and with whom art created: group. During the initial analysis, an additional question surfaced: Is there a difference in with whom art created: group for participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 28).

<table>
<thead>
<tr>
<th></th>
<th>Illness Based Social Support</th>
<th>Enjoyment</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=6; 100%</td>
<td>n=0; 0%</td>
<td>n=2; 33%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=0; 0%</td>
<td>n=2; 33%</td>
<td>n=4; 66%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=1; 13%</td>
<td>n=4; 50%</td>
<td>n=2; 25%</td>
</tr>
</tbody>
</table>

Art beginners created art in groups for the purpose of illness based social support (100%). Art beginners did not seem to create art in groups for enjoyment or instruction (0-30%). Art discontinuous participants created art in groups for instruction (66%), but did not seem to create art in groups for illness based social support or enjoyment (0-33%). Art continuous participants created art in groups for enjoyment (50%), but did not seem to create art in groups for illness based social support or for instruction (13-25%).

Exemplars of the relationship of art experience and with whom: group. Participant 78 was an art beginner and created art in an illness based group at the cancer center. “It's more than
the art, the art's fun and it's fun to create, but I think it's really something (pause) people who have been through catastrophic illnesses need groups where they can be together and know everybody else understands" 78:289.

Participant 99 was art discontinuous and created art in groups for instruction. “I probably travel twice a year uh to take umm glass classes” 99:645. She also enjoyed creating art with other artists. “I just finished a wind catcher that I think I mentioned earlier where I'm doing the glass and uh a gentleman who’s a retired engineer is getting into kinetic sculptures… and then we rivet my glass to the kinetic sculptures.” 99:629-633.

Participant 88 was art continuous. She enjoyed creating art with other artists. “I do meet up groups and I had a couple of, one of my art groups and I invited one of my other to do a concurrent meet up together” 88:375.

Environment for Art Creation

Participants described aspects of the environment in which they created art. The environment for creating art was the place that the art creation occurred. Two specific aspects of environment were identified from the interview data using content analysis and include: relaxing surroundings and modified work space (Table 29).

TABLE 29. Environment for Art Creation

<table>
<thead>
<tr>
<th>Relaxing Surrounding</th>
<th>Definition: the setting for art creation</th>
<th>60:332 the sounds, the sound of the water and the uh there's nothing stark about that garden. Everything is umm well it's, it's nature I guess if you could have a few geckos running around it would be even better 64:299 my studio is a very bright place with a huge window and different colors of fabric all over it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified Work Space</td>
<td>Definition: an environment accommodated for limitations</td>
<td>32:477 I don't feel comfortable working on large pieces because they're too hard to move around and I have to work on them from so many different angles. So I've got of Lazy Susan that I put them on and work on them like that 64:307 If I’m having a day when the vertigo's bad I can still do hand stitching. I maybe don't want to be using my sewing machine because that movement will sometimes set me off umm if I'm sort of teeter tottering on the edge of vertigo</td>
</tr>
</tbody>
</table>
Exemplars of environment for art creation.

Participant 11 enjoyed the environment in which she created art. “That was also one of the most awesome parts of it I thought; was being held in the garden” 11:491.

Participant 99 modified her work environment to accommodate for her limitations. “I’ve transferred from things you would sit to do to, you know I stand up. My whole studio is set up for me to stand and lean against a chair so I can, I can work. And I work (clears throat) on many different projects at once so that if I start having issues with my hands on one thing that I'm working on I just switch to something that uses a different movement” 99:181.

Summary

The characteristics of context included with whom art was created and the environment in which art was made. With whom art created included solitary or with a group art creation. Solitary art creation included art created always alone and art created sometimes alone. Art beginners did not seem to create art alone. Art discontinuous participants created art always alone and sometimes alone. Art continuous participants created art sometimes alone.

Art groups had different purposes: illness based social support, enjoyment and instruction. Art beginners created art in groups for the purpose of illness based social support. Art beginners did not seem to create art in groups for enjoyment or instruction. Art discontinuous participants created art in groups for instruction, but did not seem to create art in groups for illness based social support or enjoyment. Art continuous participants created art in groups for enjoyment, but did not seem to create art in groups for illness based social support or for instruction. Environment included relaxed surroundings and modified work space.

Data will help define the characteristics of the context of art to guide program development, research and theory development of art as a healing intervention. It is helpful to
know the context that is most suited to different types of participants in programs for the creation of art as a healing intervention.

**Components and Dose**

The fourth research question was: What were the intervention components and dose? Data will help to identify the active ingredients for art creation (i.e., what makes art healing for people with chronic illness). Data will help to identify the dose required for art to be a healing intervention for people with chronic illness.

Components are the active ingredients of creating art for the activity to be a healing intervention. Components were identified from the interview data using content analysis and include: color, content and material manipulation. Further content analysis was conducted to identify aspects of color, content and material manipulation. Specific components of color include color used: to convey meaning, to elicit emotion and for enjoyment. Specific components of content included: illness-based and non-illness based content. Specific components of material manipulation included: hands-on, layering and texturing.

The dose is the quantity and intervals of art creation the participants reported. Doses were identified from the interview data using content analysis and include: frequency and amount of art used. Further content analysis was conducted to identify aspects of frequency and amount of art used. Dose frequency included: art daily, and art not daily. Dose amount of art used included: fewer than five pieces and greater than five pieces.

Figure 12 summarizes the results of this analysis which helps to identify the components and dose of creating art as a healing modality.
Components and Dose

Components

Color
- Convey meaning
- Elicit emotion
- Enjoyment

Content

Material Manipulation
- Illness Based
- Non-Illness Based

Frequency
- Daily
- Not Daily

Amount
- Greater Than 5 Pieces
- Fewer Than 5 Pieces

Dose

FIGURE 12. Components and Dose

Components

Components are defined as the active ingredients of creating art for the activity to be a healing intervention. Components were identified from the interview data using content analysis and include: color, content and material manipulation.

Component: Color.

All of the participants used color in creating art. Using color is defined as creating with different hues. Components of color were identified from the interview data using content analysis and include color used: to convey meaning, to elicit emotion and for enjoyment (Table 30).
<table>
<thead>
<tr>
<th>To Convey Meaning</th>
<th>Definition: using color as symbols</th>
<th>57:295 I think there's a lot of meaning to color. 72:225 I have a lot of support around me. My children are wonderful. Umm, They don't live near me, but they call. And you know they’ve assured me that no matter what decision I make they will back me. So you know I have great comfort in that. So I tried to show that as up colors</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Elicit Emotion</td>
<td>Definition: using color to provoke affective states</td>
<td>22: 183 My colors affect my mood, and my mood affects my colors 42: 264 If I'm in a, you know kind of want to pizzazz myself up I’ve got the orange color that I used in that bracelet umm is called saffron and umm I, that color is just joyful to me umm and so I use that color a lot</td>
</tr>
</tbody>
</table>

FIGURE 13. Color For Meaning – Participant 72

FIGURE 14. Color to Elicit Emotion – Participant 42
<table>
<thead>
<tr>
<th>For Enjoyment</th>
<th>Definition: Using color for the pleasure of seeing different hues</th>
<th>19:143 I really do beautiful lizards and I do them in bright colors and they’re, they have pimples on them and (laughter) they’re really you know like umm chameleon lizards and uh they’re green and they change colors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>22: 175 I like to play with color</td>
<td></td>
</tr>
</tbody>
</table>

**Exemplars of component: color.** Participant 27 used color to convey meaning. “I wanted to paint the reds and oranges and like you say the purples and greens to show that my journey wasn’t bad and that everybody that's had a part in my journey over the six months is an important part” 27:148.

Participant 64 used color to elicit emotion. “The colors make me smile. And it's really hard to be depressed when you've got a lot of color staring at you in the face all the time. And so my studio is a very bright place with a huge window and different colors of fabric all over it” 64:299.

The effect of diagnosis on use of color. During the initial analysis, an additional question surfaced: Does diagnosis affect the use of color in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 31).

**TABLE 31. Diagnosis and Component: Color**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Create Meaning</th>
<th>Elicit Emotion</th>
<th>Enjoyment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n=6; 86%</td>
<td>n=2; 29%</td>
<td>n=3; 43%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n=0; 0%</td>
<td>n=3; 75%</td>
<td>n=3; 75%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n=4; 44%</td>
<td>n=3; 33%</td>
<td>n=5; 55%</td>
</tr>
</tbody>
</table>

Participants with cancer seemed to use color to convey meaning (86%), but did not seem to use color to elicit emotion or for enjoyment (43%). Participants with fibromyalgia seemed to use color to elicit emotion and for enjoyment (75%), but did not seem to use color to convey meaning (0%). Participants with other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) seemed to use color for enjoyment (55%), but did not seem to use color to convey meaning or to elicit emotion (33-44%).

Exemplars of diagnosis and color. Participant 11 had cancer. She used color to convey meaning. “If I was to do something probably closer to my surgery it would probably be kind of like maybe dark and different” 11:427.

Participant 15 had fibromyalgia. She used color to elicit emotion. “There will be a lot of days where I’ll think ooo I just need to paint orange today. What can I paint that would be orange? Because, and I picked orange because that's the mood I've been in lately (laughter)” 15:311.

Participant 28 had fibromyalgia. She enjoyed color. “I could just sit there and stare at other people's art just look at the, the colors” 28:331.
Participant 88 had multiple injuries. She enjoyed color. “I have such attraction to color”

Component: Content.

The content of art is the subject matter of the piece. Components of content were identified from the interview data using content analysis and included: illness-based and non-illness based content (Table 32).

TABLE 32. Content

| Illness Based | Definition: the illness experience is the subject matter for the majority of the pieces the participant created | 26:289 Umm, umm, like I said fir trees I had an issue with uhh, trying to figure out fir trees and I was trying to, I was trying to do a waterfall and, and a, a log cabin and that, because I want to show down here in this little corner here, was where was and that's where the black was, and then the yellow and red where, where my feeling sorry for myself and anger was, and then where everything kind of got out of that everything was getting much better and better, kept on continuing to get better and, and uhh, to where I am now.

78: 317 When I first found out I had cancer I felt really torn. I actually called the picture torn [note the torn piece of canvas in the petal]

FIGURE 16. Illness Based Content – Participant 78
### TABLE 32. - *Continued*

| Non-Illness Based | Definition: the illness experience is not the subject matter for the majority of the pieces the participant created. | 82:091 *I did some Western scenes, and, those are fine in fact one I'm working on now is the Western scene uh but it's not nearly as good as the florals*
| | 92:175 *I go out and paint scenery*

**FIGURE 17. Non-Illness Based Content – Participant 82**

---

**Exemplars of component: content.** Participant 11 created art with illness based content. Her art explored her experience of cancer. “That's what I brought out was the hope. Because it did look hopeful I thought with the flower and the blue sky or whatever that represents, it could be the ocean, the sky. I just, you know when I look at it over and over and the angels to me that brings peace because I have a very strong faith. Umm and a very good Christian background so I really believe that there's a purpose for me going through this; that God has a plan for me” 11:167.

Participant 54 created art that was not illness based. “I've always painted with hands. I remember drawing hands as a little girl; it was the first thing I even remember drawing” 54:091.
The effect of diagnosis on component: content. During the initial analysis, an additional question surfaced: Does diagnosis affect the art content in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 33).

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Illness Based</th>
<th>Non-Illness Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n=7; 100%</td>
<td>n=3; 43%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n=0; 0%</td>
<td>n=4; 100%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n=0; 0%</td>
<td>n=9; 100%</td>
</tr>
</tbody>
</table>

Participants with cancer created art with illness based content (100%) much more than they created art with non-illness based content (43%). Participants with fibromyalgia or other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) created art with non-illness based content and did not seem to create art with illness based content (0%).

Exemplars of diagnosis and component: content. Participant 78 created art about her cancer. She writes about the first painting she created “my picture is of the ocean, it starts out dark and stormy at a time when I got my confirmation I had breast cancer. As time went on with heavenly father's help and with the help of my church and all my friends and family things started to get better. The stars started coming out, lining up, the seas started calmin, calming, the sun came out with all the beautiful colors and the birds appeared. I felt, I feel a lot more bright and hopeful now” 78:345.

Participant 54 had diabetes. She created art that was non-illness based. “My idea when I go into painting is to paint the spirit of my subject whether it be a person or even if it's an abstract it's spirit and even when it’s an abstract when it's good spirit it's very healing” 54:187.
Component: Material manipulation.

Material manipulation is the physical interaction with the materials of art. Components of material manipulation were identified from the interview data using content analysis and included: hands-on, layering and texturing (Table 34).

TABLE 34. Material Manipulation

<table>
<thead>
<tr>
<th>Hands-On</th>
<th>Definition: enjoyment in the manual manipulation of the materials of art</th>
<th>22:151 Doing hands-on work, I love, I love the process of painting 54:159 You know I paint with my hands umm, putting paint down, putting color down, putting the line down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layering</td>
<td>Definition: putting images over each other</td>
<td>54:383 I think everything that’s hidden is still there. You just might not see it but it's energy and power or whatever it was will be 88:131 I started to work with it and the more I worked with the layers and colors</td>
</tr>
</tbody>
</table>

FIGURE 18. Layering – Participant 54
TABLE 34. - Continued

<table>
<thead>
<tr>
<th>Texturing</th>
<th>Definition: developing the quality of the surface so that it either had differences that could be felt or the appearance of differences that could be felt</th>
<th>64:067 Its several pieces of fabric that are hand pieced and then once that was done on top of it I did embroidery with beads and just embroidery floss to create more texture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>99:545 I'm working with texture</td>
<td></td>
</tr>
</tbody>
</table>

FIGURE 19. Texturing – Participant 64


Participant 57 layered images in her art work. “I just keep pullin them in, they're just layered and layered things” 57:139.

Participant 99 created glass pieces that had texture. “That one is rough, those are, those are, it's, it’s like a fossil it, and I could take that up to a higher temperature or put a, put another clear piece of glass on top of it and fire it and it would be beautiful and glassy but I prefer it not to be” 99:445.

The relationship between art experience and component: material manipulation. During the initial analysis, an additional question surfaced: Is there a difference in material manipulation
for participants with different art experience? A third order data matrix was developed to address this question (Table 35).

**TABLE 35. Art Experience Level and Material Manipulation**

<table>
<thead>
<tr>
<th>Art Experience Level</th>
<th>Hands-On</th>
<th>Layering</th>
<th>Texturing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=4; 66%</td>
<td>n=1; 16%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=6; 100%</td>
<td>n=3; 50%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=8; 100%</td>
<td>n=3; 38%</td>
<td>n=3; 38%</td>
</tr>
</tbody>
</table>

Participants with all levels of art experience enjoyed the hands on aspect of creating art (66-100%). Participants with discontinuous art experience used layering when manipulating the materials of art (50%). Art beginners and art continuous participants did not seem to use layering or texturing when manipulating materials (16-38%).

*Exemplars of relationship between art experience and component: material manipulation.* Participant 26 was an art beginner. He enjoyed the hands-on aspect of working with the materials of art. “You know painting you’re stroking you’re moving. Umm, the glasswork umm, you’re moving there too, constantly moving and you're constantly having to pay attention to where your hands are” 26:333.

Participant 15 was art discontinuous. She enjoyed the process of using the materials of art. “It's just the whole process of doing the painting itself” 15:171. She also used layering when creating art. “I work on and umm in many layers” 15:171.

Participant 64 was art continuous. She enjoyed the process of using the materials of art. “I feel connected to the fabric. Fiber artists are tactile” 64:075.

**Dose**

The dose is the frequency and amount of art creation the participants used. Dose frequency identified from the interview data using content analysis included: art daily, and art
not daily. Dose amount of art created identified from the interview data using content analysis included: fewer than five pieces and greater than five pieces (Table 36).

TABLE 36. Dose

<table>
<thead>
<tr>
<th>Dose Daily</th>
<th>Definition: art was a routine part of life</th>
<th>28:267 [My studio is] where I come every day 64:195 I try to do at least do one thing toward making art every day.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Daily</td>
<td>Definition: art was not a routine part of life</td>
<td>26:181 “That was a one day uhh, umm experience umm, they can only do it like once a year something like that, once maybe twice a year. 27:216 I had never painted [before the cancer day of art]</td>
</tr>
<tr>
<td>Greater Than Five Pieces</td>
<td>Definition: greater than five pieces of art total created since enacting art as a healing intervention</td>
<td>42: 180 I usually take about $10,000 worth of product to a show at a time 92:175 I started painting for galleries and I was in Santa Fe and Scottsdale and different galleries</td>
</tr>
<tr>
<td>Fewer Than Five Pieces</td>
<td>Definition: fewer than five pieces of art total created since enacting art as a healing intervention</td>
<td>60: 071 This is the third time I've gone and it's the second time I've used acrylics 78:433 The one [painting] you helped me do is my third one.</td>
</tr>
</tbody>
</table>

Exemplars of dose.

Participant 88 created art daily. “There, there isn't a day that goes by when I don't think about another dimension to an idea that I'm ruminating on or something” 88:211. She had created more pieces of art than she could remember or count. “Stuff that I did early on in life umm, most of that stuff you know kind of just went elsewhere and I never really kept track of it much” 88:231.

Participant 26 did not create art daily. He created art only in class. “[Art class] was only four weeks unfortunately umm. It was once a week umm, uhh and, and, of course we uhh, uhh, course ended, the class ended” 26:193. He had only created two pieces of art at the time of the interview.
The effect of art experience on dose. During the initial analysis, an additional question surfaced: Does art experience affect dose in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 37).

<table>
<thead>
<tr>
<th></th>
<th>Art Daily (15)</th>
<th>Art Not Daily (5)</th>
<th>Fewer than 5 pieces (6)</th>
<th>More than 5 pieces (14)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=1; 16%</td>
<td>n=5; 83%</td>
<td>n=5; 83%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=6; 100%</td>
<td>n=0; 0%</td>
<td>n=0; 0%</td>
<td>n=6; 100%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=8; 100%</td>
<td>n=0; 0%</td>
<td>n=0; 0%</td>
<td>n=8; 100%</td>
</tr>
</tbody>
</table>

Eight-three percent of the art beginner participants created art not daily and made fewer than five pieces. One hundred percent of participants with other levels of art experience created art daily and made greater than five pieces.

Exemplars of the effect of art experience on dose. Participant 11 was an art beginner. The day of art she participated in prior to the interview was the first time she had created art and the piece she created there was the only piece she had ever created: “My first day of art” 11:315.

Participant 82 was art discontinuous. He painted routinely. “Umm I try to and say most days that I paint” 82:387. He had created many pieces of art. “I've got my house filled with them” 82:223.

Summary

The components of art included color, content and material manipulation. Color had aspects of: to create meaning, to elicit emotion, and for enjoyment. Participants with cancer seemed to use color to convey meaning. Participants with fibromyalgia seemed to use color to elicit emotion and for enjoyment. Participants with other illnesses seemed to use color for enjoyment.

Content was illness based or non-illness based. Participants with cancer created art with illness based content much more than they created art with non-illness based content.
Participants with fibromyalgia or other illnesses created art with non-illness based content and did not seem to create art with illness based content.

Material manipulation had aspects of: hands on, layering and texturing. Participants with all levels of art experience enjoyed the hands on aspect of creating art. Participants with discontinuous art experience used layering when manipulating the materials of art. Art beginners and art continuous participants did not seem to use layering or texturing when manipulating materials.

The dose included the frequency and amount of art creation. The frequency was daily and not daily. The amount of art was greater than five pieces and fewer than five pieces. Art beginner participants created art not daily and made fewer than five pieces. Participants with other levels of art experience created art daily and made greater than five pieces.

**Enactment and Adherence**

Question five was: What factors influenced participants to enact and adhere to the intervention? Data will help to identify factors that encourage people to enact and then adhere to art as a healing intervention.

Enactment is defined as starting to creating art as a healing intervention. Enactment could be encouraged or discouraged. Further content analysis was conducted to identify aspects of enactment encouragement and discouragement. Specific components of enactment encouragement included: invitation, opportunity, something to do and past experience. Specific components of enactment discouragement include: financial, unnecessary, and poor skill.

Adherence is defined as the participant continuing the intervention. Adherence could be encouraged or discouraged. Further content analysis was conducted to identify aspects of adherence encouragement and discouragement. Specific components of adherence
encouragement include: enjoy skill building and enjoy process. Specific components of adherence discouragement include: harsh critique and dependent on facilitator.

Figure 20 summarizes the results of this analysis which helps to identify the factors that influence the enactment of and adherence to creating art as a healing modality.

**Figure 20. Enactment and Adherence**

**Enactment Encouragement**

Enactment is defined as what encouraged people to begin creating art as a healing intervention. Components of enactment encouragement were identified from the interview data
using content analysis and include: invitation, opportunity, something to do and past experience (Table 38).

### TABLE 38. Enactment Encouragement

| **Invitation** | Definition: a personal offer to create art | 27:140 T. said oh you should do it just come see it's really fun  
60:87 P. told us that they had a day of art and she told me several times before I had enough courage to even go (laughter) |
| **Opportunity** | Definition: the chance to try creating art | 19:099 She [my sister] started me out like a uh beginning art student  
78:145 I go into Phoenix to the wellness Center |
| **Something to do** | Definition: Something to do | 22:207 There wasn't much else to do and I was looking for something else to do.  
99: 465 I was a very busy person and when I started doing art work you know as an outlet to, to keep me busy |
| **Past Experience** | Definition: prior engagement with creating art | 15:131 I went through an umm difficult divorce several years ago I went to painting at that time umm for some emotional umm therapy for myself  
32:149 I used to be an illustrator, let me see if I can do some drawings with the pen and ink, and I used to do layouts. (Clears throat) so I started drawing |

**Exemplars of enactment encouragement.**

Participant 11 was invited to create art by a health care professional at the cancer center.

“P. told me, she said you don't have to be an artist, you don't need to, we will be there for you we will instruct you” 11:275.

For Participant 26 the art program at the cancer center was an opportunity to try to create art. “It was an opportunity that I'd never had before” 26:057.

For participant 72 creating art was an activity that filled her days. “It gives me something to do” 72:076.

Participant 82 started creating art as a healing intervention because he had created art in the past. “I always liked it and I was hoping that it would help” 82:063.
The relationship of art experience and enactment encouragement. During the initial analysis, an additional question surfaced: Is there a difference in enactment encouragement for participants with different art experience? A third order data matrix was developed to address this question (Table 39).

