

Informal learning within the mother-daughter dyad

by

Deanne Grier Yates

A.A.S., Kansas City Kansas Community College, 2009

B.G.S., Fort Hays State University, 2010

M. S., Pittsburg State University, 2012

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Adult Learning and Leadership
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2020

Abstract

Formal, non-formal and informal are the accepted descriptions of locations and forms of adult learning. Defining where and recognizing when formal and non-formal learning takes place is uncomplicated and straightforward; formal learning and non-formal learning are planned activities and confined to organized settings. Informal learning is unplanned and occurs in the course of everyday living.

The nature of informal learning makes defining where and when it occurs a challenge. Utilizing Marsick and Volpe's (1999) six characteristics of informal learning, this qualitative study identifies informal learning within the mother-daughter dyad and supports Jarvis' (2012) theory of learning in the social context. The narratives of the participants lived experiences exhibit the influence of informal learning on the middle-aged daughter's perception of aging. The effect of informal learning on stereotype formation, moral development, and roles within the family were also established.

Informal learning within the mother-daughter dyad

by

Deanne Grier Yates

A.A.S., Kansas City Kansas Community College, 2009

B.G.S., Fort Hays State University, 2010

M. S., Pittsburg State University, 2012

A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Adult Learning and Leadership
College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2020

Approved by:

Major Professor
Royce Ann Collins, Ph.D.

Copyright

© Deanne Grier Yates 2020.

Abstract

Formal, non-formal and informal are the accepted descriptions of locations and forms of adult learning. Defining where and recognizing when formal and non-formal learning takes place is uncomplicated and straightforward; formal learning and non-formal learning are planned activities and confined to organized settings. Informal learning is unplanned and occurs in the course of everyday living.

The nature of informal learning makes defining where and when it occurs a challenge. Utilizing Marsick and Volpe's (1999) six characteristics of informal learning, this qualitative study identifies informal learning within the mother-daughter dyad and supports Jarvis' (2012) theory of learning in the social context. The narratives of the participants lived experiences exhibit the influence of informal learning on the middle-aged daughter's perception of aging. The effect of informal learning on stereotype formation, moral development, and roles within the family were also established.

Table of Contents

List of Figures	x
List of Tables	xi
Acknowledgements	xii
Dedication	xiv
Chapter 1 - Introduction.....	1
Background.....	1
Researcher Perspectives.....	2
Conceptual Framework.....	3
Informal Learning	4
Family Systems Theory	4
Mother – Daughter Relationship.....	5
Learning in the Social Context Theory.....	5
Female Perspective	6
Rationale for Study	7
Research Purpose.....	7
Research Questions.....	8
Research Design	8
Narrative Inquiry.....	9
Participants.....	9
Significance	10
Assumptions.....	10
Limitations	11
Definitions and Terminology.....	11
Summary.....	12
Chapter 2 - Literature Review.....	13
Introduction.....	13
Adult Learning.....	13
Informal learning	16
Informal Learning within the Family.....	19

Adult Learning Theories	21
Social Cognitive Learning Theory	21
Experiential Learning Theory	23
Learning in the Social Context Theory	25
Adult Development	28
Transitions Theory	29
Life Events Theory	29
Age/Stage Theory	30
Woman’s Perspective.....	33
Family Systems Theory	34
General System	35
Family Systems	36
Mother-Daughter Relationship	39
Guiding Theories for Research	41
Summary	41
Chapter 3 - Methodology	43
Research Questions	43
Research Design	43
Methodological Framework.....	45
Theoretical Framework.....	46
Methodology	47
Discipline	50
Participants.....	50
Research Site.....	51
Human Rights Protection.....	52
Ethical Considerations	52
Participant Consent	52
Pilot Study.....	53
Bracket Interview	53
Data Collection	54
Initial Meeting.....	55

Photographs.....	56
Cognitive Mapping	57
Data Analysis	59
Data Interpretation	60
Data Management	61
Trustworthiness and Rigor.....	61
Triangulation.....	62
Member Checks	62
Peer Debriefing	63
Summary.....	63
Chapter 4 - Data Analysis	65
Overview of Research.....	65
Research Questions.....	65
Introduction to the Participants.....	66
Rose and Susan	66
Lu and Becky	68
Dot and Ginger.....	70
Findings	71
Research Question 1	72
Daily routines.....	72
Internally or externally situated jolt.....	74
Not highly conscious.....	76
Haphazard and influenced by change.	78
Inductive process of reflection and action.	80
Linked to the learning of others.....	82
Research question 2:	83
Research Question 3:	87
Daily routines.....	88
Internally or externally situated jolt.....	89
Inductive process of reflection and action	90
Other Themes.....	91

More like father.....	92
Changing roles	93
Summary.....	96
Chapter 5 - Conclusion	97
Introduction.....	97
Purpose of the Study.....	97
Research Questions.....	97
Discussion of Findings.....	98
Informal Learning	98
Moral Development	100
Family Roles	102
Perception of Aging	105
Implications	107
Areas for Further Research.....	109
Concluding Remarks.....	109
References.....	111
Appendix A - Informed consent	122
Appendix B - Participant Information Form.....	124
Appendix C - Questions for Mothers.....	125
Appendix D - Questions for Daughters	126
Appendix E - Questions for Rose and Susan	127
Appendix F - Questions for Lu and Becky	128
Appendix G - Questions for Dot and Ginger	129

List of Figures

Figure 2.1 Bandura (1989) Social cognitive learning theory.....	22
Figure 2.2 Kolb & Fry (1975) Experiential learning style.....	24
Figure 2.3 Jarvis (2012) Learning in the social context.....	26
Figure 3.1 Adapted from Kim (2016, p.33) Theory levels	46
Figure 4.1 Susan conceptualized daily routines.....	89
Figure 4.2 Becky’s internal or external jolt conceptualization	90
Figure 4.3 Ginger’s inductive process of reflection and action	91

List of Tables

Table 2.1 Erikson (1997) Three stages of adult development	31
--	----

Acknowledgements

There are so many people to thank for their support, encouragement, patience, tough love and belief in me. This was a journey I never imagined and was only possible because of their unwavering support.

To my mentor and friend Sandy: You saw something in me and believed in me when I was full of doubt. Thank you for demonstrating courage, honesty, hard-work, and compassion. You made a profound impact on my life and the life I was able to provide my children.

To my anatomy and physiology professor: Years ago, I quit college and thought I'd never look back. Life was good but I always felt something was missing. I decided to go back to school and thanks to you, an adjunct anatomy and physiology professor at a local community college, I found the courage to face my past so I could look forward and continue my education. Without your support and understanding I would not be where I am today. Though you will never know, you will always be part of my story thank you.

To my committee members: Dr Jacqueline Spears, for your attention to detail and wise counsel; Dr. Judy Favor, who had to live through my first attempts at academic writing, your belief in me and purple pen helped me grow in many ways; Dr. Alex Red Corn, for encouragement first as a colleague, and later as a mentor, providing encouragement when it was needed most; and Dr. Amber Vennum for leadership as my outside chair. Thank you for your unique contribution to my success as a scholar.

To Dr. Collins, my major professor: Words are not enough to pay my debt of gratitude. Without your wisdom, support, and ability to talk me off the ledge I would never know what I am capable of accomplishing. You accepted my purposeful procrastination and never gave up on

me, even when I wanted you to. I have learned so much from working with you and watching you work. I am forever grateful.

To my co-workers: Thank you for listening to me and reading things you did not want to read. Your kind words and belief in me helped make this happen. Thank you.

To my children: Bret, Leslie, Kali, and Max, you fill my life with joy. Thank you for standing by me through all the late nights writing. You amaze me and I look forward to watching your continued growth. Remember you never know the impact your words and deeds have on others, continue to be kind and supportive.

To my husband Dan: Your love grounds me and makes me believe in myself. Your encouragement, understanding, and commitment made this possible. Thank you for being the one who completes me and makes life so much fun.

Dedication

To the four people who guide my life: my mother-in-law Jessie, my father-in-law Jack, my father, and my mother. Jessie demonstrated the love of learning and encouraged me to never stop learning. Jack showed me the importance of sitting quietly with someone, sometimes the most important thing is to just be there. My father loved life and embraced each day, his favorite saying was *life is not a dress rehearsal*. Every day I remember his words, and am guided by his curious spirit and unending love. Most importantly, to my mother, for teaching me how to be a woman, a wife, a mother, love unconditionally.

Chapter 1 - Introduction

Background

A son's a son till he takes a wife, but a daughter's a daughter for the rest of her life' is an old Irish proverb that illustrates the unique relationship that exists between mothers and daughters. This expression is often shared between elderly friends to excuse the infrequency of their son's visit or to boast of an upcoming visit by their adult daughter. Those same adult daughters often exclaim "I'm becoming my mother!" when they recognize a phrase or action that reminds them of mom. This frequently offhand remark takes on more meaning as both mother and daughter age (Fingerman, 1997). The special relationship that exists between mothers and daughters and an adult daughter's tendency to behave and react in a manner similar to her mother is the context for this research (Bojczyk, Lehan, McWey, Melson, & Kaufman, 2011; Chodorow, 1999). Research is broad on mother-daughter relationships as well as a mother's influence on her daughter's attitudes, beliefs and behaviors (Arroyo & Andersen, 2016; Bergman & Fahey, 1997; Ex & Janssens, 1998; Fischer, 1991; Shannon & Shaw, 2008; Shawler, 2004).

The social relationship of a family consists of role models and continually changing experiences that enhance learning and development (Wagner & Lang, 2011). Within the social setting of the family mother-daughter pairs are a rich, multilayered intergenerational relationships where skills and behaviors are developed and learned (Broderic, 1993). Learning takes place in social settings, affected by and closely related to the setting (Jarvis, 1987). Informal learning is identified as part of lifelong learning, but most research on informal learning has focused on the workplace or the virtual environment; informal learning in the family is recognized but under researched (Marsick, 2009; Schugurensky, 2000). The mother-daughter

dyad is a social setting where valuable informal learning occurs but there is little understanding about how it occurs.

Researcher Perspectives

A researcher does not enter into a study without prior life experiences and assumptions. They bring their worldviews, and beliefs or subjectivities to the research project (Creswell, 2007). People make decisions that can change the path of their life. The individual is usually the only one who truly understands the motivation behind decisions or the desire to take certain journeys. To gain deeper understanding of my participant's journey, I first reflected on my journey to help identify my subjectivities. The goal of reflection is not to become a blank slate but to be reflective of who I am and how that understanding can enrich the study (Bogdan & Biklen, 2007). Subjectivity influences both the research question and methodology. For purpose of clarity and integrity, Peshkin (1988) believes the researcher "should systematically identify their subjectivity throughout the course of their research" (p. 17). My position as a mother and daughter shaped the way I interacted and understood the participants of this study (Bhattacharya, 2017). Therefore, I identified and disclosed my subjectivities and address how they added clarity to my research.

When I reached middle aged, I experienced my father's decline in health and eventual death and watched as my mother entered her eighties as a widow. Sharing time with my father as he faced the end of his life with gratitude and humor, then watching my mother, after 60 years of marriage, rebuild her life and find her identity as a widow had a profound effect on me. As I reflect on my lived experiences and the events that influenced my thoughts of the old and how I expected to age, my thoughts return to my mother. The strongest memories of my mother are of her as a caregiver; she provided care for her children, husband, parents and now friends.

I only remember my grandmother as old and ill. She was a kind person but dependent on others and content to sit back and watch life from her kitchen window. I watched as my mother, without hesitation or complaint, became her mother's caregiver slowly transposing their established mother-daughter roles. In contrast, as my grandfather approached the end of his life he remained outgoing and interested in life; taking advantage of everyday even after being diagnosed with terminal cancer. I remember him living each day to the fullest, visiting family and friends, and caring about others without concern about what tomorrow might bring. My grandfather never needed the caregiving my mother was eager to provide; this caused her to feel less valued and needed. The role of caregiver brings meaning to my mother's life. Though my mother selflessly cared for her mother, her outlook and life more closely resemble her father.

During the time my mother has spent as caregiver, her smile and positive outlook have swayed my thoughts on aging. I believe as I age I will be thankful for all the events and experiences that shaped my life. The attitude and action of gratitude and love of life modeled by my mother have a strong influence on my beliefs of aging; it is a challenge for me to understand how a person can be sad, unfriendly and lack gratitude when old. As a mother it is my desire to pass the love of life and appreciation for each day and experience on to my children. I want my daughters to understand they have value beyond the role caregiver.

Conceptual Framework

The conceptual framework for this research starts with informal learning and then specifically used family systems theory, mother-daughter relationships, and social context of learning. Informal learning in the family is recognized as part of life-long learning from experience. However, most empirical research has not focused on this social setting, the concentration has been on virtual, and workplace informal learning (Eraut, 2000; Marsick, 2009).