<table>
<thead>
<tr>
<th>Art Experience Level and Enactment Encouragement</th>
<th>Invitation</th>
<th>Opportunity</th>
<th>Something to do</th>
<th>Past Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=6; 100%</td>
<td>n=4; 66%</td>
<td>n=3; 50%</td>
<td>n=0; 0%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=1; 16%</td>
<td>n=1; 16%</td>
<td>n=5; 83%</td>
<td>n=6; 100%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=0; 0%</td>
<td>n=0; 0%</td>
<td>n=2; 25%</td>
<td>n=8; 100%</td>
</tr>
</tbody>
</table>

Art beginners seemed to enact art because of an invitation to do so, the opportunity to try art, and a wish for something to do (50-100%). Art beginners did not seem to enact art because of past experience (0%). Participants with discontinuous art experience enacted art because of a wish for something to do and past experience with art (83-100%). Art discontinuous participants did not seem to enact art because of an invitation or opportunity (16%). Art discontinuous participants enacted art because of past experience (100%).

Exemplars of the effect of art experience on enactment encouragement. Participant 78 was an art beginner. She was invited to participate in a day of art at the cancer center. She appreciated the opportunity to try art. “I’ve never done it before, I can't draw and I thought mmm I might as well go try and paint, see what happens” 78:129. One of the reasons she tried art was to have something to do. “I have to keep busy, and I have to keep un-bored” 78:693.

Participant 15 was art discontinuous. She enacted art as a healing intervention because she needed something to do when she became unable to work. “When I became ill and couldn't work … I just had to do something because I couldn't do anything anymore” 15: 067. She had past experience with creating art. “I have pieces that I had with when I was a child taking lessons” 15:075.
Participant 64 was art continuous. She used art as a healing intervention when she became ill because she had always created art. “I've been creating art forever, since I was a kid. Umm but when I started creating it full-time was umm six years ago” 64:099.

**Enactment Discouragement**

Enactment discouragement is defined as factors that demotivated the participant to begin to use of as a healing intervention. Components of enactment discouragement were identified from the interview data using content analysis and include: financial, unnecessary, and poor skill (Table 40).

TABLE 40. Enactment Discouragement

| **Financial** | Definition: reluctance to invest funds in an unknown activity | 26:257 You know, painting is not cheap 64:167 I was afraid to put a financial investment in supplies if what I was doing wasn't right |
| **Unnecessary** | Definition: self-assessment that no intervention is needed | 11:139 I didn't think I needed it [assistance] 60:406 I didn't understand that I needed Patricia until things were just so overloaded on me that umm you know that I was you know crumbling in the process |
| **Poor Skill** | Definition: self-assessment of inability to create art | 11:091 I've never been able to draw 27:476 When T. told me I was like well I can't draw. And that was my reaction to her and to my friend C., but I can't draw. I can't umm paint, I can't do any of that |

**Exemplars of enactment discouragement.**

Participant 26 had financial difficulties after he became unable to work from his illness. He was concerned with the cost of creating art. “Cost is what kept me from trying it before” 26:281.

Participant 11 was reluctant to seek healing interventions because she felt they were unnecessary. “I felt like I was a uh strong person, I didn't need anybody to support me… I’ve
always been one of those strong people that think I can handle it I don't need nobody to talk to, I don't need a release” 11:767.

Participant 27 felt that she didn’t have the skill to start creating art. “I think what it is too because when you're in school or a student and a teacher and you're teaching your told that, by art people that it has to be this perfect image you know it's like you know a street lined with buildings or whatever” 27:612.

*The effect of art experience on enactment discouragement.* During the initial analysis, an additional question surfaced: Is there a difference in enactment discouragement for participants with different art experience? A third order data matrix was developed to address this question (Table 41).

<table>
<thead>
<tr>
<th>Table 41. Art Experience and Enactment Discouragement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Beginner (n=6)</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
</tr>
</tbody>
</table>

Art beginners were discouraged from enacting art as an intervention because of self-assessment of poor skill (83%). Art beginners did not seem to be discouraged from enacting art as an intervention by financial or unnecessary aspects (16-33%). Participants with art discontinuous and art continuous experience did not seem to be affected by the factors of art discouragement (0-16%).

*Exemplars of the effect of art experience on enactment discouragement.* Participant 60 was discouraged from enacting art because she thought she had poor skill. “I didn't know what anything was about or how to do anything” 60:087.
Adherence Encouragement

Adherence encouragement is defined as the factors that promote continuation of the use of art as a healing intervention. Components of adherence encouragement were identified from the interview data using content analysis and included: enjoy skill building and enjoy creative process (Table 42).

**TABLE 42. Adherence Encouragement**

<table>
<thead>
<tr>
<th>Enjoy Skill Building</th>
<th>Definition: pleasure in improving ability to create art</th>
<th>19:511 The challenge is what keeps me interested 78:201 I just want to learn more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoy Process</td>
<td>Definition: pleasure in the experience of interacting with the materials of art</td>
<td>28:107 I was just putting stuff on there to have a good time 64:075 It just makes me happy to just do it [make art]</td>
</tr>
</tbody>
</table>

**Exemplars of adherence encouragement.**

Participant 22 enjoyed skill building. “The process of producing a painting is, is sort of like a wrestling match or a, or a, really a series of problems that you need to solve. And how do you, you want a certain effect, you wanted to look a certain way and how do you achieve that, how do you translate what's in your head into something that's actually on canvas? So uh, that’s uh a series of uh problems that you solve. And I, and I just enjoy that process” 22:155

Participant 88 felt pleasure while creating art. “I do something that gives me pleasure” 88:179.

*The relationship of art experience with adherence encouragement.* During the initial analysis, an additional question surfaced: Is there a difference in adherence encouragement for participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 43).
### TABLE 43. Art Experience and Adherence Encouragement

<table>
<thead>
<tr>
<th>Experience</th>
<th>Enjoy Skill Building</th>
<th>Enjoy Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=3; 50%</td>
<td>n=6; 100%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=4; 66%</td>
<td>n=6; 100%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=5; 63%</td>
<td>n=8; 100%</td>
</tr>
</tbody>
</table>

100% of participants adhered to art as a healing intervention because they enjoyed the creative process. Participants with all levels of art experience adhered to art because they enjoyed skill building (50-66%).

**Exemplars of the effect of art experience on adherence.** Participant 11 was an art beginner. She was planning on continuing to create art in part because she enjoyed skill building. “It was starting to really look good. It was covering the pencils and you just said well let's highlight here, so I'm, I’m really excited about trying to do it” 11:203. Participant 11 enjoyed the process of creating art. “It is playing with it because that's what we did with my painting” 11:287.

Participant 82 was art discontinuous. He enjoyed the challenge of building his skills. “I guess that is a big part of art is challenge of it” 82:215. He stated that creating art feels “absolutely fabulous” 82:123.

Participant 42 was art continuous. She continued to build her skill and develop her craft. “I've taken it one step further and I've developed a tool umm to uh to make riveted large hole beads that would be similar to tandora style beads” 42: 076. Participant 42 enjoyed the process of creating art. “The only reference that I could really put into words would be the feeling, the joy that you get out of not only doing the process but the finished the piece of art and how that affects the people around you” 42:220.
Adherence Discouragement

Adherence discouragement is defined as factors that were demotivating for participants to continue art as a healing intervention. Components of adherence discouragement were identified from the interview data using content analysis and include: harsh critique and dependent on facilitator (Table 44).

**TABLE 44. Adherence Discouragement**

| **Harsh Critique** | Definition: derisive comments about a participant’s art | 19:295 When I first started she told me things like that and it’d just kill me, I didn’t. Oh I would, I get my feelings hurt and I would, I’d say I’m not doing any more. That's it. I'm through I'm not gonna paint anymore (laughter) and maybe I’d go a week or two before I do any more
64: 139-143 I took a watercolor class once and the teacher held up my work as an example of what not to do… and I was crushed |
| **Dependent on Facilitator** | Definition: does not create art without facilitator assistance | 26:193 the class ended, and we weren't able to sign up for anymore for right now
78:465 I'd like to eventually get some kind of training where I can get my strokes right, but with my income that's not likely (laughter) |

Exemplars of adherence discouragement.

Participant 33 had been discouraged from adhering to art when he was a child. He did not restart to create art after early discouragement until he was in his sixties. “I probably would have you know would have also in a you know uhh some form of umm some form of drawing if I hadn’t been discouraged uhh. umm, early on…this one teacher told me that using the grid to help you draw was not really art, and that what I was doing was not art” 33:195-199.

Participant 78 was dependent on facilitator assistance to create art. “I was frustrated a little while I was doing it but then when you have artist there and they come by and, and she gave me several suggestions and stuff” 78:185.
The effect of art experience level on adherence discouragement. During the initial analysis, an additional question surfaced: Is there a difference in adherence discouragement for participants with different art experience who used art as a healing intervention? A third order data matrix was developed to address this question (Table 45).

TABLE 45. Art Experience and Adherence Discouragement

<table>
<thead>
<tr>
<th>Art Experience</th>
<th>Harsh critique</th>
<th>Dependent on Facilitator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=2; 33%</td>
<td>n=5; 83%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=1; 16%</td>
<td>n=0; 0%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=1; 13%</td>
<td>n=0; 0%</td>
</tr>
</tbody>
</table>

Art beginners were discouraged from adhering to art as an intervention by their dependence on a facilitator (83%). Art beginners did not seem to be discouraged from adhering to art as an intervention by harsh critique. Participants with art discontinuous and art continuous experience did not seem to be discouraged from adhering to art by harsh critique or dependence on an intervention facilitator (0-16%).

Exemplars of the effect of art experience on adherence discouragement. Participant 60 was an art beginner. She only created art when she attended a day of art at the cancer center. In two years she had attended three times. “This is the third time I've gone.” 60:071.

Summary

Enactment is defined as what encouraged participants to start creating art as a healing intervention. Enactment could be encouraged or discouraged. Adherence is defined as continuing the intervention. Adherence could be encouraged or discouraged. Factors that encouraged art enactment included: invitation, opportunity, something to do and past experience. Art beginners seemed to enact art because of an invitation to do so, the opportunity to try art, and a wish for something to do. Participants with discontinuous art experience enacted art because of a wish for
something to do and past experience with art. Art discontinuous participants enacted art because of past experience.

Factors that discouraged art enactment were financial, unnecessary and poor skill. Art beginners were discouraged from enacting art as an intervention because of self-assessment of poor skill. Participants with art discontinuous and art continuous experience did not seem to be affected by the factors of enactment discouragement.

Factors that encouraged adherence were: enjoy skill building and enjoy process. Participants with all levels of art experience adhered to art as a healing intervention because they enjoyed the creative process and skill building.

Factors that discouraged adherence were harsh critique and dependent on facilitator. Art beginners were discouraged from adhering to art as an intervention by their dependence on a facilitator. Participants with art discontinuous and art continuous experience did not seem to be discouraged from adhering to art as a healing intervention.

Data will help define the characteristics of enactment and adherence and guide the practitioner in targeting strategies to encourage art as an intervention for people with different art experience.

Immediate Outcomes

Question five was: What were the immediate outcomes of creating art as a healing intervention? Data will help to identify possible immediate outcomes from the use of art as a healing intervention in people with chronic illness. Data will assist practitioners to target appropriate populations for art as a healing intervention as well as guide intervention evaluation. Data will help to frame further research and theory development.
The immediate outcomes of creating art as a healing intervention are defined as the outcomes that the participant experienced during the time they were actively creating art. Components of immediate outcomes were identified from the interview data using content analysis and included: mental, emotional, physical, social and spiritual aspects.

Further content analysis was conducted to identify aspects of the mental, emotional, physical, social and spiritual immediate outcomes. Specific components of immediate mental outcomes included: expression, interest and present in the moment. Specific components of immediate emotional outcomes included feelings of: enjoyment, contentment, freedom and control. Specific components of immediate physical outcomes included: rest and forget pain. Specific components of immediate social outcomes included: illness based socialization and non-illness based socialization. Specific components of spiritual outcomes included: connection to nature, connection to beauty and connection to higher being.

Figure 21 summarizes the results of this analysis which helps to identify the immediate outcomes of creating art as a healing modality.
Mental Aspects of Immediate Outcomes

The mental aspects of immediate outcomes of creating art as a healing intervention are defined as changes to thinking patterns experienced by participants during the time they were actively creating art. Three specific aspects of mental immediate outcomes were identified from the interview data using content analysis and include: expression, interest and present in the moment (Table 46).
TABLE 46. Mental Aspects of Immediate Outcomes

| Expression                  | Definition: Stating thoughts or feelings through an art medium | 26: 309 You can you can say more in, in art than you can verbally.  
57: 371 I think it's a lot easier to use art, ‘cause there's so many aspects of art like color and shape and form that are easier to express than words maybe will express. |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>Definition: absorption in the creative process to the exclusion of other thoughts</td>
<td>28: 107 I was just putting stuff on there to have a good time, experimenting and each step was like ‘hmm I wonder how that will look, oh let's try that, oh let's do this’ you know it wasn't like ‘now I have to do this, and have to do that’, it was just ‘let’s see how that works, that should be fun’.</td>
</tr>
</tbody>
</table>
| Present in the Moment       | Definition: thinking of only the current moment                  | 19:127 When I paint I get into that, that other side of my brain and I don't umm, I lose time, there's no time umm I get tired and I don't, I don't even think about eating  
82: 123 the rest of the world does not exist. You're just doing what you're doing. |

FIGURE 22. Immediate Mental Outcome – Interest – Participant 28

42:084 It’s like a complicated brain process that umm causes me to uh sort of focus within my head as to what I'm doing, what I'm going to do and what the outcome is going to be.
Exemplars of mental aspects of immediate outcomes.

Participant 27 used creating art to express her illness experience. “I looked at each thing and as I drew it or painted it I thought about that person. I thought about what they had brought to me. I thought about that first phone call and how I felt” 27:228.

Participant 15 became totally absorbed in the process of painting. “I'm just lost in you know what, what is this gonna look like… I think about okay how am I gonna make several of these ridges here and how am I gonna get these shadows in here and I'm starting to get a ridge to come in here and oo this is starting to look like a ridge there” 15:279.

Participant 22 becomes so present in the moment of creating art that he forgets everything else. “I can get started painting and you know that's one of the things that drives my wife a little bit nuts about me because she umm she wakes up that 3 AM ‘XXX’ where are you, where are you?’ Well I'm down in my studio because time had gotten away from me and I'm into the painting I don't want to stop. Or I forget to eat you know or (laughter) that sort of thing” 22:323.

The effect of art experience on mental aspects of immediate outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the mental aspects of immediate outcomes in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 47).

**TABLE 47. Art Experience and Immediate Mental Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Expression</th>
<th>Interest</th>
<th>Present in the Moment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=5; 83%</td>
<td>n=3; 50%</td>
<td>n=5; 83%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=4; 66%</td>
<td>n=6; 100%</td>
<td>n=6; 100%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=7; 88%</td>
<td>n=4; 50%</td>
<td>n=8; 100%</td>
</tr>
</tbody>
</table>

Participants of all levels of experience experienced: expression (66-99%), interest (50-100%) and present in the moment (83-100%).
Exemplars of the effect of art experience on mental aspects of immediate outcomes.

Participant 11 was an art beginner. She created art as an expression of her illness experience. “I think I brought out my true inner feelings from the painting because I wanted it to look bright and sunny and happy and with hope. That's what I want for, and I think anybody that's going through cancer, I don't want it to be sad, I don't, because I'm not sad, but I'm scared, but I think the hope is there” 11:163. The painting process held her interest. “Adding depth by putting, cutting out the Angels in the leaves umm covering up the pencil marks” 11:111. While she was painting she was totally present in the moment. “It was almost like an adrenaline thing that you’re thinking about something else so intensely that you forget everything else around you. And I knew you were there talking to me and other people talk to me but I was just so intent on that picture” 11:567.

Participant 99 was art discontinuous. She used art to express herself. “You see the hand of the, the hand of the maker in the piece” 99:537. She used complex processes that were challenging and interesting. “I have to pre-fire the sheets, the, you can't lay up all the layers of enamel and fire it all at once. It has to be fired in stages so it’s; it's a fairly painstaking process. That, that piece probably there were three or four firings” 99:353. The process of creating art allowed her to be present in the moment. “I can do it and completely lose track of time” 99:181.

Participant 54 was art continuous. She used art to express herself. “I called it in the mountains and umm and I won't describe it but he kept going back at it and back and looking at it and he said what is that about? And I just without really thinking I said well it's, it's a dream…I've heard a lot of people say that about my work, that it feels like a dream” 54:331.

Participant 54 had developed a complex technique that held her interest. “I just draw them right on the canvas with paint loosely umm I might go in and, and uh make umm parts of them more
elaborate than others like I might make their face uh, I might put, I might give them an extra arm or leg I might put another person in the piece. And then I kind of go with it” 54:211. When she created she was totally present in the moment. “putting paint down, putting color down, putting the line down can be very meditative and I think after all these years of being a painter, or being whatever one is, you know you're so, I your technique and your practice you have it down so you don't have to think about it you just let it flow and that's very meditative, very healing” 54:159.

*The relationship between material manipulation and mental aspects of immediate outcomes.* During the initial analysis, an additional question surfaced: Is there a relationship between the material manipulation and the mental aspects of immediate outcomes? A third order data matrix was developed to address this question (Table 48).

<table>
<thead>
<tr>
<th></th>
<th>Expression</th>
<th>Interest</th>
<th>Present in the Moment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hands-On (n=18)</td>
<td>n=13; 72%</td>
<td>n=12; 66%</td>
<td>n=14; 77%</td>
</tr>
<tr>
<td>Layering (n=7)</td>
<td>n=6; 86%</td>
<td>n=4; 57%</td>
<td>n=7; 100%</td>
</tr>
<tr>
<td>Texturing (n=5)</td>
<td>n=5; 100%</td>
<td>n=3; 60%</td>
<td>n=5; 100%</td>
</tr>
</tbody>
</table>

A relationship existed between all of the aspects of material manipulation and all of the mental aspects of immediate outcomes. Hands on material manipulation was related to expression (72%), interest (66%) and present in the moment (77%). Layering was related to expression (86%), interest (57%) and present in the moment (100%). Texturing was related to expression (100%), interest (60%) and present in the moment (100%).

*Exemplar of relationship between material manipulation and mental aspects of immediate outcomes.* Participant 15 manipulated paint to create layered and textured art. “The background and the movement of the painting and the process of doing the painting umm it's just the whole process of doing the painting itself. Of the movement of the paint umm the background is, is a lot of movement that I work on and umm in many layers” 15:171.
process of manipulating the paint held her interest because it required real time problem solving. “You don't have to think about what's going to happen on the right was going happen on the left and make sure that that happens correctly because you can just kind of maneuver it and fix it as it happens” 15:83. Manipulating the materials was a process in which she lost herself. “I get lost in that I get lost in my colors and my shadows and the depths and my, in the flow of what's happening and then my painting evolves in front of me” 15:287.

FIGURE 23. Material Manipulation and Mental Aspects of Immediate Outcomes: Participant 15

**Emotional Aspects of Immediate Outcomes**

The emotional aspects of immediate outcomes of creating art as a healing intervention are defined as feelings experienced by participants during the time they were actively creating art. Components of immediate emotional outcomes were identified from the interview data using content analysis and included feelings of: enjoyment, contentment, freedom and control (Table 49).
TABLE 49. Emotional Aspects of Immediate Outcomes

| Emotional Aspect | Definition: pleasurable reaction to the elements of the process of art | 15:299 I put colors together you know and when I look at this, I love this yellow and orange put together. It just makes me feel good. But yet when I look over to the left I love that purple and blue put together.  
88:155 And there's just something fun about the little black sort of you know whimsical little feathery thing that, that I popped in the middle (laughter). I don't know where that came from, it just came and I said ooh I like it, let's leave it (laughter) |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyment</td>
<td>Definition: feeling of calm satisfaction</td>
<td>11:075 It felt like I was just at peace</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19:183 To paint a picture, you don't have to umm you know it's just a, a nice comfortable thing to do</td>
</tr>
<tr>
<td>Contentment</td>
<td>Definition: feeling unrestricted</td>
<td>28:231 Just very free like flying. It had wings, it was umm just a totally different feeling.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>99:337 It's a way to, to get outside myself so that I'm not trapped in the, in the body that I have,</td>
</tr>
<tr>
<td>Freedom</td>
<td>Definition: feeling of power</td>
<td>42:160 Watching the flame and watching the glass go from solid to a fluid and back to a solid again and being able to manipulate that there's a certain sense of control of something</td>
</tr>
<tr>
<td></td>
<td></td>
<td>82:139 You know there's a lot of things that I have no control over in my life, but uh in the painting I have a lot of control.</td>
</tr>
</tbody>
</table>

FIGURE 24. Immediate Emotional Outcome – Enjoyment – Participant 88
Exemplars of emotional aspects of immediate outcomes.

Participant 26 felt enjoyment while creating art. “It was a lot of fun uhh. We’re trying, we’re exploring. Uhh and yeah the glasswork was really, really a lot of fun” 26:089.

Participant 82 felt contentment while creating art. “You're just content, that would be the best word content” 82:127.

Participant 64 felt freedom while creating art. “I’m very free when I do it. Umm, I, I listen to music and I sing and I dance and I you know my studio is almost always a creative mess but because there's always several things going on at once and I, I do, I play. I play” 64:183.

Participant 27 felt control while creating art. “It [art] just brought a lot of things that I didn't know I was capable of together and it opened new doors. And that's so important because when you have cancer it begins, you begin to feel like it controls you and having that one little opening helps so much” 27:564.

The effect of art experience on emotional aspects of immediate outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the emotional aspects of immediate outcomes in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 50).

TABLE 50. Art Experience and Immediate Emotional Outcomes

<table>
<thead>
<tr>
<th>Art Experience</th>
<th>Enjoyment</th>
<th>Contentment</th>
<th>Freedom</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=6; 100%</td>
<td>n=5; 83%</td>
<td>n=1; 16%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=6; 100%</td>
<td>n=4; 66%</td>
<td>n=1; 16%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=8; 100%</td>
<td>n=7; 88%</td>
<td>n=3; 38%</td>
<td>n=3; 38%</td>
</tr>
</tbody>
</table>

One hundred percent of participants regardless of art experience experienced enjoyment. Participants with all levels of art experience also felt contentment (66-88%). Experiences of freedom and control did not seem to be related to art experience (16-38%).
**Exemplars of the effect of art experience on emotional aspects of immediate outcomes.**

Participant 27 was an art beginner. She felt enjoyment while creating art. “It’s fun. I, I enjoyed it” 27:580. She felt contentment while creating art. “It brought a calm to me, a more of an emotional umm acceptance; that's a good word I felt acceptance as I painted” 27: 280.

Participant 82 was art discontinuous. He felt enjoyment and contentment while creating art. “It’s the, the whole idea of you're doing something you really, really like and it soothes you” 82:083.