The structure of the family provides the benefit of age, history and time for informal learning. These benefits provide the opportunity to learn skills through life experience and the connection of family allows more time for learning to occur (Cameron & Harrison, 2012). The process of informal learning within a family system is through existing interpretive frames that continually adjust and adapt within context and through reflection and retrospective recognition (Bennett, 2012; Schugurensky, 2000).

Informal Learning

Informal learning has been researched extensively in the workplace (Eraut, 2000; Marsick, 2009; Marsick & Volpe, 1999; Marsick & Watkins, 2001). Marsick and Volpe (1999) reviewed studies of informal learning in the workplace and determined informal learning can be identified by the following six characteristics: 1) daily routines 2) triggered by an internal or external jolt 3) not highly conscious 4) haphazard and influenced by chance 5) inductive process of reflection and action 6) linked to learning of others. These characteristics were used as the guiding informal learning framework for this research.

Family Systems Theory

Family system theory is concerned with the assumptions and beliefs of family members concerning how they act and their roles within the family (Fingerman & Berman, 2000). The structure of the family system provides opportunity for support, learning and growth throughout an individual's life span. Parent child relationships have been surveyed within the family system: father-daughter, mother-son, father-son, and mother-daughter (Fingerman, 1997; Sipsma, Biello, Cole-Lewis, & Kershaw, 2010; Stiffler, Sims, & Stern, 2007; Updegraff, Delgado, & Wheeler, 2009). Each dyad relationship has unique characteristics, but the mother daughter relationship appears to be most likely of all relationships to remain important for both parties (Bojczyk et al.,

2011). Family systems theory is useful in developing an understanding of the mother daughter relationship and how identity, beliefs, and assumptions are created and shared (Fingerman & Berman, 2000). Women's constantly shifting role within the family has a significant impact on their identity formation.

Mother – Daughter Relationship

This research study focused on the informal learning within the mother-daughter pair, specifically reflected through the daughter's perception and expectation of aging. There is a considerable amount written about informal learning, perception of aging, and the mother-daughter relationship, (Arroyo & Andersen, 2016; Fingerman, 1995; Gilligan, 2016); yet, the literature is lacking concerning how informal learning takes place and is reflected within the family. Informal learning is considered a learning process taking place in the workplace, home, community and family, but the family environment is often ignored (Hayes, 2000; Livingstone, 2001)

Learning in the Social Context Theory

Learning in the social context theory is an adult learning theory advanced from the idea that adults apply many reference points from past experiences to enhance learning from new experiences (Jarvis, 1987; Merriam & Brockett, 2007). Sharing many characteristics with Bandura's (1989) social cognitive theory and Kolb's (1984) experiential learning theory Jarvis (1987) stressed the role social context and reflection play in learning. Social context is how the person constructs experience; it exists as part of culture, social-economic situation and previous knowledge that shapes the person (Dyke, 2017).

Female Perspective

The mother-daughter relationship is recognized as relevant by both women (Bojczyk et al., 2011; Fingerman, 1995). The bond often carries into adulthood and adult daughters frequently characterize the relationship as close and intimate (Cochran, 1985). Research supports the strength, interdependence, and emotional connection shared by the mother-daughter dyad (Fischer, 1991; Shawler, 2004). Fisher (1991) finds the intensity of the mother-daughter bond to be higher than all other intergenerational bonds. This relationship is considered important to the self-definition of women and the connection deemed positive (LaSorda & Fodor, 1990). The significance of this unique relationship continues to grow as both mother and daughter age.

Chodorow's (1999) reproduction of mother's theory posits that "gender personalities are reinforced by differences in the identification process of boys and girls that also results from women's mothering" (p. 173). This process results in mother's who identify with their mother and relate to their daughters, whom they believe to be similar to themselves (Lawler, 2000). Gilligan (2016) expands on Chodorow's (1999) theory stating that femininity is defined through attachment, whereas masculinity is defined by separation. Females develop their identity through their attachment with their mothers and the shifting roles in the family through the life span (Gilligan, 2016; Sholomskas & Axelrod, 1986). The shifting roles requires women to be flexible. Cochran (1985) considers flexibility "important for women because these new roles may take them away from what used to be their sole function and principal identity" (pp. 3-4). Daughter's continually shift between dependence on their mother and separation throughout the adult relationship. This has a female perspective; a woman interrogating women about their understanding of informal learning within their distinct mother-daughter relationship.

Rationale for Study

Research on informal learning in the family is lacking. It is common for informal learning to be included in adult education research, but the majority of research focuses on informal learning in the workplace, places of instruction, or the computer and internet (Galanis, Mayd, & Garcia-Penalvo, 2015; Marsick & Watkins, 2001; Overwien, 2000; Yanchar & Hawkey, 2014). Research on informal learning in organizations highlights the importance of beliefs, values and context of learning, further confirming the difficulty linking informal learning to outcomes (Marsick, 2009). For example, Galanis, Mayd, Alier, and Garci-Penalvo (2015) recently researched informal learning through the use of computers. They concluded that informal learning is important and has value in both institutions and governments, due to social collaboration but believe attempts to find the appropriate method to validate learning lacking (Galanis et al., 2015). Further, Galanis et. al. (2015) exclude the existence and value of informal learning in the family in their research.

Family research has studied the effect of a mother's attitudes and beliefs on her daughter's behavior in areas as diverse as gender roles, career choice, menopause, and leisure activity (Ex & Janssens, 1998; Shannon & Shaw, 2008; Utz, 2008). Fingerman (2001) studied how mothers and daughters view their relationship, and Shawler (2004) explored the change over time in the mother-daughter relationship. This research studied informal learning within the mother-daughter dyad, demonstrated by their interaction, behavior and constructed meaning and the daughter's perception of aging.

Research Purpose

Informal learning is included in adult learning research but has mainly concerned with social settings other than the family (Hayes, 2000; Livingstone, 2001). The family and more

specifically the mother-daughter dyad is a unique social relationship where valuable informal learning occurs but there is little research into how it is demonstrated.

The purpose of this study was to examine informal learning within the mother-daughter relationship focused on how mothers and daughters construct meaning from an experience, memory, or conversations that contributes to informal learning and identified through characteristics of informal learning as stated by Marsick and Volpe (1999). Finally, the study examined how informal learning within the mother-daughter dyad is reflected in the daughter's perception of aging.