Participant 64 was art continuous. She felt enjoyment while creating art. “Hope and happiness and again that word play because of all the bright colors umm my work is very playful. Umm I tend to work a lot shape and form and there's just something about balancing line and shape that umm that I find playful and it’s fun” 64:223. She felt contentment while creating art. “It [creating art] makes me feel, there's just something about it that comforts me” 64:071.

**The relationship of color and emotional aspects of immediate outcomes.** During the initial analysis, an additional question surfaced: Is there a relationship between component: color and emotional aspects of immediate outcomes for people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 51).

**TABLE 51. Color and Emotional Aspects of Immediate Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Enjoyment</th>
<th>Contentment</th>
<th>Freedom</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color: Create meaning (n=10)</td>
<td>n=10; 100%</td>
<td>n=7; 70%</td>
<td>n=2; 20%</td>
<td>n=2; 20%</td>
</tr>
<tr>
<td>Color Elicit Emotion (n=8)</td>
<td>n=8; 100%</td>
<td>n=7; 88%</td>
<td>n=1; 13%</td>
<td>n=2; 25%</td>
</tr>
<tr>
<td>Color Enjoyment (n=11)</td>
<td>n=11; 100%</td>
<td>n=9; 82%</td>
<td>n=1; 1%</td>
<td>n=3; 27%</td>
</tr>
</tbody>
</table>

A relationship existed between all of the aspects of color and enjoyment and contentment (70-100%). The aspects of color did not seem to be related to the emotional aspects of freedom and control (1-27%).
Exemplar of the relationship of color and emotional aspects of immediate outcomes.

Participant 42 used color for enjoyment. “Those colors umm the purples the blues and the, that kind of sagey green flowing together uh there's something about that color tone that I can't get myself away from (laughter)” 42:252. She used color to elicit emotion. “I love the way it looks, and it makes me feel good when I use it” 42:256. Her use of colors elicited positive emotions. “I have specific colors that I work with that make me feel better” 42:248. Watching the colors change as she worked with glass was calming to Participant 42. “There's this kind of mesmerizing umm almost to me I, I don't think I've ever been hypnotized, but that's kind of what it feels like. Like your being sucked out of yourself into some other place, you know realm, I don't know how to explain that, umm it's peaceful” 42:164.

Physical Aspects of Immediate Outcomes

The physical aspects of immediate outcomes of creating art as a healing intervention are defined as the bodily sensations that the participant experienced during the time they were actively creating art. Two specific components of immediate physical outcomes were identified from the interview data using content analysis and included: rest and forget pain (Table 52).

<table>
<thead>
<tr>
<th>TABLE 52. Physical Aspects of Immediate Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rest</strong></td>
</tr>
<tr>
<td><strong>Forget pain</strong></td>
</tr>
</tbody>
</table>
Exemplars of physical aspects of immediate outcomes.

Participant 28 found that creating art helped her relax. “It helps me relax” 28:071. She felt relief from pain during the time she created art, “It's kind of like taking a pain pill for eight hours (laughter)” 28:123.

Participant 42 experienced physical relaxation while creating art. “I get some down time where my brain is working but my body is resting” 42:116. She felt relief from her pain during the time she created art. “So part of my residual chronic fatigue one of my issues is a umm fibromyalgia so I hurt most of the time, and when I do my torch work and I go into that other level I don't feel any of that hurt” 42:84.

The effect of diagnosis on physical aspects of immediate outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the physical aspects of immediate outcomes by participants with different diagnoses who use art as a healing intervention? A third order data matrix was developed to address this question (Table 53).

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Rest</th>
<th>Forget Pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n=2; 29%</td>
<td>n=1; 14%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n=3; 75%</td>
<td>n=4; 100%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n=4; 44%</td>
<td>n=4; 44%</td>
</tr>
</tbody>
</table>

Fibromyalgia was related to the immediate physical outcomes of rest (75%) and forget pain (100%). Cancer and other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) did not seem to be related to rest or forget pain (14-44%).

Exemplar of the effect of diagnosis on physical aspects of immediate outcomes.

Participant 15 had fibromyalgia. She experienced relaxation while creating art. “I just found it relaxing and therapeutic” 15:71. She forgot her pain while creating art. “While I'm doing it [creating art] I forget get my pain umm and so my pain level goes down” 15:167.
Participant 92 had fibromyalgia. She forgot her pain while creating art, “If I don't feel good, another thing that painting does for me is it's a distraction. Especially if I'm not feeling good or you know there's a lot of pain. When I'm painting it just takes my mind to another place so I don't have to focus on the pain as much” 92:187.

**The relationship between mental and physical aspects of immediate outcomes.** During the initial analysis, an additional question surfaced: Is there a relationship between the mental and emotional aspects of immediate outcomes in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 54).

<table>
<thead>
<tr>
<th>TABLE 54. Immediate Mental Outcomes and Immediate Physical Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expression</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Rest (n=9)</td>
</tr>
<tr>
<td>Forget Pain (n=9)</td>
</tr>
</tbody>
</table>

The immediate physical outcome of rest appears to be related to the immediate mental outcomes of expression (78%), interest (67%) and present in the moment (67%). The immediate physical outcome of forget pain appears to be related to the immediate mental outcomes of expression (78%), interest (67%) and present in the moment (89%).

**Exemplar of the relationship between mental and physical aspects of immediate outcomes.** Participant 28 expressed herself through her art. “You work it out in the canvas” 28:187. She found that creating art interested her and took so much of her thought that she wasn’t able to think about her pain. “When I'm in the moment of painting your mind is not on your pain it's in, it's on what you're doing” 28:119. She used her focus on art and her immersion in the moment to forget about her body sensations, “It's kind of like putting your body on a shelf and just using your mind to go where you want to go” 28:315. Creating art helped her relax, “It helps me relax” 28:071. While she was relaxed and her mind was occupied with creating art she
was able to forget her pain. She stated that creating art was medication for pain, “the best way I could say that it is pain medication if you don't feel the pain it's not, it's not in the front of your mind it's like pushed all the way in the back” 28:231.

**Social Aspects of Immediate Outcomes**

The social immediate outcomes of creating art as a healing intervention are defined as the interactions with others that the participant experienced during the time they were actively creating art. Two specific components of immediate social outcomes were identified from the interview data using content analysis and included: illness based socialization and non-illness based socialization (Table 55).

**TABLE 55. Social Aspects of Immediate Outcomes**

<table>
<thead>
<tr>
<th>Illness Based Socialization</th>
<th>Definition: creating art is an opportunity for socialization with others with a similar illness</th>
<th>27:480 I think that helped umm the comfort zone because you weren't with people that didn't understand what you were going through</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>78:285 I'm being around the people [during the day of art] socializing with them, being able to be just yourself no matter what kind of scars you have or how you look or anything like that you can just be you.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Illness Based Socialization</th>
<th>Definition: creating art is an opportunity for socialization with others not based on the illness experience.</th>
<th>72:297 I mean I paint purposely on Saturday morning with a group of women, and I also paint on Tuesday afternoon at a club a local club here.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>88:375 I do meet up groups and I had a couple of, one of my art groups and I invited one of my other to do a concurrent meet up together… a couple of artists came and they were very creative and they made outlines of whimsical you know fantasy figures of animals and things.</td>
</tr>
</tbody>
</table>

**Exemplars of social aspects of immediate outcomes.**

Participant 26 socialized with people with a similar illness while he created art. “It's just getting, getting involved with other people with just in similar situations” 26:053.
Participant 64 socialized with people who did not have a similar illness while she created art “I have umm a few girlfriends family try to get together… We get together and we'll dye silk scarves together or paint silk scarves” 64:207.

**The effect of diagnosis on social aspects of immediate outcomes.** During the initial analysis, an additional question surfaced: Did participants with different diagnoses experience different aspects of social immediate outcomes? A third order data matrix was developed to address this question (Table 56).

### TABLE 56. Diagnosis and Immediate Social Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Illness Based Socialization</th>
<th>Non-Illness Based Socialization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer (n=7)</td>
<td>n= 7; 100%</td>
<td>n=3; 43%</td>
</tr>
<tr>
<td>Fibromyalgia (n=4)</td>
<td>n= 0; 0%</td>
<td>n=3; 75%</td>
</tr>
<tr>
<td>Other (n=9)</td>
<td>n= 0; 0%</td>
<td>n=6; 66%</td>
</tr>
</tbody>
</table>

Participants with cancer experienced illness based socialization (86%). Participants with fibromyalgia and other illnesses (e.g., multiple sclerosis, rheumatoid arthritis, cardiac disease, autoimmune disease) experienced non-illness based socialization (66-75%).

**Exemplars of the effect of diagnosis on social aspects of immediate outcomes.** Participant 60 had cancer. For participant 60 socializing with others with cancer was an important part of creating art. “I find it enjoyable and I certainly enjoy the people. Umm sometimes that's the only chance you have to see some of the umm individuals uh you don't see them at umm any of the other events or anything” 60:131.

Participant 42 had fibromyalgia. She socialized while creating art with other artists who did not share her illness experience. “Umm I collaborate with several other artists in making pieces together and that umm exchange of creative ideas is not something you can do with everybody” 42:396.
Participant 99 had rheumatoid Arthritis and colitis. She socialized while creating art with other artists who did not share her illness experience. “I just started collaborating with another artist… he does kinetic steel sculptures and (clears throat) and I'm doing, I'm doing the glass that's mounted on the kinetic steel sculpture” 99:169.

**Spiritual Aspects of Immediate Outcomes**

The spiritual aspects of immediate outcomes of creating art as a healing intervention are defined as sacred experiences that the participant had during the time they were actively creating art. Three specific components of spiritual outcomes were identified from the interview data using content analysis and included: connection to nature, connection to beauty and connection to higher being (Table 57).

**TABLE 57. Immediate Outcome – Spiritual**

<table>
<thead>
<tr>
<th>Connection to nature</th>
<th>Definition: a deep affinity for the environment while creating art</th>
<th>32:357 I'm careful who I buy my stones from. I want them to love those stones. I don't want something ripped out of the earth without any concern.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>99:313 I made these mono prints using leaves and powdered glass and I'll take the, the umm leaves from the trees and all that and I want to do the bark umm, here let's see. I call them fossils umm.</td>
<td></td>
</tr>
<tr>
<td>Connection to beauty</td>
<td>Definition: a sacred feeling when creating something aesthetically pleasing.</td>
<td>33: 227 There’s something about being involved with umm, creating uhh, something uhh, beautiful. That uhh, uhh, makes me feel, uhh, feel good. You know I can point to a place in my chest where you know I, I just get a, you know, a feeling of uhh, uhh, wonder when I do that</td>
</tr>
<tr>
<td></td>
<td>54:323 It is a different kind of beauty than a photograph of a beautiful mountain it's, it's something deep</td>
<td></td>
</tr>
<tr>
<td>Connection to a higher being</td>
<td>Definition: a feeling of reverence for the divine while creating art</td>
<td>54:151 for me anyway painting is umm spirit comes through me and my hands are vehicle to put it out and then the paint is a vehicle</td>
</tr>
<tr>
<td></td>
<td>92:279 I always think of God as the creator and an artist. And when I'm creating I feel like I'm really close to God because I'm, I’m a creator of sorts.</td>
<td></td>
</tr>
</tbody>
</table>
Exemplars of immediate spiritual outcomes.

Participant 15 felt connected to nature and a higher being when she created art. “I have a strong relationship with God and so for me nature is a reflection of what God is doing in nature and with me” 15:111.

Participant 99 felt a connection to beauty while she created art. “Just making things that are beautiful; I actually had somebody had a show one time look at a piece of, of my jewelry and asked me if it had any meaning and I said no it’s just beautiful. I mean you know I, to me if I'm always in pain or I'm always feeling umm it I, I think working on something beautiful is freeing” 99:221.

Participant 54 felt connected to nature while she created art. “I think I knew how connected I'd be to the land here when we came here and said oh we have to live here… I'm feeling the, the rocks and the spaciousness. I feel the ocean, I feel everything underneath and above all the layers of where we walk on the ground now at this point” 54:427. She felt connected to something greater than herself as she created art. “my idea when I go into painting is to paint the spirit of my subject whether it be a person or even if it's an abstract it's spirit and even when it’s an abstract when it's good spirit it's very healing” 54:187.

The effect of art experience on spiritual aspects of immediate outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the spiritual aspects of immediate outcomes in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 58).

<table>
<thead>
<tr>
<th></th>
<th>Connection to Nature</th>
<th>Connection to Beauty</th>
<th>Connection to Higher Being</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=2; 33%</td>
<td>n=2; 33%</td>
<td>n=0; 0%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=3; 50%</td>
<td>n=3; 50%</td>
<td>n=3; 50%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=4; 50%</td>
<td>n=2; 25%</td>
<td>n=4; 50%</td>
</tr>
</tbody>
</table>
Art beginners did not seem to experience the immediate spiritual outcomes of creating art (0-33%). Art discontinuous participants experienced connection to nature (50%), connection to beauty (50%) and connection to higher being (50%). Art continuous participants experienced connection to nature (50%) and connection to higher being (50%).

*Exemplars of art experience and spiritual aspects of immediate outcomes.* Participant 32 was art discontinuous. She created art using stones. She used art to give a face to a stone to be used for healing. “The energy’s from the stones. It's not from the face.” She felt connected to the stones and to the earth from which they came. “I'm careful who I buy my stones from. I want them to love those stones. I don't want something ripped out of the earth without any concern” 32:357. Creating healing stones was an act that connected participant 32 with a higher being. She felt that she was commissioned to create art and that through art she connected with the spirit. “My theory is that we put energy into things when we are creating. But we also receive energy from everything on earth. Uh I think God is everything so that means even in the smallest stone” 32:273 (Figure 25).

![Figure 25. Immediate Spiritual Outcome – Participant 32](image-url)
Participant 92 had a continuous level art experience. She felt a deep connection to nature and a higher being as she created. “When I'm creating I feel like I'm really close to God because I'm, I'm a creator of sorts. I'm using materials that he created you know paints are made from minerals and things from the earth so I'm taking things from the earth and somehow man figured out how to use it and turn around when I do scenery is especially I'm taking something he made, a mountain or a tree or color, I mean he created color. So to me it's, it's just pure joy. I feel like I'm bringing something good into the world and there's a lot of darkness in this world and if I can bring a little light into the world that feels really good” 92:279.

**Summary**

Immediate outcomes of creating art included mental, emotional, physical, social and spiritual aspects.

Mental aspects of immediate outcomes included: expression, interest and present in the moment. Participants of all levels of experience experienced expression, interest and present in the moment. A relationship existed between all of the aspects of material manipulation and all of the mental aspects of immediate outcomes.

Emotional aspects of immediate outcomes included: enjoyment, contentment and freedom. Participants regardless of art experience experienced enjoyment and contentment. A relationship existed between all of the aspects of color and enjoyment and contentment.

Physical aspects of immediate outcomes included rest and forget pain. Fibromyalgia was related to the immediate physical outcomes of rest and forget pain. Cancer and other illnesses did not seem to be related to rest or forget pain. The immediate physical outcomes of rest and forget pain seem to be related to the immediate mental outcomes of expression, interest and present in the moment.
Social aspects of immediate outcomes included illness based socialization and non-illness based socialization. Participants with cancer experienced illness based socialization. Participants with fibromyalgia and other illnesses experienced non-illness based socialization.

Spiritual aspects of immediate outcomes included: connection to nature, connection to beauty and connection to higher being. Art beginners did not seem to experience the immediate spiritual outcomes of creating art. Art discontinuous participants experienced connection to nature, connection to beauty and connection to higher being. Art continuous participants experienced connection to nature and connection to higher being.

Data identifies possible immediate outcomes of creating art. Data will help focus intervention planning by guiding the practitioner to target populations for whom the immediate outcomes address their illness experience. Data will also guide program evaluation through identifying appropriate outcomes for measurement. Data may also guide research and theory development.

**Intermediate Outcomes**

The seventh research question was: What are the intermediate outcomes of creating art as a healing intervention? Data will help to identify possible intermediate outcomes from the use of art as a healing intervention in people with chronic illness. Data will assist practitioners to target appropriate populations for art as a healing intervention as well as guide intervention evaluation. Data will help to frame further research and theory development.

The intermediate outcomes of art creation are defined as the aspects of the experience that lasted beyond the time the participants were actively creating art. Components of intermediate outcomes were identified from the interview data using content analysis and included: the piece of art; mental, emotional, and social aspects.
Further content analysis was conducted to identify aspects of the piece of art, mental and social intermediate outcomes. Specific components of the piece of art included: representation of self, representation of values and representation of transformation. Specific components of mental aspects included: process experience and motivation. Specific components of emotional aspects included: enjoyment in viewing own art and pride. Specific components of social aspects included: self-expression and non-illness based interactions.

Figure 26 summarizes the results of this analysis which helps to identify the aspects of the intermediate outcomes of creating art as a healing modality.

FIGURE 26. Intermediate Outcomes
Aspects of the Piece of Art

The piece of art is defined as the created object of visual art. Three specific components of the piece of art were identified from the interview data using content analysis and included: representation of self, representation of values and representation of transformation (Table 59).

TABLE 59. Aspects of the Piece of Art

<table>
<thead>
<tr>
<th>Representation of Self</th>
<th>Definition: art symbolizes important aspects of the art creator’s life</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33:119 You know had found uhh, a, uhh, something, uhh, tangible that that had, that really represented who I was</td>
</tr>
<tr>
<td></td>
<td>99:421-425 I feel pretty lumpy myself you know? … I mean I don't look lumpy, I'm this tall skinny woman you know (laughter) but, but I feel umm rough and hurt and you know… it's kind of interesting with the glass I have a tendency to, to umm leave the surfaces uneven and, and bumpy and textural and not perfect … and I’m very much not perfect</td>
</tr>
</tbody>
</table>

FIGURE 27. Representation of Self – Participant 99
| Representation of Values | Definition: art symbolizes the values of the art creator | 11:179 When you see the leaves that are falling and the, the three leaves say, I think; love, hope, and courage because it does take courage to go through this |

**FIGURE 28. Representation of Values – Participant 11**

88:183 The huge ‘seven deadly sins’ piece, that's a long-term effect that reminds me of my code of ethics
TABLE 59. - Continued

| Representation of Transformation | Definition: art that symbolizes changes in the art creator’s life | Example: 27:152 You look at that and you can actually see what you’ve gone through… That’s why I think this art project means so much to me is because I can look at it at any time and know what steps I went through for my journey |

**FIGURE 29. Representation of Transformation – Participant 27**

64:087 I can see a progression of, of how I'm growing in my art and also a progression of how I'm growing as a person, emotionally and physically. And it just helps me to sort of have sort of a journal of who I am and how my life is going without actually creating a physical journal.

**Exemplars of aspects of the piece of art.**

Participant 28 created art that reminded her of important parts of her life. “A lot of the pictures up on the wall are paintings of marshes that I did. Umm, we lived in Florida for four years and it was like paradise for me but we had to come back here because my mother-in-law was sick and umm, and she did pass away but we will never get to go back to Florida, we can’t...
afford it. And umm, I look at that and, and I'm okay knowing that I have a piece of it here with me” 28:175.

Participant 57 created art that represented the progression of her disease. “I think that was kinda what I was kinda thinking my life had progressed from that point to, to current. It kinda, you know, and I, and when it gets more and more twisted I think it's, to me that the face looks more questioning than pain. I don't know if it looks that way to other people, but it's more like how the hell did that happen?” 57:255.

Participant 78 created art that represented transformation. “I look at these paintings and it reminds me that I am moving on” 78:557.

The effect of art experience on aspects of the piece of art. During the initial analysis, an additional question surfaced: Does art experience affect aspects of the piece of art in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 6).

<table>
<thead>
<tr>
<th></th>
<th>Representation of self</th>
<th>Representation of values</th>
<th>Representation of transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=4; 66%</td>
<td>n=2; 33%</td>
<td>n=4; 66%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=2; 33%</td>
<td>n=1; 16%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=5; 63%</td>
<td>n=3; 38%</td>
<td>n=4; 50%</td>
</tr>
</tbody>
</table>

For art beginners, the piece of art they created was a representation of self and transformation (66%). For art continuous participants the piece of art they created was a representation of self and transformation (50-63%). Discontinuous art experience did not seem to be related to representational aspects of the piece of art (16-33%).

Exemplars of the effect of art experience on aspects of the piece of art. Participant 78 was an art beginner. Her piece of art of art represented herself. “I said the flower is how I felt, torn when I got my confirmation really torn ‘cause you don't know how to react” 78:357. The
paintings she had done were symbols of her transformation process. “They [the paintings] are actually a part of me going through process” 78:493.

Participant 64 was art continuous. Her art represented herself and her life. “I have created three or four pieces of art based on those that are larger umm quilts and then a few others that I've done based on things that I've seen umm when, when we've gone umm snorkeling or we visited, when we traveled” 64:239. She used art to represent transformation. “It's just my way to take something and alter it and turn it into something else… It's just who I am. So in that way yeah I think I'm constantly showing a piece of my life in every piece of art that I do” 64:331-335.

*The relationship between content and aspects of the piece of art.* During the initial analysis, an additional question surfaced: Is there a relationship between the content of the art and the aspects of the piece of art in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 61).

**TABLE 61. Content and Aspects of the Piece of Art**

<table>
<thead>
<tr>
<th></th>
<th>Representation of self</th>
<th>Representation of values</th>
<th>Representation of transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illness Based Content (n=7)</td>
<td>n=5; 71%</td>
<td>n=2; 29%</td>
<td>n=5; 71%</td>
</tr>
<tr>
<td>Non-Illness Based Content (n=13)</td>
<td>n=6; 46%</td>
<td>n=4; 31%</td>
<td>n=4; 31%</td>
</tr>
</tbody>
</table>

Illness based content was related to the piece of art as a representation of self (71%) and representation of transformation (71%) but did not seem to be related to the piece of art as a representation of values (29%). Non-illness based content did not seem to be related to representation of self, representation of values or representation of transformation (31–46%).

Exemplar of the relationship between content and aspects of the piece of art. Participant 11 created illness based art. Her art represented: self, values and transformation through illness. “It represents my outlook on life that I do think that the skies are blue and I do think that the flowers are beautiful and smell good and that the angels are looking out for me and, and I do
have hope and courage and faith and the love of all my family. I really do, without that, that, that flower would be wilted so I guess maybe it is me, maybe it does represent me. Because I felt like that was a strong flower” 11:647.

**Mental Aspects of Intermediate Outcomes**

The mental aspects of intermediate outcomes of art creation are defined as changes to thinking patterns experience by participants that persisted beyond the time they were actively creating art. Two specific components of mental intermediate outcomes were identified from the interview data using content analysis and included: process experience and motivation (Table 62).

**TABLE 62. Intermediate Outcomes – Mental**

<table>
<thead>
<tr>
<th>Process Experience</th>
<th>Definition: reflecting on the product of art to understand life experience.</th>
<th>26:085 I think the recognition of, of what was going on in my head through, through the painting was, was doing something like that uhh, helped quite a bit too 64:235 I didn't know what it was about until after I created what had been in my mind. And once I created it I understood that, sort of all the things in my life have been building blocks leading me to who and what I am now and that's what this quilt ended up showing. And I don't know that, I think intuitively I knew that, but I don't think I ever realized that my subconscious was telling me that I'd come to this point until I looked at it and I saw the finished piece and I went ‘okay I see that now’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation</td>
<td>Definition: using past creative experience as incentive to overcome present challenges</td>
<td>28:243 That's what, what's on my mind when I am lying there. I have to get to my next painting, I have to get to my next painting. I have to paint. You know and then I'll start thinking about what do I want to paint 54:147 I always wanted to get better so that I could go paint</td>
</tr>
</tbody>
</table>

**Exemplars of mental aspects of intermediate outcomes.**

Participant 33 interacted with his piece of art of art to process his experience. “The interpretation of that uhh, image uhh that uhh, was a real soul-searching exercise uhh, that uhh, made me realize that, you know, that a lot of what I have done in my life was correct, it was a good choice uhh, at the time and uhh uhh it was uhh kind of uhh uhh self-affirming” 33:155.
Participant 42 used the experience of creating art as motivation to think about getting better. “I know if I keep my mind going you know and keep from being depressed about it umm that I will you know get the energy back and then you know I, I kind of look back on it like okay I had all this time bed and I could think about what I want to do when I get out of bed and then when I, when I have energy then I’m ready to go and I'm okay I've got all these things that that I’ve got to go try now” 42:332.

**The effect of art experience on aspects of mental intermediate outcomes.** During the initial analysis, an additional question surfaced: Is there a difference in the mental aspects of intermediate outcomes in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 63).

<table>
<thead>
<tr>
<th>Art Experience Level</th>
<th>Process experience</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=6; 100%</td>
<td>n=1; 16%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=4; 66%</td>
<td>n=2; 33%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=6; 75%</td>
<td>n=4; 50%</td>
</tr>
</tbody>
</table>

One hundred percent of art beginners used art to process experience, but did not seem to use the creation of art as motivation (16%). Art discontinuous participants used art to process experience (66%), but did not seem to use the creation of art as motivation (33%). Art continuous participants used art to process experience (75%) and for motivation (50%).

**Exemplars of the effect of art experience on mental aspects of intermediate outcomes.**

Participant 60 was an art beginner. She used art to process her illness experience. “[The painting represented] the feelings of, of the journey all the way through treatment and so, so that you know that brought some of that back, but it, it helps me see things a little bit differently than I had felt when it was going on. As I was trying to say how do you visualize what this was like? And then I realized some of it was very dark as I was doing; I hadn't realized that before” 60:212.
Participant 99 was art discontinuous. She used art to process her illness experience. “in my mind I feel like I don't fit in and that I'm observing or you know when I have the ideas for these projects umm you know the birds are freedom and freedom from pain and freedom to move so easily and, and umm you know I, I would, I would think that the, the window project is also just you know being more comfortable with the fact that it's okay that I've always been different and that, and that I don't fit in and that I'm watching” 99:257.

Participant 88 was art continuous. She used art to process her life experience. “There is a certain, a certain quality of, of maybe not so much directly healing, but personal awareness and, umm when you become more personally aware of yourself and your life and things I think there is uh, a certain you know if nothing else emotional quality of healing to that” 88:187. She also used art as a motivation to re-engage with life after an illness. “To say well okay I don't feel great but I can get up and I can go do a little bit of something for a while and kind of get back in the mode again” 88:267.

The relationship between aspects of the piece of art and mental intermediate outcomes.

During the initial analysis, an additional question surfaced. Is there a relationship between aspects of the piece of art and mental intermediate outcomes in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 64).

<table>
<thead>
<tr>
<th>TABLE 64. Aspects of the Piece of Art and Mental Intermediate Outcomes</th>
<th>Process experience</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representation of self (n=11)</td>
<td>n=9; 82%</td>
<td>n=5; 45%</td>
</tr>
<tr>
<td>Representation of values (n=6)</td>
<td>n=5; 83%</td>
<td>n=3; 50%</td>
</tr>
<tr>
<td>Representation of transformation (n=9)</td>
<td>n=8; 89%</td>
<td>n=3; 33%</td>
</tr>
</tbody>
</table>

Pieces of art that were a representation of self were related to processing the experience (82%), but did not seem to be related to motivation (45%). Pieces of art that were a representation of values were related to process experience (83%) and motivation (50%). Pieces
of art that were representations of transformation were related to the mental intermediate outcome of process experience (89%), but did not seem to be related to motivation (33%).

*Exemplar of the relationship between aspects of the piece of art and mental intermediate outcomes.* Participant 99 created art that was self-representative. “I'm attached to the, or so interested in the roughness and uh and I like things not be perfect umm because I'm not perfect you know” 99:441. Her art represented what she was capable of and the transformations she had been through. “[Art is] something that's beautiful and permanent and are symbols for what you can do you rather than what you can't do” 99:693. Through interaction with her the piece of arts of art participant 99 was able to process her illness experience. “The window project is also just you know being more comfortable with the fact that it's okay that I've always been different and that, and that I don't fit in and that I'm watching” 99:257. Creating art provided a motivation for her to get out of bed in the morning even if she was not feeling well. “I need to have a reason to get up every morning, and I need to have something to do, and having something to do makes it easier to cope with the difficulties that I have” 99:605.

**Emotional Aspects of Intermediate Outcomes**

The emotional aspects of intermediate outcomes of art creation are defined as feelings experienced by participants about their art experience that lasted beyond the time the participants were actively creating art. Two specific components of emotional intermediate outcomes were identified from the interview data using content analysis and included: enjoyment in viewing own art and pride (Table 65).
TABLE 65. Intermediate Outcomes – Emotional

<table>
<thead>
<tr>
<th>Enjoyment in viewing own art</th>
<th>Definition: pleasure from interaction with one’s own product of art</th>
<th>15:131 I'll look at them afterwards and to make sure that I feel that they’re you know complete and I just enjoy them. Umm they give me pleasure back</th>
<th>27:144 When I finished it, it was like wow. I took a deep breath and I really sat and looked at it and enjoyed it because it was important to me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pride</td>
<td>Definition: a sense of accomplishment</td>
<td>11:331 I am very proud, I don't know why I am so proud of it but I am (Laughter)</td>
<td>19:199 It's very pleasurable to, to look at it when it's done. I'm real proud of myself and I feel good</td>
</tr>
</tbody>
</table>

Exemplars of intermediate emotional outcomes.

Participant 88 enjoyed looking at her art. “And every time I look at this piece it just, it takes me to that feeling of where I, when I looked at it and I was completely finished with it I just felt good all over” 88:171.

Participant 92 is proud of what she has accomplished with her art. “I mean I had all these dreams of being in magazines and I didn't think it would ever happen so I mean I'll still have magazines that I’ll have for the rest of my life. It's really amazing to see myself in a magazine; and for my family to see me in a magazine, and for my friends to see me in a magazine it, it's, it's just kind of amazing” 92:191.

The effect of art experience on emotional aspects of intermediate outcomes. During the initial analysis, an additional question surfaced: Does art experience affect emotional aspects of intermediate outcomes in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 66).

TABLE 66. Art Experience and Intermediate Emotional Outcomes

<table>
<thead>
<tr>
<th>Art Experience</th>
<th>Enjoyment in Viewing own Art</th>
<th>Pride</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=5; 83%</td>
<td>n=6; 100%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=3; 50%</td>
<td>n=3; 50%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=5; 63%</td>
<td>n=3; 38%</td>
</tr>
</tbody>
</table>
Art beginners enjoyed viewing their own art (83%) and felt pride in their piece of art (100%). Participants with discontinuous art experience enjoyed viewing their own art (50%) and felt pride in their piece of art (50%). Art continuous participants enjoyed viewing their own art (63%), but did not seem to feel pride in their piece of art (38%).

Exemplars of the effect of art experience on emotional aspects of intermediate outcomes. Participant 78 was an art beginner. She had the picture of her painting on her phone so she could look at it frequently. “I've got it on my phone on my wallpaper now” 78:493. Creating art made her feel proud. “It just makes you feel good when you do something pretty, you feel like you’ve accomplished something” 78:981.

Participant 22 was art discontinuous. He enjoyed looking at his pieces of art. “I feel good looking at them” 22:219. He was proud of his art work. “When people like that tell me that uh, that they admire my work and they like my style and, and all that stuff it's a real, it's a real morale booster.” 22:139.

Participant 64 was art continuous. She enjoyed looking at her art. “I love to be able to look at my art afterword” 64:087.

Social Aspects of Intermediate Outcomes

The social aspects of intermediate outcomes of art creation are defined as the interactions with others that the participant experienced with an art focus, but not while actively creating art. Two specific components of social intermediate outcomes were identified from the interview data using content analysis and included: self-expression and non-illness based interactions (Table 67).
TABLE 67. Social Aspects of Intermediate Outcomes

| Communication | Definition: art used to express self to others | 27:688 I hope it becomes a conversational piece I think. Even those that aren’t on with me on my journey now could benefit from my picture you know.  
57:383 I can be very uhh, I’m very off the wall, and I’m very, not very subtle. I definitely can say what I think, but sometimes I think when you say that out loud it’s very shocking to people, like oh good God does she really feel that way? And yes I did, but I only felt that way for the moment. I don’t live there you know. And I think art can capture that moment uhh, and not be so threatening |
| Social Activity | Definitions: interactions with others with an art focus, but that do not occur during the creation of art | 15:203 It’s a social circle that isn’t sick. And even though I’m finding out a lot of people in that social circle they have really bad arthritis or they’ve got some other illnesses to, but we’re not there because we have illnesses we are there because we do art  
92: 251 I’m in a the Sonoran Arts league there in Phoenix or up in, it’s up in Cave Creek and Carefree and umm there’s a group of women that we’ve been meeting every Monday morning for years and even though I moved away for two years now I, I’m coming back there and I’ll be going every Monday morning while I’m there. And we just talk about art, sometimes we have show and tell different people bring their art. |

Exemplars of social aspects of intermediate outcomes.

Participant 26 used his art to express himself to others. “Through some sort of art medium I think is, is, is the only way you can really express yourself without verbally expressing yourself” 26:305.

Participant 82 socialized with other artists. “I find myself more attracted to people who are related to some form of art” 82:319.

The effect of art experience on social aspects of intermediate outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the social aspects of intermediate outcomes in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 68).
TABLE 68. Art Experience and Social Aspects of Intermediate Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Communication</th>
<th>Social Activity</th>
<th>Making a Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=4; 66%</td>
<td>n=2; 33%</td>
<td>n=2; 33%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=1; 16%</td>
<td>n=5; 83%</td>
<td>n=3; 50%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=6; 75%</td>
<td>n=6; 75%</td>
<td>n=6; 75%</td>
</tr>
</tbody>
</table>

Art beginners used art as self-expression (66%), but did not seem to use art as a basis for non-illness based interactions (33%). Art discontinuous participants used art as a basis for non-illness based interactions (83%), but did not seem to use art to express themselves to others though art (16%). Art continuous participants used art as self-expression (75%) and as a basis for non-illness based interactions (75%).

*Exemplars of the effect of art experience on social aspects of intermediate outcomes.*

Participant 27 was an art beginner. She used art to express herself to others. “She could tell the way I was feeling. And they, you can't always do that with words because you start to jumble or mumble where pictures are to the point” 27:172.

Participant 82 was art discontinuous. Though he always created art by himself he belonged to art based social groups because he wanted to socialize with other artists rather than others with similar disease processes. “I've got a lot of publications from MS societies and whatnot. And I don't want to be around those sickos (laughter)... Sorry to say it but it’s true, you know because I don't want to hear about your problems. I've got problems of my own and, and I don't want to concentrate on them” 82:323-327.

Participant 54 was art continuous. She used art to express herself. “I think umm especially painting and poetry they’re, they’re very much, they're very similar. They’re different mediums but they have a lot in common” 54:231. She socialized with an art based community. “There is an artist community here that keeps amazing me at how talented everyone is” 54:427.
Summary

The intermediate outcomes of creating art as a healing intervention were the aspects of the art experience that lasted beyond the time of active art creation. The intermediate outcomes of art included the following aspects: the piece of art, mental, emotional and social.

The piece of art included art as a representation of: self, values and transformation. For art beginners, the piece of art they created was a representation of self and transformation. For art continuous participants the piece of art they created was a representation of self and transformation. Discontinuous art experience did not seem to be related to representational aspects of the piece of art. Illness based content was related to the piece of art as a representation of self and representation of transformation. Non-illness based content did not seem to be related to representation of self, representation of values or representation of transformation.

Mental aspects of intermediate outcomes included: process experience and motivation. Art beginners and art discontinuous participants used art to process experience. Art continuous participants used art to process experience and for motivation. Pieces of art that were a representation of self or transformation were related to processing the experience. Pieces of art that were a representation of values were related to process experience and motivation.

Emotional aspects of intermediate outcomes included: enjoyed viewing own art and pride. Art beginners and participants with discontinuous art experience enjoyed viewing their own art and felt pride in their art. Art continuous participants enjoyed viewing their own art.

Social aspects of intermediate outcomes included: self-expression and non-illness based interaction. Art beginners used art as self-expression. Art discontinuous participants used art as a basis for non-illness based interactions, but did not seem to use art to express themselves to
others. Art continuous participants used art as self-expression and as a basis for non-illness based interactions.

Data identifies possible intermediate outcomes of creating art. Data will help focus intervention planning by guiding the practitioner to target populations for whom the intermediate outcomes address areas of their illness experience that could be improved. Data will also guide program evaluation through identifying appropriate outcomes for measurement. Data may also guide research and theory development.

**Ultimate Outcomes**

The eighth research question is: What are the ultimate outcomes of creating art as a healing intervention? Data will help to identify possible ultimate outcomes from the use of art as a healing intervention in people with chronic illness. Data will assist practitioners to target appropriate populations for art as a healing intervention as well as guide intervention evaluation. Data will help to frame further research and theory development.

The ultimate outcomes of creating art are defined as the outcomes that were enduring changes in the participants. Components of ultimate outcomes were identified from the interview data using content analysis and included: mental, emotional, social and spiritual aspects.

Further content analysis was conducted to identify aspects of the mental, emotional, social and spiritual ultimate outcomes. Specific components of mental aspects included: non-illness focus, positive self-perception and positive situation perception. Specific components of emotional aspects included: appreciation and enjoy life. The specific component of social aspect was altruism. Specific components of spiritual aspects included: finding meaning and coping with mortality.
Figure 30 summarizes the results of this analysis which helps to identify the aspects of the intermediate outcomes of creating art as a healing modality.

**Mental Aspects of Ultimate Outcomes**

The mental aspects of the ultimate outcomes of creating art are the outcomes that were enduring changes in the way the participants thought about their life. Four specific components of ultimate mental outcomes were identified from the interview data using content analysis and included: non-illness focus, positive self-perception and positive situation perception (Table 69).
TABLE 69. Mental Aspects of Ultimate Outcomes

<table>
<thead>
<tr>
<th>Mental Aspect</th>
<th>Definition</th>
<th>Quote</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-Illness Focus</strong></td>
<td>Definition: emphasis on non-disease aspects of life</td>
<td>22:111 I decided I didn't want to spend my life umm immersed in uh my disease. And so art has been sort of a natural path away from that. 64:287 I'm not focused on what's wrong in my life. I focus on what's right.</td>
</tr>
<tr>
<td><strong>Positive Self-Perception</strong></td>
<td>Definition: self-assessment as worthwhile person</td>
<td>22:255 I feel like when I'm being an artist I'm really doing what I'm supposed to do. 54:263 You're thinking of yourself as producing something and adding something to society. Umm when you sell work you think that too because you're part of the economy rather than a drain on the economy.” – Participant 54.</td>
</tr>
<tr>
<td><strong>Positive Situation Perception</strong></td>
<td>Definition: self-assessment of a high-quality life</td>
<td>32:425 I've got a pretty good life; I don't have a lot of things that are bad. 33:155 I looked at uhh, the choices that I had made during my life and had come to the realization that I've made some pretty good choices umm, that I wasn't regretting uhh who I was or what I'd become but uhh, uhh, on the other hand uhh, uhh, as I went forward I uhh, might want to make, you know uhh, some adjustments but umm, uhh, you know, I wasn't going to throw out that part of my life.</td>
</tr>
</tbody>
</table>

Exemplars of mental aspects of ultimate outcomes.

Participant 54 focused on what was right in her life rather than on her illness. “I don't feel like there's no boundaries. I pay attention to, I had a heart attack a few years ago, well more than that already so it's, the elevation here is high you know I know I'm not, probably not gonna climb a mountain, but if I was a mountain climber and I, but I'm, but I’m a painter so in that way I feel that I can expand myself quite a bit uh it's, it's happening without really trying to. So that's what I talk about, right I talk about mostly the positives in my life” 54:439.

Participant 64 has a positive self-perception since she is an active participant in her own life. “When I'm not feeling well I sort of feel like I'm not contributing to my own life. But when I can create something I feel like I've contributed” 64:079.

Though participant 82 had experienced a deterioration of his health he thought he was doing well. “I'm doing a lot better than most actually” 82:055
The effects of art experience and mental aspects of ultimate outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the mental aspects of ultimate outcomes in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 70).

TABLE 70. Art Experience Level and Ultimate Mental Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Positive Self-Perception</th>
<th>Positive Situation Perception</th>
<th>Non-Illness Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=2; 33%</td>
<td>n=5; 83%</td>
<td>n=2; 33%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=6; 100%</td>
<td>n=4; 66%</td>
<td>n=5; 83%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=6; 75%</td>
<td>n=8; 100%</td>
<td>n=5; 63%</td>
</tr>
</tbody>
</table>

Art beginners experienced positive situation perception (83%) however; art beginners did not seem to experience positive self-perception or non-illness focus after creating art. Art discontinuous and art continuous participants experienced positive situation perception, positive situation perception and non-illness focus after creating art (63-100%).

Exemplars of the effects of art experience and mental aspects of ultimate outcomes.

Participant 78 was an art beginner. She found that creating art assisted her to have a positive situation perception. “Things are going, the older you get the worse things get health wise so you have to kind of try and look at it with a positive you know mind so yeah the pictures kind of help me” 78:651.

Participant 32 was art discontinuous. She had a positive self-perception because she saw herself as someone who was always growing. “You’re expanding, expanding you’re consciousness when you're creating” 32:297. For participant 32 creating art was a divine assignment and therefore what she was doing was worthwhile and her situation was positive. “I feel blessed to have had this assignment because I, I, I'm now in a lot of art shows and that’s how I make the money to be able to give them away every place (laughter)” 32:321.
Participant 54 was art continuous. She did not identify with her illness “at a certain point I don't know if I want to keep defining myself at all” 54:439. “You're not thinking about yourself as being sick or ill” 54:263. Her life was focused on her painting rather than her illness and she defined her situation and self through her painting rather than her illness. “I think painting all those years and having a somewhat successful career has really, I, I have to say that because I don't know if I hadn't how I would feel about myself as a painter you know” 54:455.

**Mental Aspects of Intermediate and Ultimate Outcomes**

During the initial analysis, an additional question surfaced: Is there a relationship between the mental aspects of intermediate and ultimate outcomes in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 71).

<table>
<thead>
<tr>
<th>TABLE 71. Intermediate Mental Outcomes and Ultimate Mental Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process experience (n=16)</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>n=11; 69%</td>
</tr>
<tr>
<td>Motivation (n=7)</td>
</tr>
</tbody>
</table>

The intermediate mental outcome process experience was related to positive self-perception (69%), positive situation perception (81%) and non-illness focus (56%). The intermediate mental outcome motivation was related to positive self-perception (71%), positive situation perception (100%) and non-illness focus (57%).

**Exemplar of the mental aspects of intermediate and ultimate outcomes.**

Participant 88 used art to process her experience. “As the process is unfolding I'm looking at it going over this is interesting” 88:147. Art was also a motivation for her. “To say well okay I don't feel great but I can get up and I can go do a little bit of something for a while and kind of get back in the mode again” 88:267. She saw herself as an interesting person,
growing and living an interesting non-illness focused life. “I learn new things and expand my, my consciousness of the world and cultures and people in it that I'm, may not be directly healing but it's certainly umm, expanding who I am and, and how I think and feel about things” 88:187.

The relationship between pride and mental aspects of ultimate outcomes. During the initial analysis, an additional question surfaced: Is there a relationship between the experience of pride and aspects of mental ultimate outcomes in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 72).

TABLE 72. Pride and Ultimate Mental Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Positive Self-Perception</th>
<th>Positive Situation Perception</th>
<th>Non-Illness Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pride (n=12)</td>
<td>n=8; 75%</td>
<td>n=10; 83%</td>
<td>n=7; 58%</td>
</tr>
</tbody>
</table>

Pride was related to positive self-perception (75%), positive situation perception (83%) and non-illness focus (58%).

Exemplar of relationship between pride and mental aspects of ultimate outcomes.

Participant 22 was proud of the art he created. I've gotten some awards umm, I work with professional artists who I have a lot of respect for who umm admire what I do” 22:123. He had a positive self-assessment and saw his illness as just a part of his life, not the focus of his life. He thought he had a good art focused life. “I related to MS as, as a uh, uh as an, as an inconvenience umm rather than as something that was, that was robbing me of, of, of really important activities. And umm and I just, I was just so focused on my art” 22:111.

Emotional Aspects of Ultimate Outcomes

The emotional aspects of the ultimate outcomes of creating art are defined as enduring changes to the disposition of the participant. Two specific components of ultimate emotional
outcomes were identified from the interview data using content analysis and included:

appreciation and enjoy life (Table 73).

TABLE 73. Emotional Aspects of Ultimate Outcomes

<table>
<thead>
<tr>
<th>Appreciation</th>
<th>Definition: ongoing feeling of gratitude</th>
<th>15:167 Through this process of art I realized that I'd given up so much of my art that this is really a gift. I'm able to, through this illness to focus on art and do something else with my life, and do other things 32:429 I think I'm very lucky to even still be here</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enjoyment</td>
<td>Definition: ongoing pleasure in everyday events</td>
<td>88:387 To me having fun is our birthright 99:309 You can go out and, and, and walk and you're transported away from yourself and, and into enjoying the surroundings, the surroundings around you</td>
</tr>
</tbody>
</table>

Exemplars of ultimate emotional outcomes.