Research Questions

- 1: How are the characteristics of informal learning as outlined by Marsick and Volpe (1999) exhibited in the lived experiences of mother daughter pairs?
- 2: How is the influence of informal learning demonstrated in the daughters' insight and perception of aging?
- 3: How is learning in a social context demonstrated by the daughters?

Research Design

This study meets the five features of qualitative research defined by Bogdan and Biklen (2007): naturalistic, descriptive data, a concern with process, inductive data analysis, and interest in meaning. The naturalistic nature of this study is the examination of informal learning taking place within mother-daughter pairs. Descriptive data was collected through interviews, pictures, and cognitive mapping (Bogdan & Biklen, 2007). The study followed narrative inquiry, bound by the mother and daughter's telling of stories examining their understanding and reflection on the research questions. Data analysis was through an inductive approach, being viewed through my lens and experiences collecting the data (Creswell, 2004). The focus of this study

investigated the relationship between three mother-daughter dyads in relation the role of informal learning on their perceptions. The nature of the research problem addressed by this study was best suited for a qualitative design.

Narrative Inquiry

Various methodologies are available for use when conducting qualitative research. A methodology is a strategy or design process employed to link the research method to the experience being studied (Crotty, 1998). Narrative inquiry is a methodology used by researchers when seeking to understand experiences, through the telling and interpretation of personal experiences (deMarrias & Lapan, 2004). Human experiences are well suited to be to be expressed and shared through personal stories (Connelly & Clandinin, 1990). The participants shared stories of their experiences and memories related to the research questions (Baxter & Jack, 2008). Exploring the research questions through stories of lived experiences adds richness that is best captured through narrative inquiry (Craig & Huber, 2007; Creswell, 2007). This study was a thematic narrative inquiry of mother-daughter dyad and their perception and expectation of aging acquired through informal learning. Their understanding of informal learning was explored through meaning making of the experiences and memories of each dyad member. Exploring the questions through a variety of lenses allows different experiences and perspectives to be revealed and understood (Baxter & Jack, 2008).

Participants

Participation in this qualitative study was through purposeful sampling. Participants were selected because they could inform the understanding of the research problem (Creswell, 2004). Additionally, the participants' ability to provide different perspectives and understanding was considered (Bogdan & Biklen, 2007). The mother-daughter dyads selected met the following

criteria: 1) Mother and daughter were both willing to participate in the study. 2) Both mother and daughter are without diagnosis of dementia or physical limitations requiring a caregiver. 3) The mother is above the age of 75 and lives independently. 4) The daughter is between the age of 45 and 60, and lived with the mother during the majority of her childhood including high school. The dyads selected for participation came from different socioeconomic backgrounds and living arrangements. The case studies were limited to three dyads to keep the amount of data and collected analyzed to a manageable level.

Significance

The significance of the mother-daughter pair and a mother's influence on her daughter has been addressed by many researchers (Bojczyk et al., 2011; Chodorow, 1999; Ex & Janssens, 1998). Mother-daughter pairs are a dynamic subset of the family social setting (Fischer, 1991; Shawler, 2004). Informal learning is recognized as an aspect of life-long learning but is under researched in the family setting (Schugurensky, 2000). This study adds to the literature concerning informal learning within the mother-daughter dyad and seeks insight on how informal learning is demonstrated through meaning making, behavior and interaction.

Assumptions

There were two assumptions influencing this research. It was assumed that the willingness of the participants to volunteer to be part of this study would not bias or unduly influence their truthfulness when answering interview questions. Furthermore, it was assumed the participants are able to differentiate modeling from learning, by making the connection between experience, events and the meaning making leading to informal learning.

Limitations

Limitations of this research study include homogenous participant population and may not represent the different lived experiences of a diverse mother-daughter relationships. The participants were recruited from the Midwest region of United States. The location of the participant pool was not representative of the diversity outside the Midwest. Further, inclusion in this study required a self-reported good relationship by the mother-daughter dyad, limiting the experiences and perceptions of many women.

Definitions and Terminology

Aged: For the purpose of this study, aged is the years in the life span when one is considered the old-old, ages 75 – 84 and oldest-old, ages 85 and over (Hooyman & Kiyak, 2008).

Aging: Changes, physical, emotional, and developmental, that take place during the life-span is considered aging (Hooyman & Kiyak, 2008). This study focused on aging after the age of 50.

Family system: Family systems theory is based on the idea that families are continuous entities, shaped by beliefs, rules and values by the individual that in turn shape the individual (Fingerman & Berman, 2000).

Informal learning: Informal learning is often unintentional by-product of an interaction or activity. The learning is not conscious or intentional but recognized after retrospective reflection (Marsick & Watkins, 2001).

Middle age: People 55 to 64 years old are considered middle age. The decade in the life span before one is considered young-old. Individuals between the ages of 65 – 74 are considered the young old (Hooyman & Kiyak, 2008).

Perception of aging: Perception of aging is defined as an evaluation of aging. It is the process by which individuals develop expectations and ideas of what it means and how it feels to become old (Moser, Spangnoli, & Santos-Eggiman, 2011).

Summary

Adult education often situates the family as an example of informal learning; however, most research on informal learning takes place outside the family, in the workplace or other social settings (Galanis et al., 2015; Marsick & Watkins, 2001). The family is a unique social system made up of individuals connected and influenced by interactions inside and outside the family (Goldenberg & Goldenberg, 1991). Viewed from the family system perspective experiences influence roles, relationships, and behaviors within the family (Fingerman & Berman, 2000). The mother-daughter relationship is a unique sub-set of the family that is continually shifting and considered the most significant of intergenerational relationships

(Bojczyk et al., 2011; Fischer, 1991). To better understand the process of reflecting on experiences and attempting to make sense of the perception of aging and changing relationships the mother-daughter relationship was selected for this informal learning study.(Marsick & Watkins, 2001).

Chapter 2 - Literature Review

When we reflect upon an experience instead of just having it, we inevitably distinguish between our own attitude and the objects toward which we sustain the attitude (Dewey. 2008, p. 147)

Introduction

The purpose of this study was to identify informal learning within the mother-daughter dyad. Informal learning is broad and can be difficult to identify when and how it occurs. This study identified the characteristics of informal learning within the mother-daughter relationship and explored how the daughter's perception and expectation of aging are influenced and informed.

This literature review provides background for why research into how informal learning within the mother-daughter dyad influences the expectation and perception of aging is needed. Included is an overview of adult learning, informal learning, and adult development. To conclude the literature review adult development, family systems theory and the unique relationship of the mother-adult daughter dyad is identified. The purpose of this literature review was to provide insight and a foundation for the topic.