Participant 15 cultivated an attitude of gratitude. “I just look for ways to be thankful and I have a more positive outlook” 15:355.

Participant 42 concentrated of finding ways to be joyful. “I'm not putting up with umm negative umm things that are not joyful to me anymore” 42:416.

The effect of art experience on emotional aspects of ultimate outcomes. During the initial analysis, an additional question surfaced: Does art experience affect spiritual aspects of ultimate outcomes in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 74).

TABLE 74. Art Experience and Emotional Aspects of Ultimate Outcomes

<table>
<thead>
<tr>
<th></th>
<th>Appreciation</th>
<th>Enjoyment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner (n=6)</td>
<td>n=2; 33%</td>
<td>n=2; 33%</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
<td>n=2; 33%</td>
<td>n=4; 66%</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
<td>n=5; 63%</td>
<td>n=2; 25%</td>
</tr>
</tbody>
</table>

Art beginners did not seem to experience emotional aspects of ultimate outcomes (33%). Art discontinuous participants experienced enjoyment (66%). Art continuous participants experienced appreciation (63%).
Exemplars of the effect of art experience on emotional aspects of ultimate outcomes.

Participant 42 was art discontinuous. She used art to foster an ongoing attitude of joy. “That's important to me to be able to share the feel-good part of life and I mean everybody's got tragedies and you know we all have our own cross to bear in some form or another and if you can hang onto those little joyful happy moments umm I think you're all better off for it” 42:364.

Participant 64 was art continuous. She appreciated what she was able to do in her life and with art. “I try to keep those moments and to savor them because for so long they didn't exist in my life” 64:251.

Social Aspects of Ultimate Outcomes

The social aspects of the ultimate outcomes of creating art are the outcomes that were enduring changes in the way participants interacted with others. One specific component of the ultimate social outcomes was identified from the interview data using content analysis and included altruism (Table 75).

| **Altruism** | Definition: art for the benefit of others | 42:352 We just collected 6,100 beads on last Saturday to donate to beads of courage
72:084 I come just to assist, help people who never painted before you know, talk to them see if I can get them to get them, them started on a painting. So I do help people to express themselves, in, in their cancer world |

Exemplar of social aspects of ultimate outcomes.

Participant 92 used her art to make a difference. “When I'm teaching, if I'm painting and thinking somebody might buy it and it brings somebody else pleasure it, it I feel like I'm giving something that helps someone else” 92:279.

Participant 54 created art with the intent of helping others. “It's something deep for them that they don't have to know about or think about but it’s a part of them that can enter into their
world without them even being conscious about it but that's good that there's that bridge between what I can do as a painter and what they can have in their life” 54:323.

**The relationship between mental and social ultimate outcomes.** During the initial analysis, an additional question surfaced: Is there a relationship between the mental and social ultimate outcomes in people who use art as a healing intervention? A third order data matrix was developed to address this question (Table 76).

<table>
<thead>
<tr>
<th>Altruism (n=11)</th>
<th>Positive Self-Perception</th>
<th>Positive Situation Perception</th>
<th>Non-Illness Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=8; 66%</td>
<td>n=9; 75%</td>
<td>n=7; 58%</td>
<td></td>
</tr>
</tbody>
</table>

Altruism was related to positive self-perception (66%), positive situation perception (75%) and non-illness focus (58%).

**Exemplars of the relationship between mental and social ultimate outcomes.** Participant 42 had a positive self-perception and focused her life on what she could do with her art. “There's accolades; people coming by for two and three days at a time and crowding around your booth and going oh my gosh this is so gorgeous you know and you’re thinking well oh I wasn't wasting my time (laughter)” 42:172. Though she continued to have symptoms of her disease she didn’t focus on her illness. “You know the last eight years you know aside of it being you know 20 years older I, I kind of consider myself not to ill anymore”42:060. Participant 42 used art in an altruistic way. “Making angry bird beads for beads of courage. I think that's pretty appropriate and every kid knows what angry birds are (laughter)…Every day I'd sit down and I’d make the little you know there's the black one there's the yellow one there's a blue one I, every day I would make a set and then I would start off on my beads and it made me feel good to know today I was
doing a set of those and each one of those little beads was gonna make some little kid happy somewhere” 42:372-376.

The effect of art experience and social aspects of ultimate outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the social aspects of ultimate outcomes in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 77).

<table>
<thead>
<tr>
<th>TABLE 77. Art Experience and Social Aspects of Ultimate Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Altruism</strong></td>
</tr>
<tr>
<td>Beginner (n=6)</td>
</tr>
<tr>
<td>Discontinuous (n=6)</td>
</tr>
<tr>
<td>Continuous (n=8)</td>
</tr>
</tbody>
</table>

Art beginners did not seem to create art for altruism (33%). Art discontinuous and art continuous participants created art for altruism (50-75%).

Exemplars of the effect of art experience and social aspects of ultimate outcomes. Participant 32 was art discontinuous. She made her art with the intent of easing other’s suffering. “Her daughter called me and she had heard about my stones and would I make a beautiful angel for her mother. And I said you know ‘these don't do anything, they're just stones with faces on them’. And she said ‘I understand that’, but she said ‘could you make me a beautiful angel?’ And I said ‘I will do my best. I, I'll do it’. And umm I knew they didn't have much money and she said ‘how much will it be?’ And I said ‘well this is going to be a gift’ and I made this umm this stone and I sent it out to her” 32:049.

Participant 57 was art continuous. She used art for altruism. “I have used it to help other people heal. I, I do the same imaging for people” 57:459.
Spiritual Aspects of Ultimate Outcomes

The spiritual aspects of the ultimate outcomes of creating art are defined as existential changes in the participants. Two specific components of ultimate spiritual outcomes were identified from the interview data using content analysis and included: making meaning and coping with mortality (Table 78).

TABLE 78. Spiritual Aspects of Ultimate Outcomes

<table>
<thead>
<tr>
<th>Making Meaning</th>
<th>Definition: attributing significance to the events of one’s life</th>
<th>54:263 [making art] gives you meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>92:335 if it wasn't for God in my life, none of this would be happening. He gave me the gift of being able to go and paint and I'm just using it. I'm just using the gift God gave me. I didn't create this gift, I'm just using it</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coping with Mortality</th>
<th>Definition: continued engagement in life despite a realization that one will die</th>
<th>26:201 I know that there's going to come a time when uhh, when my umm quality-of-life is gonna change again and I guess I'm trying to do everything I can before that happens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>72:208 I'm trying not to live like the next shoe is gonna fall and who knows what it's gonna be</td>
<td></td>
</tr>
</tbody>
</table>

Exemplars of spiritual aspects of ultimate outcomes.

Participant 28 describes her illness as an opportunity to create art. She finds it meaningful that she now has the opportunity to enjoy her gift. “Since I’ve been sick that's when I really have been able to really enjoy my gift” 28:163.

After creating art participant 33 decided to continue to engage in activities he enjoyed, even though his life time was limited. “If learning uhh, really worthwhile then and I'm only going a live three years doesn't really do me any good to fill my brain with you know uhh, anything new? And I uhh, I came to the conclusion that yes, you know, learn, that I love learning” 33:207.

The effect of art experience on ultimate spiritual outcomes. During the initial analysis, an additional question surfaced: Is there a difference in the spiritual aspects of ultimate outcomes
in participants with different art experience who use art as a healing intervention? A third order data matrix was developed to address this question (Table 79).

**TABLE 79. Art Experience and Spiritual Aspects of Ultimate Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Making Meaning</th>
<th>Coping with Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Beginner (n=6)</td>
<td>n=1; 16%</td>
<td>n=3; 50%</td>
</tr>
<tr>
<td>Art Discontinuous (n=6)</td>
<td>n=2; 33%</td>
<td>n=0; 0%</td>
</tr>
<tr>
<td>Art Continuous (n=8)</td>
<td>n=3; 38%</td>
<td>n=1; 13%</td>
</tr>
</tbody>
</table>

Art beginners experienced the ultimate outcome of coping with mortality (50%). Art discontinuous and art continuous participants did not seem to experience spiritual ultimate outcomes (0-38%).

*Exemplars of the effect of art experience on ultimate spiritual outcomes.* Participant 27 was an art beginner. She found that making art about her illness was part of coping with her mortality. “I've embraced my cancer and I don't fight it and that one moment in time it, it changed my whole life. It changed who I am today” 27:292.

*The relationship between immediate and ultimate spiritual outcomes.* During the initial analysis, an additional question surfaced: Is there a relationship between immediate and ultimate spiritual outcomes in participants who use art as a healing intervention? A third order data matrix was developed to address this question (Table 80).

**TABLE 80. Relationship Between Immediate and Ultimate Spiritual Outcomes**

<table>
<thead>
<tr>
<th></th>
<th>Making Meaning</th>
<th>Coping with Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection to Nature (n=9)</td>
<td>n=4; 44%</td>
<td>n=1; 11%</td>
</tr>
<tr>
<td>Connection to Beauty (n=7)</td>
<td>n=4; 57%</td>
<td>n=1; 14%</td>
</tr>
<tr>
<td>Connection to Higher Being</td>
<td>n=3; 43%</td>
<td>n=0; 0%</td>
</tr>
</tbody>
</table>

The immediate outcome of connection to beauty seemed to be related to making meaning (57%). There did not seem to be a relationship between connection to nature and making meaning or coping with mortality (11-44%). There did not seem to be a relationship between connection to higher being and making meaning or coping with mortality (0-43%).
Exemplar of relationship between immediate and ultimate spiritual outcomes. Participant 15 had a spiritual connection to beauty and to a higher being. “That's part of the spiritual part of it. It just fills part of me, it’s, I believe God enjoys beauty in everything and art is beauty” 15:327. She found meaning in her life circumstances. “Every once in a while pulled out of my pocket and prayed and said ‘Lord some time I’d like to be an artist, a full-time artist’. God in some twisted way has allowed me to do that at this time in my life and I, I there's got to be a reason for that. There's got to be a purpose for that” 15:327.

Summary

The ultimate outcomes of creating art are the outcomes that were enduring changes in the participants. Components of ultimate outcomes included: mental, emotional, social and spiritual aspects. Components of ultimate mental outcomes included: non-illness focus, positive self-perception and positive situation perception. Art beginners experienced positive situation perception. Art discontinuous and art continuous participants experienced positive situation perception, positive situation perception and non-illness focus. The intermediate mental outcome process experience was related to positive self-perception, positive situation perception and non-illness focus. The intermediate mental outcome motivation was related to positive self-perception, positive situation perception and non-illness focus. Pride was related to positive self-perception, positive situation perception and non-illness focus.

Components of ultimate emotional outcomes included: appreciation and enjoyment. Art beginners did not seem to experience emotional aspects of ultimate outcomes. Art discontinuous participants experienced enjoyment. Art continuous participants experienced appreciation.

Components of ultimate social outcomes included altruism. Altruism was related to positive self-perception, positive situation perception and non-illness focus. Art beginners did
not seem to create art for altruism. Art discontinuous and art continuous participants created art for altruism.

Components of ultimate spiritual outcomes included: finding meaning and coping with mortality. Art beginners experienced the ultimate outcome of coping with mortality. Art discontinuous and art continuous participants did not seem to experience spiritual ultimate outcomes. The immediate outcome of connection to beauty was related to making meaning.

Data identifies possible ultimate outcomes of creating art. Data will help focus intervention planning by guiding the practitioner to target populations for whom the ultimate outcomes address their illness experience. Data will also guide program evaluation through identifying appropriate outcomes for measurement. Data may also guide research and theory development.

**Conclusion**

The most surprising aspect of the data analysis was the frequency with which art beginners experienced immediate, intermediate and ultimate outcomes from the creation of art. Art beginners had created fewer than five pieces of art and did not make art daily. They had a very small dose of the intervention, yet they stated that they had benefited from creating art. That they were able to experience benefits with such small doses raises questions about the potency of the intervention. Were these particular participants simply more reactive to the intervention, or is the intervention itself so potent that even small doses may generate outcomes?
CHAPTER 6: DISCUSSION

Introduction

The purpose of this research study was to identify and describe various key components of creating visual art as a healing intervention in the context of chronic illness. The goal was to better understand the intervention for use in clinical practice and research. For this study, healing interventions were defined as those that promote resilience and human flourishing.

Intervention theory provided the study framework as a systematic way to examine the structure, process and outcomes of creating art as an intervention. The structure of an intervention includes characteristics of the participants, facilitators and context. The process of an intervention includes the components or active ingredients, enactment/adherence and dose. The outcomes of an intervention include the immediate, intermediate and ultimate outcomes. The structure influences the process, which in turn influences and is influenced by the outcomes. This framework was used to identify the research and interview questions as well as a guide for data analysis (Figure 31).
Several nursing theories also informed this study, suggesting how art as an intervention may work to promote health and healing within the context of chronic illness. Creating art is a healing intervention grounded in the unitary transformative nursing theories of Parse and Newman. These nursing theories hold that people and the environment are interactive; they are an inseparable whole that manifest evolving patterns of change and flux (Meleis, 2007; Rogers 1992, 2009). The goal of nursing is to assist people to develop their full human potential as they flux and change within the context of chronic illness (Manhart Barrett, 2002, 2009; Meleis, 2007; Newman, 1992, 2009; Newman, Sime & Corcoran-Perry, 1991, 2009; Parse, 2005, 2009; Parse, 2012; Rogers, 1992, 2009; Watson, 1999). The nurse assists patients through reverently...
entering into the patient’s pattern and reflecting the patient’s pattern while offering other patterns that may be helpful to the patient (Manhart Barrett, 2002, 2009; Parse, 2005, 2009; Parse, 2012; Rogers, 1992, 2009; Rosa, 2011; Watson, 1999). Creating art is an intervention that can create flux and offer new patterns of living with chronic illness.

The nursing theories of Parse and Newman are consistent with complex systems science (CSS). In CSS, people are viewed as complex adaptive systems (CAS) (Koithan et al., 2012). Basic tenets of CAS propose that people are: (a) whole systems that (b) exhibit changes over time and (c) that are characterized by emergence, connectivity and mutual causation in which (d) emergence is a function of the whole system and not predictable by the properties of the parts and is (e) driven by self-organization in which (f) stability and flexibility are critically paired (Koithan et al., 2012). Complex systems science helps to explain how art stimulates a healing response within the context of chronic illness. Art as intervention creates new points of organization offering the whole person a new way of viewing their illness and world. In turn, these new and unique patterns offer greater flexibility and options which describe the characteristics of human resilience and flourishing or healing.

Summary

The results of this study can be interpreted through the lens of intervention, nursing and complex systems frameworks. Intervention theory provided the structure for the research while nursing theory and CSS provides a framework for understanding the results of the study.

Discussion of Results

Sidani and Braden (2011) and Rossi, Lipsey and Freeman (2009) identify that researchers must understand eight characteristics of an intervention prior to testing its effectiveness and efficacy. These formed the basis for the eight research questions addressed by this study:
1. What are the characteristics of the people who participate in art as a healing intervention?

2. What facilitator characteristics influenced the participant’s experience with art as a healing intervention?

3. What were the characteristics of the context for creating art?

4. What were the intervention components and dose?

5. How did the participant enact and adhere to the treatment?

6. What were the immediate outcomes of participation?

7. What were the intermediate outcomes of participation?

8. What were the ultimate outcomes of participation?

This section will discuss the research questions from a theoretical perspective.

Structure

The structure of an intervention includes characteristics of the participant, facilitator and context (Sidani & Braden, 2011). In this study, structure was examined by describing (a) the types of people for whom creating art may be a healing intervention, (b) the characteristics of the people that facilitated the art that people found most helpful and (c) aspects of the context that were necessary to promote healing.

**Characteristics of the participants.**

The analysis of the characteristics of the participants in this study revealed that those people who found art to be a useful intervention displayed similar characteristics. People who used art to positively address chronic illness seem to be people who had a pattern of focus on, or attraction to the illness experience. This pattern was seen across mental, emotional, physical, social and spiritual domains.
Participants described thinking processes that were dominated by the illness experience. They experienced obsessive thinking about their illness. Participants also described recurring negative emotional patterns. They experienced sadness, anger, fear and frustration about their illness experience. The participant’s physical experiences were focused on symptoms and treatment issues. The participants described a narrowing of their social sphere. They felt their illness was invisible, and they had difficulties with communication, employment and finances. Finally, they faced mortality and questioned the meaning of their life. Therefore, the participants who were helped by creating art experienced complex, multi-domain patterns that revolved around their illness experience. Creating art assisted the participants to create life patterns that revolved around art rather than their illness.

**Characteristics of the facilitators.**

There was also a particular constellation of facilitator characteristics that were identified as most helpful. The participants found that facilitators who were accessible, provided clear instruction and had a positive demeanor provided the most positive art experiences. Accessibility was described as “being present”. Consistent with nursing theory, presence creates an environment where transformation is possible (Rosa, 2011). Presence was described by the participants as relationship and availability. The participants described facilitators who were there when needed and who demonstrated caring. The participants described the demeanor in helpful facilitators as pleasant, encouraging and non-judgmental. These characteristics demonstrated respect and even reverence for the participant’s experiences. The participants were open to suggestions from the facilitators because of the facilitator characteristics.

Facilitators offered participants new activities, new ways to interact with their illness and new ways to express their illness experiences. These were offered as instruction that included
material support, skill building was allowing. Material support included providing needed supplies. Skill building included practical instruction, which was offered to participants to assist them to use the intervention of creating art. Material support and skill building were especially helpful to art beginners who did not yet know how to use art and therefore could not participate in the intervention without assistance. Facilitators also offered these instructions in an open and permissive manner, allowing the participants to create art that was their own work. The activity of creating art did not have a pre-determined product goal; rather the outcomes emerged through choices of the participant. Thus, the facilitator assisted the participant but did not direct the healing outcomes.

The participants in this study described facilitators who administered creating art as an intervention in a way that was consistent with unitary-transformative nursing theories and CSS. The facilitators entered into the patient’s pattern with respect and offered other patterns. They then allowed the participant to self-organize around a new and emergent pattern.

**Characteristics of context.**

Creating art can be a challenging endeavor, especially for beginners. Participants described fear and apprehension at the prospect of creating art. For people with chronic illness, this challenge is exacerbated by the challenges of the illness experience. Participants described living with chronic illness as a challenging experience, and beginning to create art added a challenge to their already challenging lives. Therefore, participants found that a context of support and comfort was helpful when creating art.

Some of the more experienced participants preferred to create art alone. They did so because they found being alone was peaceful, and once they had mastered the rudiments of creating art, they did not feel the need for the support of a group while creating art. Participants
also discussed creating art in relaxing surroundings, stating that it was often helpful to create art in a space modified to accommodate any limitations from their illness.

It was surprising how fearful participants, especially art beginners, were of creating art. Creating art was perceived as a risk-taking activity. Supportive and comfortable context decreased the participant’s anxiety and encouraged them to undertake a challenging and risky endeavor. Therefore, a comfortable, supportive environment was helpful in the implementation of this intervention.

Summary.

The structure of art as a healing intervention includes characteristics of the participants, facilitators and context. The participants who were helped by creating art experienced complex, multi-domain patterns that revolved around their illness experience. Participants were most helped by facilitators who entered into their pattern with respect and offered other patterns of response to chronic illness. It was important that the facilitators remained open to the outcomes of creating art to emerge from the participant choices. The participants found that a comfortable supportive environment was helpful in the implementation of this intervention.

Process

The process of an intervention is described by Sidani and Braden (2011) as inclusive of components, dose, enactment and adherence to treatment.

Components.

The components of any intervention are considered to be the active ingredients, “which are theoretically hypothesized to bring about the intended changes” (Sidani & Braden, 2011, p 68). The participants in this study described components as color, content and material manipulation. Color offered different ways to convey meaning and elicit emotion as well as an
opportunity for enjoyment. Content provided a way to explore illness-based or non-illness based life experiences. Material manipulation was an active way of interacting with the components of art that was different than any other activity – wellness or illness based. Other active ingredients may have also contributed to the outcomes, but were not captured in this study. Possible other active ingredients include: the support of the facilitators, interaction with the group and trying a new activity.

**Dose.**

Dose is defined as the frequency and amount of the intervention. It is typically identified as the amount required to effect change (Sidani & Braden, 2011). This study did not explore dose in enough depth to answer questions of frequency and amount of art needed to produce outcomes. It did, however, highlight the dependence of art beginners on the facilitator. Art beginners were limited in their dosing because of their inability to enact art independently.

**Enactment.**

Enactment is defined as the participant’s starting the performance of the intervention (Sidani & Braden, 2011). For the participants in this study, enactment of art as a healing intervention was dependent upon their openness to trying something new and their relationship with the facilitator.

The desire to “do something” encouraged enactment since the participant was willing to try an activity that was not part of their daily routine or part of their ongoing sick role (Glanz, Rimer & Viswanath, 2008). Past experience with art encouraged enactment because it decreased the fear of creating art and the perception of risk. Art had been used in the past without adverse effects.
The relationship between the participant and the facilitator was another factor that encouraged enactment. That relationship decreased the fear of change that accompanied trying a new activity. Characteristics of the facilitator (i.e., accessibility, clear instruction and positive demeanor) encouraged trust, which lead participants to accept the invitation to try something new. Yet, there could not simply be an invitation to participate; there had to be a concrete opportunity to enact creating art. An invitation to create art without an accompanying opportunity for real support to do so would not encourage enactment.

Participants were discouraged from enactment when they were beset by self-doubt, believing that they lacked the skills necessary to participate. Further, they were discouraged when they thought they did not need support and had financial worries. The participants in this study described the characteristics of the facilitator as an important factor in assisting them to overcome the discouragement to enact art as a healing intervention and participate. This finding is consistent with intervention theory in which the facilitator is an essential part of the structure of the intervention. In addition, this finding was consistent with unitary-transformative nursing theories. The facilitators partnered with the participants to encourage a healing intervention.

**Adherence.**

Adherence is defined as continuing to perform the intervention at the recommended dose (Sidani & Braden, 2011). For the non-beginner participants in this study, creating art became a new normalized pattern. In CSS stuckness is rooted in repetitive systems patterning while flourishing/health occurs when patterns are flexible, nimble and non-repetitive (Koithan, et al. 2007). Creating art is a more flexible pattern than patterns that revolve around the illness experience and are therefore healthier.
Participants wanted to maintain their participation in creating art because the outcomes were perceived as positive alternatives to outcomes experienced in the past. They enjoyed the process of building their skills as they maintained the pattern of attraction around art.

Participants spoke about the obstacles that harsh criticism and dependence on the facilitator could create when using art as a healing modality. However, the more the participant created art, the more confident they became in their skills and the less likely they were to be dependent on the facilitator or discouraged by criticism.