Adult Learning

Where did you learn what you will be like when you get old? Who left a lasting impression on what it is like to age? How did you learn life's lessons? All life experiences provide the opportunity to learn, and in the field of adult education scholars are interested in the different ways and places adults learn. Adult learning is ongoing, occurs in multiple locations, and has varying levels of intention (Livingstone, 2001; Schugurensky, 2000) and is not limited to the development of intellectual skills. At times, adult education includes the pursuit of interests,

as well as changes in identity and self-worth (Hayes, 2000). How adults learn, where they learn, from whom they learn, and what they do with the knowledge is an ever-changing personal process.

Dewey (1997) contends that all learning involves knowing and judging while being sensitive to the context - judgement in how to act. Adult learning is important, providing the skills, tools and understanding necessary for individuals to grow, live and contribute to society (Dewey, 2008). Before the recognized types of adult education are examined, one must understand and identify the characteristics common to adult learners. Knowles (1984) brought to popular use the concept of andragogy to describe adult learners. Andragogy is an adult learning framework based on assumptions and characteristics of adult learners that differentiate them from child learners (Merriam, Caffarella, & Baumgartner, 2007). Andragogy is based on six assumptions characterizing adult learners (Knowles, 1980)

1. Adults need to have a desire know something before they learn it.
2. Adults have a self-concept of being responsible for their own lives.
3. Adults come into an educational activity with both a greater volume and a different quality of experience from youths.
4. Adults become ready to learn those things they need to know.
5. Adults are life centered in their orientation to learning.
6. While adults are responsive to some extrinsic motivators, the more potent motivators are intrinsic (pp. 83-84).

Adult learning is both a product and a process; the product is a state of knowing and understanding while the process is life long, combining both means and ends (Dewey, 1997).

Aligned with the assumptions of andragogy, adult learning can be both a conscious, explicit process and an implicit process that stems from experiences the learner may take for granted (Dewey, 1997). Adults are also motivated to learn by experiencing a disruption in their normal or regular function, causing them to be in a state of need and leading to questioning the situation and the solution (Dewey, 2008; Marsick & Watkins, 2001). The life situation and learning are both related to the experience and the situation affected (Jarvis, 1987). Based on this interrelated state, Dewey (2008) suggested that it is normal to assess learning in the course of living and it is not helpful to draw a distinction between learning and living.

Formal, non-formal and informal are common and accepted descriptors for different types, styles and locations of adult education. Merriam and Brockett (2007) consider formal adult education to be part of a system where the mission is education, usually an institution of learning such as continuing education literacy programs, vocational schools, or technical education programs. The definition of formal learning has been expanded to consider all public or private schools, and professional training to be a place for formal education (Coombs, 1985). Education outside an organized system is considered non-formal education (Coombs, Prosser, & Ahmed, 1973). These programs are usually less structured and socially driven, responding to local needs and interest in a flexible manner (Merriam & Brockett 2007). Presentations on local history, topics of special interest, and community concerns are examples of non-formal learning. However non-formal learning is still a conscious and planned activity. Conversely, it is an unplanned experience based learning that occurs during daily living is the definition of informal adult education (Coombs et al., 1973). Adult learning in a formal or non-formal setting is easy to define and recognize, but informal adult learning is much more difficult to identify.

Informal learning

Rather than being confined to organized formal or non-formal settings, informal learning stems from an individual's questioning, observing, and creative mind (Hayes, 2000; King, 2010). Overwien (2000) illustrates this point stating "the concept of 'informal education' should be avoided where in fact 'informal learning' from the view point of the subject is meant. 'Education' suggests intentionality, whereas 'learning' can also take place without intention" (p. 622). Learning and meaning making from experience is the core of informal adult learning (Hayes, 2000; King, 2010; Livingstone, 2001). Informal learning is the most widespread of all adult learning (Marsick & Watkins, 2001). Though informal learning is ever present and life-long, it is difficult to distinguish the many learning activities, and is often defined by what it is not (Livingstone, 2001; Schugurensky, 2015). As Schugurensky (2000) points out, informal learning is under researched but is how most significant learning applied to daily life occurs. Informal learning is often unintentional, a by-product of an interaction or activity. After an experience one becomes aware that learning has occurred; the learning is not conscious or intentional but recognized after retrospective reflection (Marsick & Watkins, 2001).

Informal learning takes place throughout the process of living. The actual timing of informal learning is hard to determine. Schugurensky (2015) describes the different forms of informal learning that take place during different activities and experiences:

1. Self-directed: Projects a learner undertakes with the intention of learning. Teaching yourself to paint is an example of self-directed informal learning.
2. Explicit: Activity or project undertaken with some degree of intention to learn, but learning is not the main objective. Kayaking with a guide is an example of explicit

informal learning, the objective is kayaking, but the individual will also learn how to be safe and control the kayak.

3. Incidental: The learner approaches a situation with no plan or intention to learn, but after the experience or activity there is awareness learning has occurred. Incidental learning is demonstrated when one learns how to build a campfire after watching and helping others build a fire.
4. Tacit: Through daily life, values, attitudes, behaviors and skills are learned, even though the learner has no intention to learn or awareness learning has taken place. The awareness of learning happens after a period of retrospective recognition and reflection or meaning making. Tacit learning is taking into consideration insight from intuition and processing the information through existing frames that adjust and adapt (Bennett, 2012).

Care should be taken to not confuse tacit knowledge with tacit informal learning. Polanyi (1966) suggest tacit knowledge is derived from experience and intuition, further stating “we know more than we can tell” (p.4). Often used as a catch all phrase, tacit knowledge is best understood as knowing how but not necessarily knowing why (Anderson, 2015; Eraut, 2000). Examples of tacit knowledge include, riding a bike, riding a horse, reading and grammar; programs and routines one knows how to execute but does not need to understand the meaning (Eraut, 2000; LeJune, 2011; Toom, 2012). Toom’s (2012) example of grammar describes tacit knowledge because it is possible to write and speak according to the rules without understanding the meaning or purpose of rules of grammar. Anderson (2015) suggest tacit knowing is a more descriptive term than knowledge because knowing is actualized in action, knowing how to perform but unable to express. Tacit informal learning is making meaning of behavior, attitudes, and skills experienced, understanding the why as well as the how.

At the center of adult informal learning theories is the foundation that learning takes place from reflection and making meaning of experiences that occur during the course of everyday living (Bandura, 1986; Jarvis, 1987). The learning is not directed by others, it is controlled and directed by the learner. King (2010) states:

What distinguishes informal learning is the independence of the learner and the context of daily life. A central issue is the conundrum that while educational systems often view formal learning as the pride of pedagogy, informal learning predates it and necessitates greater learner responsibility. (p. 421)

Adult informal learning makes defining where and when learning occurs a challenge. When people have a need, opportunity and motivation informal learning takes place (Marsick & Watkins, 2001). It occurs during everyday encounters and experiences and is difficult to link directly to the learning outcome (Marsick, 2009). Marsick and Volpe's (1999) desire to differentiate training from informal learning in the workplace they set out to describe informal learning. Based on review of available research on informal learning in the workplace and their experiences they developed conclusions about the characteristics of informal learning in the workplace. Marsick and Volpe (1999) concluded informal learning can be identified by the following six characteristics: 1) daily routines 2) triggered by an internal or external jolt 3) not highly conscious 4) haphazard and influenced by chance 5) inductive process of reflection and action 6) linked to learning of others.

Research on informal learning in the workplace continues to support the challenges of identifying informal learning because it is often taken for granted or not recognized as learning (Eraut, 2004).

Informal Learning within the Family

Informal learning in the family is recognized as part of life-long learning from experience; however, most empirical research has focused on virtual, workplace and social informal learning. To understand informal learning in the family, research in the workplace and social settings was transferred to family interactions and experiences where applicable. Social settings are broad and include varied relationships. Families are unique subset of social settings and they provide a setting rich in intergender and intergenerational relationships (Broderic, 1993). Jarvis (1987) clearly states the importance of social setting in learning: “Learning is not just a psychological process that happens in splendid isolation from the world in which the learner lives, but that it is intimately related to that world and affected by it” (p. 11). The family is a social setting where valuable informal learning occurs.

The structure of the family provides the benefit of age, history and time for informal learning. These benefits provide the opportunity to learn skills through life experience and the connection of family allows more time for learning to occur (Cameron & Harrison, 2012). This is illustrated by a common family occurrence: an older family member engages and socializes with younger members and through activities and day-to-day interrelationships the culture and behaviors of the family are learned and lived (Livingstone, 2001). Observation, modeling and unintentional mentorship (parent-child relationship) is the foundation of informal learning (King, 2010). In a family, the context of this learning is constantly connected to the social relationship, providing role models and adaptive strategies to enhance development (Wagner & Lang, 2011). Informal learning in the family is a process through which wisdom, knowledge and skills are imparted for better or worse.

Though the family setting provides opportunities for lengthy observation and day-to-day interaction, members of a family come to hold shared beliefs about their family, themselves, the community and the world (Fingerman, 2000). Observation and interaction with family members alone does not result in learning; learning occurs through a combination of interpretation, reflection, and implicit processing (E. Bennett, 2012). It is through processing and reflecting on experiences and attempting to make sense of a new or challenging situation, that meaning is made and learning takes place (Marsick & Watkins, 2001). For adults the information is processed through existing interpretive frames consisting of memory, adjusted with context and the nature of relationship and ultimately becomes tacit knowledge (Bennett, 2012; Schugurensky, 2000). Within the family setting, familiarity and the importance of perceptions of closeness are strong influences affecting learning (Wagner & Lang, 2011). Learning in the family is multifaceted, constantly connected to the relationship, past experiences, and future expectations. Informal life experience learning is difficult to link to specific outcomes because the learning is context driven and based on person or familiar values, beliefs and histories (Marsick, 2009).

Research to identify informal learning and meaning making experienced by women includes exploring varied topics. Poirier's (2015) qualitative study of five women examined what, where, and when positive breastfeeding views were formed. This study considered the influence of formal, non-formal, and informal learning on the women's views, and determined informal learning was fundamental in shaping both attitudes and knowledge about breastfeeding and motherhood.

Adult Learning Theories

Many adult learning theories build on andragogy and including two principal concepts- experience and a conscious change of behavior (Dewey, 1997; Knowles, 1980; Merriam & Brockett, 2007). Social cognitive learning theory is based on the concept that learning occurs in a social environment when watching and reflecting on the behavior, skills and attitudes of others (Bandura, 1986). Unstructured learning from everyday experiences is the core of experiential learning (Fenwick, 2003). Jarvis (1987) advances the theory of learning in the social context, stating an individual's place in the world and the context of experiences shapes learning from experiences. The commonality in all mentioned adult learning theories consider a form of experience effecting a change in thought or behavior. The following theories were considered for this research, however once the analysis was completed the Jarvis (1987) theory of social context aligned best with informal learning and the mother-daughter experiences.

Social Cognitive Learning Theory

Social cognitive learning theory is situated between behaviorist and cognitive learning theories (Merriam et al., 2007; Muro & Jeffery, 2008). Bandura (1986) updated the social learning theory to include recognition of both the social aspect, thoughts and actions of humankind and the cognitive processes and motivation involved in learning. The assumptions of social cognitive learning theory are: 1) individuals can learn through observing others, 2) learning is an internal process, 3) learning does not have to be demonstrated by a change in behavior, and 4) individuals have the ability to self-regulate thoughts, motivation and action (McCormick & Martinko, 2004). Social cognitive learning allows new behaviors and ways of thinking to be learned by observation differing from learning by doing which requires repeated attempts trials (Bandura, 1989).

Bandura (1989) suggests learning happens through reciprocal causation between behavior, cognition, and environment. “Reciprocal causation does not mean that the different sources of influence are of equal strength. Some may be stronger than others. Nor do the reciprocal influences all occur simultaneously” (Bandura, 1989. p.3). Figure 2.1 illustrates the interconnected relationship of reciprocal causation.