**Summary.**

The process of an intervention is inclusive of components, dose, enactment and adherence to treatment. The components, or active ingredients, described by participants in this study included the components of art: color, content and material manipulation. Together these components were a new pattern and new activity for the participants that facilitated the flux necessary for change. This study was not able to define the dose of art needed to facilitate change, but did identify the inability to create art independently as a factor that limited the dose for beginners.

Enacting something new can be difficult for people who are stuck in a routine or a repeating pattern, because there is a risk involved with any change and change is discomforting. Beginners could be encouraged to enact art through interaction with trusted facilitators and a concrete opportunity to create art. The non-beginner participants in this study had high levels of adherence to the intervention. Their attraction to the pattern of creating art built more attraction to the pattern and adherence increased with experience.

The participants in this study described aspects of components, dose, enactment and adherence in a way that was consistent with unitary-transformative nursing theories and CSS.
The components encouraged flux and change by introducing new and different possibilities. CSS theory may offer a way to understand dose. CSS suggests that a new attractor needs to be introduced to the field repeatedly with sufficient frequency to encourage a change in patterning (Koithan, et al. 2007). The dose and frequency of creating art was not well defined in this study and will need to be further explored. Finally, enactment and adherence were encouraged by facilitators who encouraged participants in a respectful way consistent with unitary-transformative nursing theories.

**Outcomes**

The outcomes of creating art were emergent and self-organizing. Though the outcomes were patient specific, there were similarities across those outcomes that will be discussed here.

**Immediate outcomes.**

Immediate outcomes are client responses to the intervention that created movement that allowed breaking from old patterns and discovering new patterns. Thus, creating art allowed participants to “unstick” from illness patterns. For example, participants discussed thinking about the creative process so intently that they did not obsess about their illness while creating.

Creating art introduced new ways of being-doing-knowing, introducing new information into the system so that change was possible (Parse, 2012; Kreitzer & Koithan, in press). New information entered the system across all domains of experience (physical, mental, emotional, social and spiritual), encouraging increasing complexity of whole person/whole system. The participants described experiences that were consistent with the unitary-transformative nursing theories. The participants were inseparable wholes that manifested evolving patterns through interaction with their environment (Meleis, 2007; Rogers 1992, 2009).
Participants described discovering new ways of thinking about their illness experience while creating art. They were able to express themselves in new ways, enjoy new experiences and reported being present in the moment rather than stuck revisiting past illness experiences.

The participants described their emotional experience prior to creating art as limited to negative emotions of sadness, anger, fear and frustration. While creating art they experienced a wider range of emotion to include enjoyment, contentment, freedom and control. While these negative emotions are believed to cause a narrowing of attention and an immediate reaction response (i.e., fight or flight), positive emotions are believed to cause a ‘broaden-and-build’ response that can have long-term effects (Fredrickson, 2001, 2004; Fredrickson & Losada, 2005). When people experience positive emotions, they broaden their attention and thinking and build personal resources. Positive emotions cause an urge to action which in turn causes long term effects, and the actions and long term effects cause positive emotions in a feedback loop (Fredrickson, 2001, 2004; Fredrickson & Losada, 2005). In systems theory, positive emotions are associated with greater pattern complexity and novel, more robust attractor patterns. Thus, in this study, creating art encouraged positive emotions and the ‘broaden-and-build’ response.

Physically, participants reported feeling rested, forgetting their pain and often decreasing their acute awareness of symptoms. Socially, participants broadened their social sphere and were able to interact with other people in different ways than they had before creating art. Some of the interaction was illness-based, and some was non-illness based. The participant’s social activities were more complex while creating art. Participants continued their usual social activities (i.e., church and family gatherings) and added creating art with others. Their experience of socialization around art was different from their past social experiences. Participants also reported new spiritual experiences when creating art. Rather than the continual focus on pending
mortality and questioning the meaning of their life, they reported feeling more connected to nature, beauty and a higher being.

The immediate outcomes of creating art were experiences of unsticking from old patterns and becoming aware of possible new patterns. Creating art created flux and opened the possibility for change.

**Intermediate outcomes.**

Intermediate outcomes represent a shift away from the old patterns towards new ones. Participants created art that was representative of: self, values and transformation. Mentally participants interacted with their piece of art to process their experiences. They described increased understanding of themselves through observation of the art they had created. In addition, they described a wider variety of emotional responses when creating art and experienced positive emotions of enjoyment and pride after creating art. The intermediate social effects of creating art were focused around expanded interactions with others. Creating art was an avenue for expression of self to others as well as a basis for non-illness based socialization. Intermediate outcomes were consistent with CSS and unitary-transformative nursing theories. The intermediate outcomes were self-organized by the participants and emerged from their choices.

**Ultimate outcomes.**

Ultimate outcomes of creating art are defined as enduring changes in the participants. The ultimate outcomes were individualistic; however the outcomes were similar in that the participants moved from a narrow pattern that was stuck and repetitive to a more expanded pattern with different options of response. They had more varied and variable patterns. Patterns were changed in mental, emotional, social and spiritual domains.
Mentally they had a pattern of non-illness focus, positive self-perception and positive situation perception. For example, Participant 22 had been obsessed with his illness experience and spent a great deal of time and energy focused on his symptoms and depressed mood. After creating art his life was focused on art and he perceived his illness as an inconvenience to be managed, but not the defining aspect of his life. His experienced this change in his mental perception of his illness even though the symptoms of his disease had worsened (e.g., he required urinary catheterization and self-administered injections). His identity was based on being an artist rather than being a person with a chronic illness.

Emotionally participants had patterns of appreciation and enjoyment. Participant 64 found that creating art helped her to appreciate the beauty around her in a deep way. Her art was inspired by her surroundings and trips she had taken; a representation of the good things in her life. She would spend time with her artwork and appreciate the positive things in her life rather than focus on what she could not do because of her illness. She found that she enjoyed her life. She still had a disease and needed to manage her symptoms, but her life was nonetheless enjoyable to her.

Socially participants were altruistic. They described activities that were done to help others and improve society. Participant 99 worked with multiple groups to promote art in the community because she felt that art was an essential part of life. Through her art-centered work, she perceived herself as a contributing member of society.

Spiritually participants described transformative changes to how they perceived their personal existence. They found meaning and coped with mortality. For participant 92 creating art was a sacred experience. She created art as a form of prayer and found that though creating art her life was focused on wonder. She found meaning in making representations of creation.
Though she recognized that she was mortal, she felt that she would leave something of value when she died.

The participants in this study were able to ultimately respond to their illness with more complexity and variability through creating art as a healing intervention. Their complexity and variability of responses helped them be more resilient in the context of the ongoing challenges of illness. They experienced human flourishing in the context of complex chronic disease. Ultimate outcomes were consistent with CSS and unitary-transformative nursing theories. Participants self-organized around the complex and flexible pattern of creating art and therefore experienced greater health.

**Summary.**

The outcomes of creating art were increased variability and complexity in response to chronic illness. Immediate outcomes provided an opportunity for flux. During flux participants were able to experience new mental, emotional, physical, social and spiritual responses. The intermediate outcomes were outcomes of reflection and trying out new responses to chronic illness. The experience of positive emotion was one of the factors that encouraged the participants to broaden their responses and build new responses (Fredrickson, 2004). The ultimate outcomes were continued variable and complex responses to the ongoing challenge of chronic illness. The ultimate outcomes were flourishing responses. The participants perceived a very high quality of life independent of the ongoing challenges of their disease process.

**Summary**

Creating art as a healing intervention is consistent with nursing and CSS theories. Creating art is an intervention that works with a whole person to provide an opportunity for emergent change through disrupting old patterns, creating movement, and providing the
opportunity for the participant to adopt new healthier patterns for living with chronic illness in a way consistent with both Parse and Newman’s theories of nursing. Creating art does not have a predictable outcome, but rather has patient specific outcomes dependent on the patient’s particular needs and individual self-organization (Koithan, 1994). The nursing role in creating art as a healing intervention is consistent with the unitary transformative nursing theories. The nurse assists the participant to enter into the flux of creating art (Manhart Barrett, 2002, 2009; Meleis, 2007; Newman, 1992, 2009; Newman, Sime & Corcoran-Perry, 1991, 2009; Parse, 2005, 2009; Parse, 2012; Rogers, 1992, 2009; Watson, 1999). This study did not fully explore how the nurse may assist participants. However, theory suggests that the nurse could support the participant during the discomfort of flux and assist the participant to explore healthier responses to their chronic illness. The nurse partners with the patient, but does not direct the process. Creating art is an intervention based in the belief that people can take new information, self-organize around the new information and thereby promote their own healing. The findings of this study support these perspectives. Participants were able to grow and change through the flux and movement of creating art.

**Study Implications**

**Practice**

While this study was exploratory and descriptive, it does provide information that may be useful in practice. Findings about characteristics of the participant, characteristics of the facilitator, characteristics of the context, components, dose, enactment and adherence may all be influential in nursing practice. Furthermore, the findings on outcomes could guide practitioners’ expectations about patient responses to art. In addition, the outcome findings may guide
practitioners in program evaluation. Many of those implications can be immediately deduced from the previous discussion. This section will highlight the primary practice implications.

Creating art for healing programs should target people who are most likely to benefit from the intervention. The participants in this study experienced mental, emotional, physical, social and spiritual energy focused on their disease process. These participants were assisted to change their focus through creating art. Therefore, creating art for healing interventions may be most beneficial to participants who are intently focused on their illness and less helpful for people who already have a broader focus of life.

Furthermore, participants should have the capacity to engage in creating art. People with debilitating symptoms (e.g., uncontrolled nausea) may not be able to engage in art until their symptoms are better controlled. Another aspect of capacity to engage was mental capacity. It seems that the ultimate outcomes of creating art are dependent on the mental ability to process experience. While participants with limited mental capacity (e.g., people with dementia) may benefit from the immediate outcomes of art, programs with the goal of participants becoming more resilient would be better targeted at participants with the mental ability to process experience.

Inpatient programs could be offered at the patient bedside with small, easy to use materials such as pastels or small pieces of clay that would be unlikely to trigger acute symptoms such as shortness of breath. Outpatient programs could offer a wider variety of art experiences. The studios for outpatient populations should have modifiable space to accommodate for physical limitation (i.e., places to stand and work for those people who have difficulty sitting). In addition, since people varied in their preference of who to make art with illness-based groups for a variety of illnesses as well as non-illness based groups should be offered.
Beginners were particularly dependent on facilitators. Programs that target art beginners need to consider reaching out to potential participants through existing relationships. The art facilitator could be part of the care team with a broader role than art interventions. For example, the art facilitator for Participant 60 worked as part of the cancer support team at the hospital where Participant 60 received care. The facilitator had assisted Participant 60 with other issues. Participant 60 had a trusting relationship with the facilitator, therefore when the facilitator suggested art as an intervention Participant 60 was open to the invitation.

The art facilitator should have a higher art skill level than the participants. Art beginners required very basic instruction while more experienced participants found basic instruction boring. The facilitator should also be someone with a positive demeanor who has a permissive teaching style and is open to unexpected outcomes.

Adherence and dose would be improved through offering more frequent programs. Adherence would also be improved through assisting beginners to become more independent in creating art. Programs that offer progressive support would address this need. For example, beginners could be offered weekly classes for a specified amount of time, then monthly classes with homework for a specified amount of time, then intermittent classes for skill building. This approach would provide beginners with support while assisting them to become more independent in creating art.

Art programs are often offered with general goals (i.e. patient support), however programs without specific goals are difficult to evaluate. A program that is offered without specific measurable goals is difficult to defend as valuable and is vulnerable to being discontinued. The goals of a program could be to encourage immediate outcomes of art (e.g., to experience positive emotions or to socialize with other people with a similar illness). Immediate
outcomes would be an appropriate goal for an intervention offered for people with mental
disabilities (i.e., people with developmental delays or dementia) or for programs offered for one
day. These programs could be measured through evaluating greater variety in responses
including an increase in positive emotion.

The goals of a program could also be to encourage intermediate and ultimate outcomes of
creating art. Creating art programs offer participants the opportunity to build resilience.
Programs of long duration, perhaps three to four months of progressive support as discussed
above, with the appropriate participants may expect to see intermediate and ultimate outcomes.
These programs could be an important part of assisting people to live well in the context of
chronic illness.

Summary.

This study described aspects of art as a healing intervention that are relevant to
practitioners. Creating art is an intervention in which people flux and change in ways that are
emergent and self-organizing. The implementation of this intervention is based on the CSS and
unitary transformative nursing theories.

The practice recommendations for the intervention structure: characteristics of
participants, facilitator and context, are recommendations that promote targeting the people who
would benefit from flux and change while providing supportive facilitators and context. The
practice recommendations for the process of the intervention: components, dose, enactment and
adherence, are recommendations that promote supporting participants to start and maintain the
intervention. The practice recommendations for outcomes guide practitioners to be aware of the
goals of their programs and consider how programs may be evaluated.
Creating art is an intervention with great potential for a great many people. However, creating art as an intervention will be more effective when interventions are implemented with an understanding of the structure, process and outcomes.

**Research**

This study was conducted so that the intervention of art as a healing modality could be more fully understood and then tested. This study described the structure, process and outcomes of creating art through the structure of intervention theory. In the current literature, the label of “art interventions” has been used almost indiscriminately for a wide variety of patients and with unstructured administration and vague goals. Many programs seem to operate with a general idea that creating art is a good thing, but without a concrete understanding of art as an intervention: who would most benefit, under what circumstances, with what assistance, how the components work and with what goals. The findings of this study helped begin to describe and define the intervention structure, process and outcomes. The findings of this study will guide further research into art as an intervention so it can be more systematically administered and studied. Yet, many questions remain unanswered and additional questions can now be posited based on the reported results.

**Characteristics of the participants.**

Though this study found that people who benefitted from art as a healing intervention were people who had pattern of multi-domain focus on their illness experience, specific aspects of participants remain undefined. In order to better understand the type of participant most likely to benefit from art interventions the following questions should be now be asked.

1. What characteristics of the illness affect the use of art as a healing intervention?
   a. What illness limitations can creating art address?
i. For example: Is art appropriate for people emotional disturbances such as depression or anxiety? Does it work for people with pain?

b. What limitations prohibit engagement from art?

i. For example: What are the intellectual limitations for the use of art? Are there emotional limitations that prohibit engagement with creating art?

c. Are there illnesses in which the use of art as an intervention would be detrimental to the participant?

i. For example: In people with obsessive compulsive disorder would creating art become a compulsion and exacerbate their disease?

2. What characteristics of the participant affect the use of art as a healing intervention?

a. Are there personal characteristics that influence engagement in art as an intervention?

i. For example: Does openness to new experiences affect adoption of art as an intervention?

Characteristics of the facilitators.

The findings of this study indicated that participants found facilitators helpful in implementing the intervention. However, questions remain about how facilitators can specifically promote healing outcomes. The following questions may be asked:

1. How would a facilitator identify a healthy pattern?

a. What support does a participant need in order to enter into the flux and movement of change?

i. Is the use of the art materials enough or are there scripts the facilitator should use to reassure participants and encourage new experiences?
b. Is greater variability a sign of health? How would a facilitator determine if participant is demonstrating variability in response?

c. How can a facilitator assist a participant to adopt new and more complex responses?
   i. Is mirroring patient patterns enough? Should the facilitator nudge the participant to more complex patterns? Should the facilitator maintain a neutral stance and allow the participant to choose their patterns unassisted? What if it seems as if the participant is forming an unhealthier pattern?

d. How can a facilitator determine if a participant is having an adverse reaction to the intervention?
   i. The flux and movement of change can be uncomfortable, what is the right amount of flux? How does the facilitator tell if the participant is unable to form a new pattern, and then what should they do to help?

Perhaps a grounded theory design could be used to explore the entire basic social process (BSP) of creating art as a healing intervention, thus addressing all of these questions in a single study.

**Characteristics of the context.**

Results of the current study indicated that comfortable surroundings modified for the participant limitations assisted in the use of art as a healing intervention. In addition, results suggested that people created art alone and in groups. The groups had functions that were both illness based and non-illness art. Yet, the context for art as a healing intervention has not been fully understood, and the following questions could be asked:

1. Do different types of art groups encourage different outcomes?
a. For example: Do people in illness based art groups maintain an illness identity when compared to people in non-illness based art groups?

2. Are illness based art groups more effective for different illnesses?
   a. For example, do people with cancer respond to the intervention more in illness based, vs. non-illness based groups?

**Components.**

A great many questions remain about the components of art. Though creating art is a commonplace intervention, very little is understood about how creating art actually works as an active ingredient. Indeed, the aspects of art that could be included in a list of active ingredients are not yet well defined. Some of the questions that could be asked about the components of art as a healing intervention are:

1. What are the components of art that could be considered active ingredients?
   a. For example: Are the components of art in general (e.g., line, shape, space, texture, value and color) what make the intervention healing, or are the interactions with facilitators, interactions with groups and the activity of creating art also active ingredients for healing?

2. Are different components treatments for different aspects of illness?
   a. For example: Is color more effective for emotional disturbances (e.g., anxiety or depression) than shape? If so, what colors are better for treating what emotional states?

3. Is there something especially therapeutic about the action of creating art?
a. For example: Does working with a more physically active art form, for example clay, as opposed to a more passive art form, for example paint, lead to a greater sense of agency and therefore an increased likelihood to change?

4. Does the content of the piece of art affect the outcomes of creating art?
   a. For example: Is illness based art more effective than non-illness based art for processing experience?
   b. For example: Does illness based art increase or decrease the experience of negative emotions?

5. Are there physiologic changes associated with creating art?
   a. For example: Does creating art foster a parasympathetic or sympathetic response of the autonomic nervous system?
   b. For example: Are there endocrine level changes (e.g. stress hormones, dopamine, oxytocin and neuropeptides) associated with creating art?
   c. Which regions of the brain (e.g. language, limbic or visual) are involved in the act of creating art, and how might these regions be associated with the experience of creating art?

**Dose.**

The participants in this study had two different doses of art. The art beginners made fewer than five pieces of art and did not create art daily. The more experienced participants made more than five pieces of art and created art daily. The amount of art needed to cause intermediate and ultimate outcomes is unknown. The following questions could be asked:

1. At what point do participants start to display intermediate and ultimate outcomes?
Enactment.

This study discovered that enactment could be affected by participant characteristics: openness to trying something new, desire to do something, self-doubt, belief that they lacked the skills, thinking they did not need help and financial worries. Enactment could also be affected by facilitator characteristics, particularly the relationship between the participant and the facilitator. While these aspects of intervention enactment were identified, further questions remain. Some questions that could be asked are:

1. Which participant characteristics most influence enactment of the intervention?
   a. For example: Are there participant characteristics that make them particularly open to the intervention?
   b. For example: What is the difference between those who enacted the intervention and those who refused the intervention?

Adherence.

This study found that experience level affected adherence to the intervention. People with more art experience were able to independently create art and were therefore more able to adhere to the intervention. Questions remain about factors that influence intervention:

1. Would frequent support for beginners translate to greater adherence over time?
   a. For example: Would a program with weekly classes that taught people how to independently create art lead to independent art making and greater adherence?
Immediate outcomes.

The immediate outcomes of creating art created flux and allowed participants to break from their previous way of experiencing their illness. Further questions may be asked to better understand this process:

1. What is the optimum amount of flux?
   a. For example: Is there an amount of variability that is too low to encourage change?
   b. For example: Is there an amount of variability that is too high and causes disorganization?

2. Could the facilitator monitor flux as an indicator of immediate outcomes?
   a. For example: How would the amount of flux be measured?

Intermediate outcomes.

The findings of this study indicate that the intermediate outcomes of creating art are associated with reflecting on the piece of art created. Questions remain about intermediate outcomes:

1. How does the piece of art affect the ability to process experience?
   a. For example: Is art with illness based content more effective in increasing understanding of self than art with non-illness based content?
   b. For example: Does the skill level apparent in the piece affect the pride felt by the participant?
   c. For example? Does the skill level apparent in the piece affect the interpretations the participant can make?

2. How does art based social interaction provide support to ill people?
   a. Does an art based social network assist people to have non-illness focused lives?
Ultimate outcomes.

In this study ultimate outcomes were defined as enduring changes in the participants. While the outcomes were individualistic, much more could be understood about the patterns of ultimate outcomes. The following questions could be asked:

1. How long is enduring?
   a. For example: Do participants still demonstrate the ultimate outcomes after one year, five years, ten years?

2. Does the intervention have to be continued for the outcomes to persist?
   a. For example: How long do the ultimate outcomes last in people who don’t continue to adhere to creating art?

3. How should the ultimate outcomes be measured?
   a. For example: What measurements would be appropriate for evaluating non-illness focus, positive self-perception and positive situation perception?
   b. For example: What measurements would be appropriate for evaluating patterns of appreciation and enjoyment?
   c. For example: What measurements would be appropriate for evaluating altruism?
   d. For example: What measurements would be appropriate for evaluating meaning and coping skills?

4. How do the ultimate outcomes of creating art correlate with current research on resilience?
   a. Do measures of resilience adequately measure the ultimate outcomes of creating art?
   b. How could art be used to promote resilience?
Summary.

This study was a very preliminary study that described aspects of art as a healing intervention. Though creating art has been commonly used with chronically ill people, research about the intervention is in its infancy. The findings and structure of this study allow for the development of a systematic research agenda. The findings of further studies can be used to guide practice and develop theory.

Theory

This study was informed by intervention theory, unitary transformative nursing theories and CSS. The findings of this study could be used to modify the way that intervention theory is used to guide research in whole person interventions. The findings of this study could also be used to better understand healing in the context of unitary-transformative nursing theories and CSS.

Intervention theory.

This research highlights the need to broaden intervention theory to include non-linear outcomes. Intervention theory could be strengthened by the inclusion of emergent and self-organizing outcomes. The findings of this study underline the complex nature of whole person interventions. Current intervention theory is difficult to apply to an intervention with emerging and unexpected outcomes. A more appropriate way to evaluate creating art as a whole person intervention may be to examine the patterns of change rather than the linear conceptualization of outcomes predominant in intervention theory.

For example, Sidani and Braden (2011) state that “each component should be clearly labeled to reflect the active ingredients it captures. Also, it is described in terms of the goal it is set to achieve, the specific activities that constitute the component, and the mode selected for its
Intervention theory could then be applied to evaluate art as an intervention for pain. The study would possibly be structured by the question: Will the intervention of painting about ones’ pain with yellow and green paint once a week with a facilitator, decrease pain as measured by the pain scale in people with chronic back pain? While a study like this could be performed, it would be unlikely to capture the outcomes of creating art which are outcomes of changes in perceptions and coping abilities.