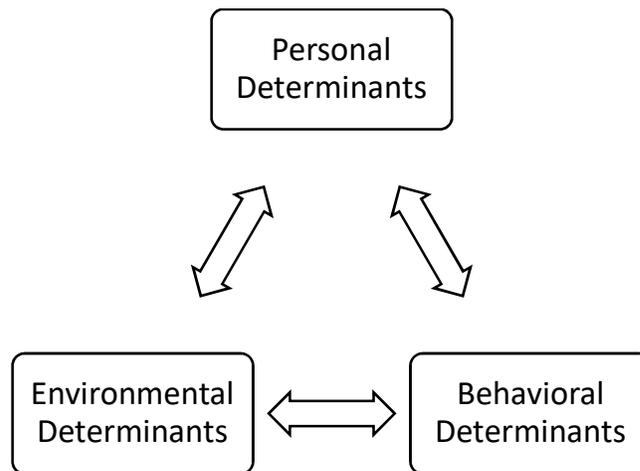


Figure 2.1 Bandura (1989) Social cognitive learning theory

Self-regulation is an important aspect of social cognitive theory, describing the processes by which an individual acquires the norms of behavior, thought, and action within their environment (Green & Peil, 2009). If behavior is supported by positive reinforcement, the individual will continue the behavior; if the consequence is negative, the behavior is stopped by self-regulation (Merriam et al., 2007). There are many strengths to social cognitive learning theory, but researchers find some limitations (Green & Peil, 2009; McCormick & Martinko, 2004; Muro & Jeffery, 2008). For example, the nature of the theory focuses on certain constructs while ignoring others. Self-regulation is a main focus while changes over the life-span are not given much consideration (Green & Peil, 2009; Muro & Jeffery, 2008). Social cognition theory

attempts to explain learning through triadic reciprocity, giving importance to the influences of personal cognition, reinforced behaviors, and the environment (Bandura, 1989)

Experiential Learning Theory

Experience plays an essential role in adult learning (Dewey, 1997; Kolb, 1984; Merriam et al., 2007). Learning from experience is a primary assumption of andragogy (Knowles, 1980), and Dewey (1997) further advances the position that all genuine learning comes from experience. Experience is continual, but all experiences do not provide equal opportunity for valuable learning; learning is derived from experience through meaning for the individual in relationship to social interaction and cultural context (Dewey, 1997). Everyday learning from experiences is the basis of experiential learning theory (Fenwick, 2003). Experiential learning theory is a model for learning processes emphasizing the role of experience (Kolb & Fry, 1975).

Theorizing learning is continuous and founded on experiences, Kolb and Fry (1975) advance the idea that people learn in a four-step spiral process: concrete experience, reflective observation, abstract conceptualization, and experimentation. The process begins when a person has an experience and makes observations and reflects on the experience. After reflection and analysis, the person formulates a concept, forming a conclusion about the experience. Modification of behavior and experimenting with new experiences is the next step in the learning process (Kolb, 1984; Kolb & Fry, 1975). This four-step process takes place many times a day and continues throughout life. Kolb and Fry (1975) explain “Learning and change result from the *integration* of concrete emotional with cognitive processes: conceptual analysis and understanding” (p. 34). Figure 2.2 illustrates Kolb and Fry’s (1975) experiential learning theory.

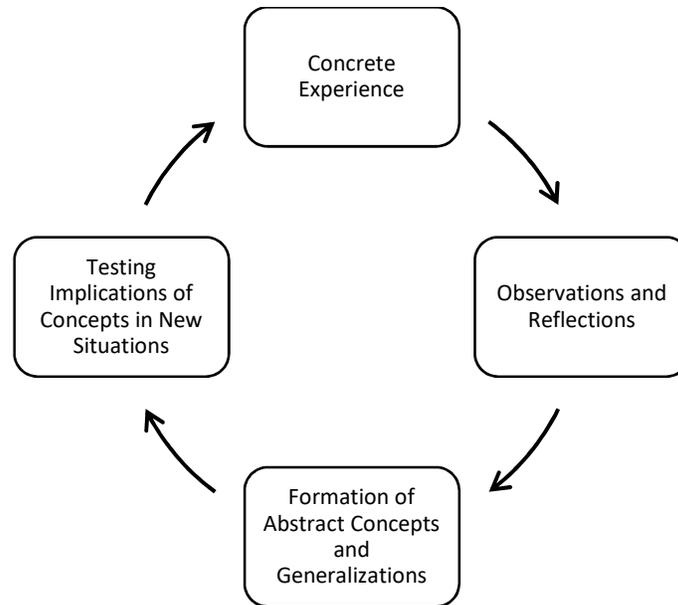


Figure 2.2 Kolb & Fry (1975) Experiential learning style

Following the experiential learning theory, Kolb (1984) believes learning should be considered in terms of a process, not in terms of an outcome. The process is one of adaptation to the environment through creating knowledge from the transformation of experiences (Grover & Stovall, 2013). Kolb (1984) suggests that overtime people demonstrate a preference for certain steps in the cycle, causing them to form certain learning styles or patterns. An example is when one prefers to watch and reflect on an activity before attempting the activity; the person prefers observation. A person can enter the learning cycle at their preferred step and move to the next step when they have processed the previous step (Kolb & Fry, 1975). Experiential learning theory considers learning to be a lifelong process and how one learns determines personal development (Fenwick, 2003; Kolb, 1984; Kolb & Fry, 1975).

Experiential learning theory though widely respected, is not without critics. Failure to value the activity and context where learning takes place is considered a weakness of this theory (Fenwick, 2003; Seaman, 2007). Feminist have noted depersonalization of the learner

by a failure to recognize that knowledge may be constructed within a power-laden social process (Michelson, 1996). Michelson (1996) contends experiential learning theory is a constructivist model that denigrates the intuitive experience. Despite some criticism, experiential learning remains a respected learning theory, expanding on principal concepts of adult learning.

Learning in the Social Context Theory

Learning in the social context theory is an adult learning theory advanced from the idea that adults apply many reference points from past experiences to enhance learning from new experiences (Jarvis, 1987; Merriam et al., 2007). Sharing many characteristics with Bandura's (1989) social cognitive theory and Kolb's (1984) experiential learning theory Jarvis (1987) stresses the role social context and reflection play in learning. Social context is how the person constructs experience; it exists as part of culture, social-economic situation and previous knowledge that shapes the person (Dyke, 2017). Jarvis views learning as involving the whole-person:

Combination of processes whereby the whole person-body (genetic, physical and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs, and senses)-is in a social situation and constructs an experience which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the individual person's own biography resulting in a continually changing (or more experienced) person (Jarvis & Parker, 2006 p.7)

Social context learning theory values observation, experience and transformation while emphasizing the role social context of the individual plays in learning. Jarvis (2006) considers the following elements critical to learning: the person is in the world, the person experiences the world, the content of an experience is transformed, the person experiencing the world is

transformed, and the changed person is in the world. Figure 2.3 depicts how Jarvis (2012) conceptualizes the continuous nature of learning and the transformation of the person through learning.