Expanding the Sidani and Braden (2011) theory to include whole person changes and account for more non-linear emergent and complex outcomes could help inform intervention studies that examined patterns of change rather than specific outcomes. For example, a study on creating art as a healing intervention could be structured by the question: Will creating art with participant determined content and color once a week with a facilitator and increase coping with pain in participants with chronic back pain? This study would measure coping rather than pain levels and may better capture the outcomes of creating art.

Intervention theory could also be applied to other whole person interventions with measurements that include increased variability and complexity rather than specific symptom based outcomes. People have the capacity to live high quality lives even with symptoms of chronic illness. Intervention theory could be used to measure aspects of life that improve perception of quality even when physical healing is not achieved.

**Nursing theory.**

This study had outcomes congruent with unitary-transformative nursing theory. Specifically the concepts of human being, health, goal of nursing and mode of practice for art as a healing intervention as developed in Parse’s (2005, 2009, 2012) theory of Human Becoming
and Newman’s (1992, 2009) theory of Health as Expanding Consciousness were congruent with creating art as a healing intervention.

Parse conceptualizes the human being as an open, co-creating, multidimensional being in process with the environment (Parse, 2005, 2009, 2012). Health is conceptualized as whole person well-being (Parse, 2005, 2009, 2012). The goal of nursing is to improve the quality of life and the mode of practice is to mobilize transcendence (Parse, 2005, 2009, 2012). In this study the participants interacted in a co-creative way with their environment. They created art, and then interacted with their piece of art in a way that changed their perceptions. The outcomes of creating art were whole person well-being and were person specific. Creating art improved the participant’s quality of life. Though it was not clear in the findings of this study that the facilitators worked to mobilize transcendence, it is possible that facilitators could mobilize transcendence through creating art with others. This study supports Parse’s theory and gives a concrete example of an intervention that uses the concepts of Parse’s theory to promote whole person healing in people with chronic illness.

Newman conceptualized the human being as part of the universe of expanding consciousness (Newman, 1992, 2009; Newman, Sime & Corcoran-Perry, 1991, 2009). Health is conceptualized as Space/time/energy and consciousness expansion (Newman, 1992, 2009; Newman, Sime & Corcoran-Perry, 1991, 2009). The goal of nursing is caring in the human health experience and the mode of practice is presence to assist patients to re-pattern their life (Newman, 1992, 2009; Newman, Sime & Corcoran-Perry, 1991, 2009). The participants in this study expanding their understanding of themselves and the world around them through increasing variability and complexity of experience in a way that is consistent with Newman’s conceptualization of expanding consciousness. Though it was not clear in the findings of this
study that the facilitators worked to assist the participants to re-pattern their life, it is possible that facilitators could work through an art intervention to assist others to re-pattern their life. This study supports Newman’s theory and gives a concrete example of an intervention that uses the concepts of Newman’s theory to promote whole person healing in people with chronic illness.

CSS.

The findings of this study were also congruent with CSS. The basic tenets of CSS are that people are: (a) whole systems that (b) exhibit changes over time and (c) that are characterized by emergence, connectivity and mutual causation in which (d) emergence is a function of the whole system and not predictable by the properties of the parts and is (e) driven by self-organization in which (f) stability and flexibility are critically paired (Koithan, et al. 2012).

The participants in this study were whole, multifaceted people who exhibited change over time. The changes they made emerged from their experience and choices and were a function of the whole system. The participants exhibited individualized changes because their changes were self-organized (i.e., they made the particular changes that they needed). Finally, they moved between the flux of the immediate outcomes and the more stable intermediate and ultimate outcomes. This study supports CSS and gives a concrete example of an intervention that uses the concepts of CSS to promote whole person healing in people with chronic illness.

**Study Limitations**

The use of qualitative descriptive research design was appropriate for this study since so little was known about art as a healing intervention. This method allowed for rich descriptions of the components of art as a healing intervention and provided a framework for a future research program into art as a healing intervention and investigation into methods for evaluating interventions with complex structure, processes and outcomes.
However, specific design decisions contributed to some limitations of this study. The recruitment procedure and sampling strategy allowed for a sample in which all of the art beginners were cancer patients. A convenience sample was used rather than theoretical and stratified sampling. Therefore, it was difficult to determine if the differences in the experiences of the beginners were attributable to the particular experience of cancer or to their level of art experience.

The study design and inclusion criteria led to a sample that only included people who had very positive results. The study was designed this way to enable understanding of who is helped by this intervention. However, this limits what we know to only positive results by design. No participants who experienced negative outcomes were included in the sample. Therefore, this study did not describe what might happen if a person were to break from a pattern and be unable to establish a new pattern or adopt a pattern that is less healthy than the original pattern.

Though limitations were present, this study was nevertheless valuable in what it was able to contribute: a greater understanding of art as an intervention.

**Research Program Next Steps**

There are so many remaining unanswered questions about art as a healing intervention that it is difficult to determine what future study to undertake next. However, the outcomes of this study were closely aligned with the research on resilience. Therefore, I would like to conduct research that examines whether creating art has an influence on resilience as defined by the literature. Resilience has three characteristics: (1) an attitude of approach/engagement (i.e., interest, curiosity, appreciation noticing beauty) (2) social relatedness (i.e., empathy, compassion, helping, friendship, love (3) an efficient stress response (i.e., reduced cortisol, increased dopamine and oxytocin) (Kent & Davis, ND). I would like to do a study with people
who suffer from post-traumatic stress disorder (PTSD) to determine whether creating art can improve their attitude of approach/engagement, thereby adding to the treatment protocols available for persons with PTSD.

A population of particular interest are patients enrolled in the Veterans Health Administration. Veterans with post-traumatic stress disorder (PTSD) are similar to the participants in this study in that their lives revolve around an unhealthy pattern: focus on a traumatic experience. Symptoms of PTSD include: re-experiencing trauma, avoidance of reminders of trauma/emotional numbing and hyper arousal (Adler, et al. 2008; American Psychiatric Association, 2013; Congress of the United States, 2012; Wilkins, Lang & Norman, 2011). These symptoms disrupt the veteran’s lives across all domains.

The goal of treatment for PTSD is to improve coping. It is understood that people with PTSD will always have the experience of trauma as a part of their personal story and their life experience. However, change in processing the trauma experience can change the attraction to the trauma and therefore change the person’s pattern from a pattern centered on trauma to a more variable and healthy pattern. The treatments for PTSD work to change erroneous cognitions, reduce intensity and frequency of negative emotions, promote coping (Cahill & Foa, 2007) This study found that creating art can change perceptions, emotions and promote coping. Therefore creating art may be an appropriate treatment for veterans with PTSD. Alternative treatments for PTSD are needed because the drop-out rates from the gold standard PTSD treatment, (i.e., cognitive process therapy) is between 20 and 40% (Bryant, et al. 2007; Kent & Davis, ND). Creating art may be a therapy that is a good fit with these therapeutic goals while being more palatable and therefore more adhered to.
Conclusions

This study contributed to knowledge about creating art as a healing intervention by exploring various intervention components that must be explicated prior to development of program initiatives in practice and conducting systematic studies about the effectiveness of this intervention. The results of this study provide a foundation for a research career that both furthers the use of art as a healing intervention and further develops intervention theory to include complex evaluation methods.

Creating art is an intervention that can disrupt the patterns of illness experience for people with chronic illness and assist them to adopt healthier experience patterns. Creating art should therefore be used as an intervention for people with illness patterns that are illness focused and limited in the variability of their response.
APPENDIX A:

THEORETICAL LITERATURE
## THEORETICAL LITERATURE

<table>
<thead>
<tr>
<th>Reference</th>
<th>Attributes</th>
<th>Model case</th>
<th>Additional cases</th>
<th>Antecedents and consequences</th>
<th>Empirical referents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissanayake, E. (1995). Homo aestheticus: Where art comes from and why. Seattle: University of Washington Press.</td>
<td>Examination of art as a human activity from an anthropologic perspective</td>
<td>Multiple examples of art in many cultures across time.</td>
<td>Art for display: this is described as art with a big ‘A’, that is art that is done by a professional for professional goals, as opposed to art with a little ‘a’ that is done by ordinary people to address needs</td>
<td>Favors art as a process over art as a product</td>
<td>Anthropologic research on use of art across cultures</td>
</tr>
<tr>
<td></td>
<td>Art is a way of making the ordinary special</td>
<td>Use of art for funerary ritual</td>
<td></td>
<td>Looks at art as a biological necessity — art enhances survivability of the species</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art provides a safe outlet for big feelings (especially ritual)</td>
<td>Use of art to symbolize passage i.e. puberty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art provides a safe way for people to emotionally engage with content</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ritual an important aspect of healing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construction of a symbolic world</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Healthcare a component of culture and cultural identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Grey, A., (2001). <em>The mission of art.</em> Boston: Shambhala.</td>
<td>Art as a spiritual practice</td>
<td>Art as a way of connecting people to their spirit.</td>
<td>Example of art that was done for shock value and without respect for the subjects and how damaging it was to the psyche of the artist</td>
<td>Ethical responsibility to add goodness to the world</td>
<td>Personal story of A. Grey’s life as an artist and how art has molded his life experiences.</td>
</tr>
<tr>
<td></td>
<td>Art as a way of seeing</td>
<td>Art for connecting people to each other</td>
<td></td>
<td>Art is important enough to spend the time to learn to do it very well so the product approximates intention – doping the process well improves the product.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art as a process and a product</td>
<td>Transformative experiences through people interacting with sacred mirror installation (this is an installation of life size paintings of men and women of different races, and of the spirit world. The participant interacts with the images then stands in front of a mirror with the goal of an experience of oneness</td>
<td></td>
<td>Art can be damaging to individual and community psyche if not done with awareness and intent. Author feels that art is a very powerful tool and comes with obligations and ethical responsibility.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art as a method for transforming human consciousness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kalmanowitz, D. &amp; Potash, J. (2010). Ethical considerations in the global teaching and promotion of art therapy to non-art therapists. <em>The Arts in Psychotherapy</em>, 37, 20-16.</td>
<td>Art as a therapeutic intervention is not solely the realm of the art therapist</td>
<td>Descriptions of teaching art therapy to people in war zones where there are not enough therapists, the social structure is broken, and the need for healing is great.</td>
<td>Directive and non-directive creative experiences</td>
<td>Discussion of determining personal ethics of non art therapists prior to training</td>
<td>Referrals to multiple art therapy publications</td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Koithan, M. (1994). The seeing self: Photography and storytelling as a health promotion methodology (247-261). In P.L. Chinn &amp; J. Watson (Eds). Art &amp; Aesthetics in Nursing. New York: National League for Nursing Press.</td>
<td>Use of photography to be selective in focus and concentration to facilitate unfolding wholeness and healing</td>
<td>“Health promotion occurs as meanings unfold, human purpose is examined and illuminated, and alternatives take wing” p 250</td>
<td>Health promotion in the unitary transformative world view does not have a specific set outcome</td>
<td>Disharmony between perceived/ideal self and the realized/experienced self</td>
<td>Art is a non-verbal way to assign meaning, interpret events and illuminate purpose. Nurses don’t lead patients to correct interpretation, but work as ‘celebrants’ to assist self-discovery and healing</td>
</tr>
<tr>
<td></td>
<td>Art heals through meditation on art of others and through creation of one’s own art</td>
<td>Art as a personal and collective empowerment</td>
<td>Representations of aberrations offer opportunity to affirm life</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art as treatment for the soul Focus on health instead of illness Provides a chance to be fully in the now</td>
<td>Artist as shaman – using art to catch the soul and restore health to person and world</td>
<td>Insight outside of reasoning mind Provides a chance to be fully in the now</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art reconnects the person with their soul</td>
<td>Used art as therapy – patients dialogued with their product of art to discover hidden meanings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Thompson. G. (2009). Artistic sensibility in the studio and gallery model: Revisiting process and product. Art Therapy: Journal of the American Art Therapy Association, 26(4), 159-166.</td>
<td>Balance of process and product of art – both are valuable</td>
<td>Art as a way to empower those whose voice is not always heard</td>
<td>If the product of art doesn’t matter than the process is devalued</td>
<td>Art to develop identity</td>
<td>Used open studio for psychiatric patients to make art without direction.</td>
</tr>
<tr>
<td></td>
<td>Art for expression of feeling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art to reframe events</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Art therapy has valued process over product</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Author advocates for balance of art process an appreciation for aesthetics</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Development of aesthetic sense of beauty, ‘as well as other qualities such as perfection, temporality, stillness, observation, comparison, and empathy’ p 160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘Change mental states acceptance, confidence, freedom, empathy, compassion, recognition of choice, insight, symbolization, personal vision, and an increased tolerance of imperfection and ambiguity’ p 160</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>------------------</td>
<td>------------------------------</td>
<td>---------------------</td>
</tr>
</tbody>
</table>
Art as connection and continuity and opportunity for transformation  
Art as way of visioning what we might be  
Four different types of art in healing:  
Art intended to directly heal  
Art created to facilitate artists personal healing  
Art about aspects of healing process  
Artist designed healing space | Integration of art into life and healing as a life affirming practice.  
Art as part of a healing environment | Modern art has been separated from life, but shouldn’t be  
Art humanizes patients and workers  
Art to reconnect with the soul | Cites studies of women with breast cancer who used art as a healing modality. |
APPENDIX B:

PROGRAM REVIEW LITERATURE
<table>
<thead>
<tr>
<th>Reference</th>
<th>Attributes</th>
<th>Model case</th>
<th>Additional cases</th>
<th>Antecedents and consequences</th>
<th>Empirical referents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collie, K. &amp; Kante, A. (2011). Art groups for marginalized women with breast cancer. <em>Qualitative Health Research</em>, 21 (5), 652-661</td>
<td>Are there barriers that limit support group participation, and can art help address those barriers? People with poor language skills or discomfort with discussing feelings may not join verbal based support groups Art provides an opportunity to do something that isn’t just cancer focused. Art as distraction</td>
<td>Strong endorsement from these women for art based support groups Wanted new and happy activities Emphasize talents rather than need for support</td>
<td>Don’t want to accept help without offering help to others Suggested that art be the primary focus and the disease process secondary.</td>
<td>Women wanted to be private with medical concerns No mind-body precedent in their communities Mistrustful of outside assistance Needing to feel capable</td>
<td>Qualitative descriptive study, 13 participants interviewed Barriers to participating in support groups: wanting to be private, no mind-body precedent, mistrustful of assistance, needing to feel capable. Value of art groups for overcoming barriers: being drawn in, learning something new and valuable, helping others, being distracted and uplifted</td>
</tr>
<tr>
<td>Rockwood Lane, M. (2005a). Creativity and spirituality in nursing: Implementing art in healing. <em>Holistic Nursing Practice</em>. 122-125.</td>
<td>Art defined as creative expression History of art first as a healing modality then as performance Nurses are witness to patient lives and can implement art as a healing modality</td>
<td>Music, drawing and dance for patients Visual art for nurses to display what it is they do, and to memorialize patients Journaling Nurse as witness</td>
<td>Historical examples of meditation on images for reconnection with essential aspects of self Some cultures believe that art can heal the world</td>
<td>Viewing or creating art stimulates parasympathetic response Viewing or creating art causes autonomic system balance Art changes attitudes, emotional states and perception of pain</td>
<td>Parasympathetic response to engaging with art</td>
</tr>
<tr>
<td>Rockwood Lane, M.T. &amp; Graham-Pole, J. (1994). The power of creativity in healing:</td>
<td>Developed an arts program in a hospital with the goal of demonstrating</td>
<td>Used art as a healing “Nurses unique</td>
<td>Art as a way of assisting the</td>
<td>Implemented an art program in a</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference</th>
<th>Attributes</th>
<th>Model case</th>
<th>Additional cases</th>
<th>Antecedents and consequences</th>
<th>Empirical referents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collie, K. &amp; Kante, A. (2011). Art groups for marginalized women with breast cancer. <em>Qualitative Health Research</em>, 21 (5), 652-661</td>
<td>Are there barriers that limit support group participation, and can art help address those barriers? People with poor language skills or discomfort with discussing feelings may not join verbal based support groups Art provides an opportunity to do something that isn’t just cancer focused. Art as distraction</td>
<td>Strong endorsement from these women for art based support groups Wanted new and happy activities Emphasize talents rather than need for support</td>
<td>Don’t want to accept help without offering help to others Suggested that art be the primary focus and the disease process secondary.</td>
<td>Women wanted to be private with medical concerns No mind-body precedent in their communities Mistrustful of outside assistance Needing to feel capable</td>
<td>Qualitative descriptive study, 13 participants interviewed Barriers to participating in support groups: wanting to be private, no mind-body precedent, mistrustful of assistance, needing to feel capable. Value of art groups for overcoming barriers: being drawn in, learning something new and valuable, helping others, being distracted and uplifted</td>
</tr>
<tr>
<td>Rockwood Lane, M. (2005a). Creativity and spirituality in nursing: Implementing art in healing. <em>Holistic Nursing Practice</em>. 122-125.</td>
<td>Art defined as creative expression History of art first as a healing modality then as performance Nurses are witness to patient lives and can implement art as a healing modality</td>
<td>Music, drawing and dance for patients Visual art for nurses to display what it is they do, and to memorialize patients Journaling Nurse as witness</td>
<td>Historical examples of meditation on images for reconnection with essential aspects of self Some cultures believe that art can heal the world</td>
<td>Viewing or creating art stimulates parasympathetic response Viewing or creating art causes autonomic system balance Art changes attitudes, emotional states and perception of pain</td>
<td>Parasympathetic response to engaging with art</td>
</tr>
<tr>
<td>Rockwood Lane, M.T. &amp; Graham-Pole, J. (1994). The power of creativity in healing:</td>
<td>Developed an arts program in a hospital with the goal of demonstrating</td>
<td>Used art as a healing “Nurses unique</td>
<td>Art as a way of assisting the</td>
<td>Implemented an art program in a</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>------------------</td>
<td>-----------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>A practice model demonstrating the links between the creative arts and the art of nursing (203-222). In P.L. Chinn &amp; J. Watson (Eds). <em>Art &amp; Aesthetics in Nursing</em>. New York: National League for Nursing Press.</td>
<td>links between creative arts and healing arts</td>
<td>modality because she was drawn to it, not as a part of a program</td>
<td>relationship with patients allows incorporating art into care” p 205</td>
<td>patients voice and artistic expression</td>
<td>bone marrow transplant unit</td>
</tr>
<tr>
<td></td>
<td>Art used as a therapeutic tool</td>
<td></td>
<td></td>
<td>Art as a vessel for feeling</td>
<td>Incorporated passive and active art activities</td>
</tr>
<tr>
<td></td>
<td>Art linked to transcendence through allowing the expression of what lies within</td>
<td></td>
<td></td>
<td>Value in reflection on the product of art</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art as a way of seeing the self and the situation clearly</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art as a way of finding meaning</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art is a way of being in the moment and finding beauty in the moment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Art creates movement</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C:

RESEARCH LITERATURE
<table>
<thead>
<tr>
<th>Reference</th>
<th>Attributes</th>
<th>Model case</th>
<th>Additional cases</th>
<th>Antecedents and consequences</th>
<th>Empirical referents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haltiwinger, E., Rojo, R. &amp; Funk, K. (2012). Living with cancer: Impact of expressive arts. <em>Occupational Therapy in Mental Health</em>, 27 (1), 65-86.</td>
<td>Case study of a lymphoma patient who used art to ‘reestablish her occupational identity as a catalyst to recovery’ Focus on an occupational therapy use of art as a treatment modality with patients with cancer</td>
<td>Patient participated in art group even though she refused to join any other type of support group. Meeting with group for camaraderie, use of art to build a legacy and redefine meaning Crafts were very satisfying to participant</td>
<td>Part of health is the ability to engage in activities that give purpose and meaning to life Art for expression of feelings Art for learning coping skills that can translate to other arenas Non-verbal communication may be less threatening than verbal communication Chance to be a person beyond an illness</td>
<td>Transformation of reaction to illness and what it meant to her life. Outcome of art participation was increase in resilience</td>
<td></td>
</tr>
<tr>
<td>Marin, E. (2011). Pain and knowledge: Artistic expression and the transformation of pain. <em>The Arts in Psychotherapy</em>, 38, 239-246.</td>
<td>Study of the art of 6 professional artists who used art to deal with pain Auto photography of Jo Spence when dealing with breast CA Drawings and sculptures of Eva Hesse. She escaped the holocaust, but extended family did not, subsequent suicide by mother, died of brain CA at 34. She used art to make internal struggles external and transform pain through abstraction Tracy Emin uses art to relive and repeat sexual abuse. Her art does not</td>
<td>Art therapists support pts to find their own expression Art as a necessity of life Examples of people who had psychotic attacks from censorship and not being able to create</td>
<td>Art is a symbolic language Art compresses the past present and future Art expresses that which has no words Process of experimentation and learning doesn’t stop with the final art work Commitment, embodiment and</td>
<td>Ritualistic aspects present in all 6 stories Expression is heterogeneous Transformation relies on interaction with the product of art Embodied images more intense than diagrammatic images</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>------------------</td>
<td>-------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td>seem to bring resolution</td>
<td></td>
<td></td>
<td>rejection of authority</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multiple genres of Sophie Calle. Exorcism of pain through repetitive sharing</td>
<td></td>
<td></td>
<td>Need a safe space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nancy Spero dealt with war and the oppression of women through recasting them as powerful rather than victims</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lygia Clark developed a treatment for others using relational objects to touch bodies to treat people in a pre-verbal way</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moller, A.C., Elliot, A.J. &amp; Maier, M.A. (2009). Basic hue-meaning associations. <em>Emotion</em>, 9 (6), 898-902.</td>
<td>Red and green have specific effects on emotion – empirically tested in this study</td>
<td>Red positively related to failure and negatively related to success</td>
<td>The meaning of color extends to verbal metaphors, i.e. ‘red tape’ or ‘red flag’</td>
<td>Beginning of understanding of how color may influence meaning and mood</td>
<td>Laboratory testing of response to color</td>
</tr>
<tr>
<td></td>
<td>Red means danger and awareness as well as sexual availability</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green means success</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Goal: decrease stress increase quality of life</td>
<td>Art for concrete representation in meaningful and personal manner</td>
<td>Most common intervention is group, but most people with cancer don’t participate</td>
<td>8 week structured program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Based in self-regulation theory</td>
<td>Focused expression of unpleasant experiences for improving medical symptoms</td>
<td>Left brain for verbalization of meaning of art</td>
<td>Had dropouts from progressing illness or complications, so wonder about result data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Examines schema from objective and subjective experience</td>
<td>MBAT to integrate brain pathways and decrease stress</td>
<td>Also significant improvement in social health</td>
<td>No change in physical health, but significant change in mental health</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>------------------</td>
<td>-----------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>Rockwood Lane, M. (2005b). Spirit body healing-A hermeneutic, phenomenological study examining the lived experience of art and healing. <em>Cancer Nursing</em>, 28(4) 1-7.</td>
<td>Art for self-healing, self-expression and self-awareness People went to a place inside themselves where they found meaning</td>
<td>University of Florida incorporates art into patient experience and life Process of art as healing resembles process of self-transcending Examples of instances when art became more important than physical experience Art as transcendence</td>
<td>Experienced a shift of consciousness Allowed participants to see their life in a different way Art as a way of being outside oneself to see oneself and come up with different ways of coping Healing started with spiritual healing Art really helped with the fear Learning to trust oneself and instinct when making art There is a movement with rhythm intensity and life</td>
<td>Asked question was the process of art a healing experience? Asked what art felt like in the body Most people had a spiral between themes</td>
<td></td>
</tr>
<tr>
<td>Stuckey, H. L. &amp; Nobel, J. (2010). The connection between art, healing and public health: A review of the current literature. <em>American Journal of Public Health</em>, 100 (2), 254-263.</td>
<td>Four primary therapies: Music engagement Visual arts therapy Movement based creative expression Expressive writing</td>
<td>Art as refuge from intense emotions Art used by cancer patients to incorporate cancer into their life story</td>
<td>Need for meaning and relevance in daily life Health is more than the absence of</td>
<td>Comprehensive reviews were found for music and expressive writing therapies</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Attributes</td>
<td>Model case</td>
<td>Additional cases</td>
<td>Antecedents and consequences</td>
<td>Empirical referents</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>------------------</td>
<td>------------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Visser, A. &amp; Op’t Hoog, M. (2008). Education of Creative Art Therapy to Cancer Patients: Evaluation and Effects, <em>Journal of Cancer Education</em>, 23:2, 80-84</td>
<td><em>Need for whole person interventions for creating and sustaining health</em>&lt;br&gt;<em>Studied creative expression in clinical and informal settings to promote wellness and healing</em></td>
<td><em>Creation of art used to improve expression and increase coping</em></td>
<td><em>Decreased ability to do ADLS over the 8 weeks of the course – attributed to serious illness</em></td>
<td>Visual art therapies resulted in reduction in stress and anxiety and improved symptom management</td>
<td></td>
</tr>
<tr>
<td>Wood, M.J.M., Molassiotis, A. &amp; Payne, S (2011). What research evidence is there for the use of art therapy in the management of symptoms in adults with cancer? A systematic review. <em>Psycho-oncology</em>, 20, 135-145.</td>
<td><em>Explorative evaluation effect study with 35 cancer pts, mostly women with breast cancer, to examine effect of an art intervention</em>&lt;br&gt;<em>Combination of art therapy with other relaxation methods</em></td>
<td><em>Participant goals for participating in art changed over time</em></td>
<td><em>60% of participants said that the course was a positive change in their life</em>&lt;br&gt;<em>Statistical analysis said that the course did change the quality of life for participants</em></td>
<td><em>Research still in its infancy</em>&lt;br&gt;<em>Symptoms included physical, social, psychological and emotional</em></td>
<td><em>Most frequently studied population for the use of art to relieve cancer symptoms is women with breast cancer</em>&lt;br&gt;<em>Qualitative studies showed that art can be used for defense of selfhood</em></td>
</tr>
</tbody>
</table>
APPENDIX D:

EMAIL TO PROFESSIONAL AND PERSONAL CONTACTS
EMAIL TO PROFESSIONAL AND PERSONAL CONTACTS

Dear ……

My name is Lisa Wayman. I am a PhD nursing student at the University of Arizona. I am conducting a qualitative descriptive study on the use of art as a healing intervention in the context of chronic illness. The goal of this research study is to identify, describe and explain the use of visual art as a healing intervention in the context of chronic illness. I would like to interview people with chronic illness who have created visual art for healing. Would you assist me in recruiting participants? Participants in this study should meet the following inclusion criteria:

1. English speaking
2. Access to a phone or computer for the interview
3. Living with a chronic illness that is not primarily psychiatric for at least 12 months
4. Participated in the creation of visual art as a healing intervention in the past 24 months
5. Created at least one piece of art
6. Be willing to share a picture of the participant created art with the researcher
7. Able to participate in a one to two hour long interview
8. Able to have insights into behaviors and responses
9. Eighteen years old or older
10. Not currently a hospice patient

Please post the recruitment flyer (attached) where potential participants will see it. If there is someone who you think would be an appropriate participant please feel free to ask them to contact me if they are interested. Please forward this email and the recruitment flyer (attached) to colleagues who may also be able to identify potential participants for this study. I appreciate your assistance.
APPENDIX E:

SAMPLE RECRUITMENT ADVERTISEMENTS
Creating Art as a Healing Intervention Research

Have you created art for healing?

Would you be willing to discuss your experience with a researcher? If so, consider enrolling in this research study.

Participation in this study will involve sharing a photograph of one of your pieces of art and participating in a one to two hour interview.

This study is being done to better understand how art can be used as a healing intervention for people with chronic illness.

If interested call or email
Lisa Wayman
Doctoral Candidate in Nursing
University of Arizona
623-776-6766
lisaway@cox.net
APPENDIX F:

SCREENING SCRIPT
SCREENING SCRIPT

Thank you for your interest in this research study. I am so happy that you called. This study is being conducted to describe what happens when people with chronic illness participate in creating art in order to provide information that will be helpful to people to implement programs and for people who research art interventions. If you chose to participate in this study you will be asked to send me a picture of a piece of art you made, either by mail or email, and then participate in a one to two hour interview by phone or by Skype. I may also call you back to check that what I describe from your interview is correct. Are you still interested?

If the possible participant says no I will say: ‘Thank you for your interest and call. I want to thank you very much for contacting me and for taking time from your busy life to express interest in this study.’

If possible participant says yes I will say: ‘I have a few questions that need to be asked to determine if you are eligible to participate in this study.’

1. Are you over 18 years old?
2. Do you have access to a phone or computer for the interview?
3. Do you have a chronic illness?
4. What illness do you live with, and how long have you lived with it?
5. Do you use art to primarily treat a psychiatric illness?
6. Have you created visual art as a healing intervention in the past 24 months?
7. Would you be willing to share a picture, electronically through email or by mail, of your art with me?
8. Are you able to participate in an interview for one to two hours?
9. Are you currently a hospice patient?

If numbers five and nine are answered with a no and the rest of the questions with a yes I will say:

‘Thank you for responding to these questions. I am pleased to inform you that you are eligible to participate in this study. The next step is to read you the explanation of the research and the research disclosure. Do you have time for that now, or would you like me to call you at another time? After you assent to the research I’ll send you a copy of the disclosure form and a stamped self-addressed envelope so you can mail me a photograph of a piece of art. When I receive the photograph by mail or email I’ll call you to set up an appointment for the interview. I want to thank you very much for contacting me and for taking time from your busy life to express interest in this study. I very much appreciate it.’
If question five or nine is answered with a yes, or any other question answered with a no, then I will say:

‘Thank you for responding to these questions. However, you do not meet the criteria for participating in this study. I want to thank you very much for contacting me and for taking time from your busy life to express interest in this study.’
APPENDIX G:

EXPLANATION OF THE RESEARCH
I am conducting a qualitative descriptive study on the use of art as a healing intervention in the context of chronic illness. The goal of this research study is to identify, describe and explain the use of visual art as a healing intervention in the context of chronic illness. If you chose to participate in this study you will be asked to send a picture of one piece of art you created either by mail or email to the researcher. I will then contact you to set up an appointment by phone or by Skype, whichever you prefer. The interview will last one to two hours and you will be asked questions about creating art as a healing intervention. A follow up interview may be done to ensure that I correctly understood you. You may choose to not answer any question or to stop your participation at any time.

While there are no anticipated physical, psychological, social or economic risks identified for this study, you may experience concern or strong emotional responses when reflecting and recalling difficult aspects of your life and illness experiences. In addition, participation in the interviews may precipitate self-discoveries that are difficult to reconcile. If you experience any negative responses you will be referred to your primary care provider for follow-up. There are no immediate physical benefits to participation in this study. There will be no compensation for participating in this study. However, you may benefit from the process of self-discovery and gain a deeper understanding of the importance that art had had for you within the context of their chronic illness. You may also gain a sense of satisfaction by participating in a study that helps improves nursing’s understanding of the health benefits of art during chronic illness.
APPENDIX H:

THE UNIVERSITY OF ARIZONA RESEARCH DISCLOSURE FORM
THE UNIVERSITY OF ARIZONA RESEARCH DISCLOSURE FORM

1 Study Title: Art as a healing modality in chronic illness

2 Principal Investigator: Lisa M. Wayman, RN, MSN, AHN-BC

3 Advisor: Mary Koithan, RN-C, CNS-BC

5 Disclosure:

You are being invited to participate in a research study. The purpose of this study is to learn more
about art as a healing intervention. Twenty five people will be enrolled in this study. If you chose to take
part in this study you will be asked to share a piece of visual art that you created for healing. You will
also be asked to participate in a phone or computer interview lasting approximately one to two hours. The
interviews will be about your experience of creating art as healing. You may be contacted a second time
for an interview lasting approximately one hour to answer questions that will clarify previous information
or to confirm the findings after the data analysis is complete. Interviews will be audio recorded. The
information you share may be analyzed through May of 2014.

Your participation is voluntary. You may refuse to participate in this study. If you decide to take
part in the study, you may leave the study at any time. No matter what decision you make, there will be
no penalty to you and you will not lose any of your usual benefits. Your decision will not affect your
future relationship with The University of Arizona. If you are a student or employee at the University of
Arizona, your decision will not affect your grades or employment status.

While there are no anticipated physical, psychological, social or economic risks, your
participation in this research may cause concentration on difficult aspects of life that may result in
unpleasant memories surfacing. It may also precipitate self-discoveries. You will be given the opportunity
to stop the interview at any point should you experience any distress because of the topic being discussed.
If you experience difficulties, you will be referred to your primary care provider for follow-up. The
University of Arizona has no funds set aside for the payment of treatment expenses for this study.
There may be no direct benefits to you from participating in this study however this study may help you to explore what art has meant to you and your health. This study may provide information of how art can be used as a healing modality.

Information about you will be kept confidential to the extent permitted or required by law. People who have access to your information include the Principal Investigator and the dissertation committee. Representatives of regulatory agencies such as the Office of Human Research Protections (OHRP) or the Food and Drug Administration (FDA) and entities such as the University of Arizona Human Subjects Protection Program may access your records to make sure the study is being run correctly and that information is collected properly. Reports regarding this research study will not include your name or any personal identifiers.

Participation in this study will require that you provide a photograph of your visual art either by mail or electronically. No other costs are anticipated. No payment will be made for taking part in this study. If you chose to send a photograph by mail you will be provided with a stamped self addressed envelope in which to send a photograph of your art. The photograph of your art will be discussed with you during the interview and included as data in the research study. Any parts of the photograph that may identify you will be digitally altered prior to sharing with the research committee or publication. If you do not want the photograph of your art used in a dissertation or publication please notify the primary researcher and the photograph will be used for analysis only, but not included in the dissertation of publication. Photographs will not be returned and will be destroyed upon completion of the study.

An Institutional Review Board responsible for human subjects research at The University of Arizona reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research. For questions, concerns, or complaints about the study you may contact the principle investigator Lisa Wayman, RN, MSN, AHN-BC Doctoral Candidate at lwayman@nursing.arizona.edu or 623-776-6766. You may also contact the principle investigator’s advisor Mary Koithan PhD, RN-C, CNS-BC at mkkoithan@nursing.arizona.edu or 520-626-2036.
For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact the Human Subjects Protection Program at 520-626-6721 or online at http://ocrp.vpr.arizona.edu/irb
APPENDIX I:

ART DATA COLLECTION FORM
ART DATA COLLECTION FORM

1) What does the artwork seem to want the observer to notice?
2) What is the work showing the observer?
3) What is unusual about this piece of art?
4) What is the emotional impact of this piece of art?

(Rancour & Barrett, 2011)
APPENDIX J:

INTERVIEW GUIDE
INTERVIEW GUIDE

1) Demographic questions:
   1. How old are you now
   2. How long have you lived with your disease process
   3. When did you participate in creating art?

2) Grand tour question:
   1. Tell me about the artwork in the picture you sent

3) Aim 1: What are the characteristics of the people who participate in art as a healing intervention?
   1. Questions to answer aim 1:
      i) What do you think made you want to participate in creating art?

4) Aim 2: What intervention facilitator characteristics influenced the participant’s experience with art as a healing intervention?
   1. Questions to answer aim 2:
      i) What did you find helpful about the person who assisted you in creating art?
      ii) Was there anything that you found not helpful?

5) Aim 3: What were the characteristics of the context for creating art?
   1. Questions to answer aim 3:
      i) Where did you create art?
      ii) Who was with you?
      iii) What did you find helpful?
      iv) What did you find unhelpful?

6) Aim 4: What were the intervention components and dose?
1. Questions to answer aim 4:
   
   i) What did you do when you made art?
   
   ii) What was the experience like for you?
   
   iii) How often did you participate in the activity?
   
   iv) How many pieces of art did you make?
   
   v) What amount of art creation would you advise for people wanting to use art for healing?

7) Aim 5: What was the participant's reaction?

1. Questions to answer aim 5:

   i) What did you think about creating art?

8) Aim 6: How did the participant enact and adhere to the treatment?

1. Questions to answer aim 6:

   i) How much did you participate in creating art (if not answered with questions above)

9) Aim 7: What were the intermediate outcomes of participation?

1. Questions to answer aim 7:

   i) What do you think that art did for you in the short term (First few weeks after making art)?

10) Aim 8: What were the ultimate outcomes of participation?

1. Questions to answer aim 8:

   Were there any effects of making art that you noticed more long term?
APPENDIX K:

CODE BOOK
1. Characteristics of Participants: qualities of the participant that affected the use of art as a healing intervention
   a. Illness Experience
      i. Physical: bodily aspects of the illness experience
         1. Symptoms: aspects of the illness that the participant experienced with their bodies
            a. Pain: unpleasant physical sensations
            b. Decreased Energy: limited capacity to engage in activity
            c. Functional Limitations: Inability to do desired activities
         2. Treatment Issues: actions taken to cure a disease or alleviate the symptoms of a disease that did not work as intended in people who used art as a healing intervention
            a. Medication Ineffectiveness: medications did not adequately relieve symptoms
            b. Side Effects: unpleasant unintended effects of a treatment
      ii. Mental: ways of thinking about the illness experience in people who used art as a healing intervention
         1. Illness Awareness: attention to the illness and symptoms
         2. Illness Obsession: absorption in the illness experience to the extent that it dominates the participant’s thoughts
      iii. Emotional: facets of feeling and affect in people who used art as a healing intervention
         1. Sadness: melancholy affect
         2. Anger: strong feeling of displeasure at illness experience
         3. Fear: apprehension about the future
         4. Frustration: exasperation with dealing with illness
      iv. Social: how participants who used art as a healing intervention interacted with other people and with society
         1. Illness Invisible: illness not readily apparent
         2. Reluctant to Communicate: limiting sharing of the illness experience
         3. Unable to Work: inability to maintain out of the home employment
         4. Financial Worry: concern about monetary issues
      v. Spiritual: how living with chronic illness affected the existential experience in people who used art as a healing intervention
         1. Facing Mortality: Confronting the fact that one will die
         2. Questioning Meaning of Life: Struggling to find value in life accomplishments
   b. Art Experience: the level of involvement that participants had in creating art prior to illness in people who used art as a healing intervention
      i. Beginner: never created art before becoming ill
      ii. Discontinuous: created art in the past, but had not made art for years before becoming ill.
Continuous: created art throughout life without significant pause in engagement

c. Art Attitude: the general feeling about art in people who used art as a healing intervention
   i. Appreciation: admiration for works of art
   ii. Passion: feeling that art is an essential part of life
   iii. Nervous: anxiety about art skills

2. Characteristics of the Intervention Facilitator: the qualities of the art facilitator that affected the use of art as a healing intervention
   a. Accessibility: the open interaction between participant and the intervention facilitator
      i. Relationship: connections that were broader than the art experience
      ii. Availability: easy to reach for help
   b. Demeanor: personal manner
      i. Pleasant Attitude: positive manner
      ii. Encouraging: Emboldening others to create art
      iii. Non-Judgmental: non-derisive
   c. Instruction: teaching how to use art as a healing intervention
      i. Material Support: provided needed supplies
      ii. Skill Building: improving art ability
      iii. Allowing: open to participants creating their own work

3. Characteristics of Context: the circumstances in which participants created art.
   a. With whom art created: the people with whom the participants actively engaged in the creative process of making art
      i. Solitary: making art when alone
         1. Always Alone: the creation of art as only a solitary endeavor
         2. Sometimes Alone: art creation with others at times and alone at times
      ii. Group: making art with others
         1. Illness Based Social Support: purpose of the group is to support people with the same diagnosis
         2. Enjoyment: purpose of the group is to have fun making art
         3. Instruction: purpose of the group is to build art making skills
   b. Environment for Art Creation: the place that the art creation occurred
      i. Relaxing Surrounding: the setting for art creation
      ii. Modified Work Space: an environment accommodated for limitations

4. Components and dose
   a. Components the active ingredients of creating art for the activity to be a healing intervention
      i. Color: creating with different hues
         1. To Convey Meaning: using hues as symbols
         2. To Elicit Emotion: using color to provoke affective states
         3. For Enjoyment: Using color for the pleasure of seeing different hues
      ii. Content: the subject matter of the piece
         1. Illness Based: the illness experience is the subject matter for the majority of the pieces the participant created
2. Non-Illness Based: the illness experience is not the subject matter for the majority of the pieces the participant created
   iii. Material Manipulation: the physical interaction with the materials of art
       1. Hands-On: enjoyment in the manual manipulation of the materials of art
       2. Layering: putting images over each other
       3. Texturing: developing the quality of the surface so that it either had differences that could be felt or the appearance of differences that could be felt

b. Dose: the quantity and intervals of art creation the participants reported
   i. Art Daily: art was a routine part of life
   ii. Art Not Daily: art was not a routine part of life
   iii. Greater Than Five Pieces: greater than five pieces of art total created since enacting art as a healing intervention
   iv. Fewer Than Five Pieces: fewer than five pieces of art total created since enacting art as a healing intervention

5. Enactment and adherence
   a. Enactment: starting to creating art as a healing intervention
      i. Encouragement: what encouraged people to begin creating art as a healing intervention
         1. Invitation: a personal offer to create art
         2. Opportunity: the chance to try creating art
         3. Something to do: Something to do
         4. Past Experience: prior engagement with creating art
      ii. Discouragement: factors that demotivated the participant to begin to use of as a healing intervention
         1. Financial: reluctance to invest funds in an unknown activity
         2. Unnecessary: self-assessment that no intervention is needed
         3. Poor Skill: self-assessment of inability to create art
   b. Adherence: the participant continuing the intervention
      i. Encouragement: the factors that promote continuation of the use of art as a healing intervention
         1. Enjoy Skill Building: pleasure in improving ability to create art
         2. Enjoy Process: pleasure in the experience of interacting with the materials of art
      ii. Discouragement: factors that were demotivating for participants to continue art as a healing intervention
         1. Harsh Critique: derisive comments about a participant’s art
         2. Dependent on Facilitator: does not create art without facilitator assistance

6. Immediate Outcomes: outcomes that the participant experienced during the time they were actively creating art
   a. Mental: changes to thinking patterns experienced by participants during the time they were actively creating art
      i. Expression: Stating thoughts or feelings through an art medium
      ii. Interest: absorption in the creative process to the exclusion of other thoughts
      iii. Present in the Moment: thinking of only the current moment
b. Emotional: feelings experienced by participants during the time they were actively creating art
   i. Enjoyment: pleasurable reaction to the elements of the process of art
   ii. Contentment: feeling of calm satisfaction
   iii. Freedom: feeling unrestricted
   iv. Control: feeling of power

c. Physical: the bodily sensations that the participant experienced during the time they were actively creating art
   i. Rest: physical relaxation
   ii. Forget pain: Forget pain

d. Social: the interactions with others that the participant experienced during the time they were actively creating art
   i. Illness Based Socialization: creating art is an opportunity for socialization with others with a similar illness
   ii. Non-Illness Based Socialization: creating art is an opportunity for socialization with others not based on the illness experience

e. Spiritual: sacred experiences that the participant had during the time they were actively creating art
   i. Connection to nature: a deep affinity for the environment while creating art
   ii. Connection to beauty: a sacred feeling when creating something aesthetically pleasing
   iii. Connection to a higher being: a feeling of reverence for the divine while creating art

7. Intermediate Outcomes: the aspects of the experience that lasted beyond the time the participants were actively creating art
   a. Piece of art: the created object of visual art
      i. Representation of Self: art symbolizes important aspects of the art creator’s life
      ii. Representation of Values: art symbolizes the values of the art creator
      iii. Representation of Transformation: art that symbolizes changes in the art creator’s life
   b. Mental: changes to thinking patterns experience by participants that persisted beyond the time they were actively creating art
      i. Process Experience: reflecting on the product of art to understand life experience
      ii. Motivation: using past creative experience as incentive to overcome present challenges
   c. Emotional: feelings experienced by participants about their art experience that lasted beyond the time the participants were actively creating art
      i. Enjoyment in viewing own art: pleasure from interaction with one’s own product of art
      ii. Pride: a sense of accomplishment
   d. Social: interactions with others that the participant experienced with an art focus, but not while actively creating art
      i. Communication: art used to express self to others
ii. Social Activity: interactions with others with an art focus, but that do not occur during the creation of art

8. Ultimate Outcomes: outcomes that were enduring changes in the participants
   a. Mental: enduring changes in the way the participants thought about their life
      i. Non-Illness Focus: emphasis on non-disease aspects of life
      ii. Positive Self-Perception: self-assessment as worthwhile person
      iii. Positive Situation Perception: self-assessment of a high-quality life
   b. Emotional: enduring changes to the disposition of the participant
      i. Appreciation: ongoing feeling of gratitude
      ii. Enjoyment: ongoing pleasure in everyday events
   c. Social: enduring changes in the way participants interacted with others
      i. Altruism: art for the benefit of others
   d. Spiritual: existential changes in the participants
      i. Making Meaning: attributing significance to the events of one’s life
      ii. Coping with Mortality: continued engagement in life despite a realization that one will die
REFERENCES


Miller, S.W., Wooster, D. & Li, J.L. (2010). Does species trait composition influence macroinvertebrate responses to irrigation water withdrawals; Evidence from the intermountain west, USA. *River Research and Applications,* 26, 1261-1280.