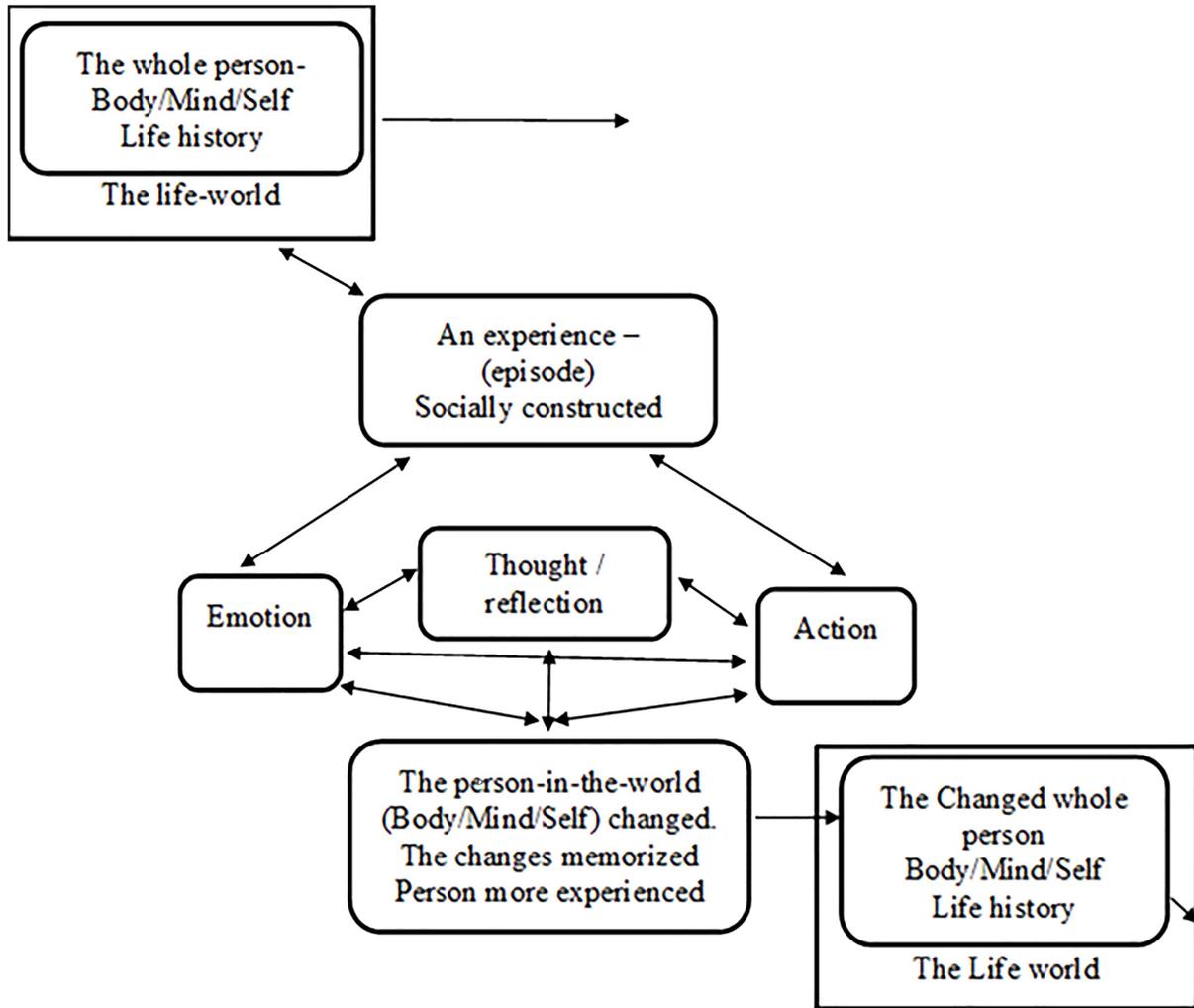


Figure 2.3 Jarvis (2012) Learning in the social context

Jarvis (2012) considers learning to be existential and experiential and begins with a sense of disjuncture or a feeling of not-knowing. A social situation that is unfamiliar or creates disharmony between an experience and a person's current situation is referred to as disjuncture

and provides the potential for learning (Jarvis, 1987, Jarvis & Parker,2006). Disjuncture or disharmony between a new experience and a person's existing knowledge creates an environment that enables learning (Dyke, 2017). An experience is not synonymous with learning, not all experiences result in learning and a person can choose not to learn (Jarvis, 1987). Choosing not to learn is exhibited by rejecting or failing to integrate the new knowledge. The more experiences one has, the new experiences are taken for granted and the person may opt to choose what is familiar and comfortable, denying the new learning opportunity (Jarvis, 1987). Learning is not isolated to one set condition or experience; different conditions can create opportunities for learning

Jarvis (1987, 2006) presents the idea that learning and non-learning take many forms: non-learning, pre-conscious, practice, memorization, contemplation, reflective practice, and experimental learning.

Non-learning: The person faces an experience or situation and previous knowledge or beliefs are reinforced, the person chooses to reject the opportunity to learn, and remains relatively unchanged (Jarvis, 1987).

Pre-conscious: Unplanned, and often unrecognized learning in response to events, the person may remain relatively unchanged but due to memorization may develop as more experienced (Conole & Dyke, 2003; Dyke, 2017; Jarvis, 2012).

Practice: During and after a situation or experience a person is relatively unchanged, but after memorization, the person practices and experiments with the new behavior, or skill then reflects on the experienced thus becoming changed and more experienced (Jarvis, 1987).

Contemplation: A rational and reasoned approach to disjuncture, the person reflects after an experience, and evaluates the response and emerges a changed person in the world (Jarvis, 1987, 2006).

Reflective practice: A situation or experience creates disjuncture the person seeks to understand the cause of experience they do not understand through practice, reflection, evaluation of the situation and response before adopting the newly learned behavior or belief and being changed and more experienced (Jarvis, 1987, 2012).

Experimental: When the person experiences disjuncture the response is to reflect before practicing the new belief, or behavior and evaluating the change and practicing again. Experimental learning is a trial and error approach coupled with evaluation and reflection before adopting the belief, or behavior and becoming a changed person in the world (Jarvis, 1987, 2012; Jarvis & Parker, 2006).

The different conditions where learning takes place require the person to attempt to memorize and reflect on the successful process then repeat the new behavior or skill in future situations (Jarvis, 2012). The more the learned process is successfully completed, the more it is taken for granted, becoming ingrained in the persons everyday life and eventually the memory of learning may be forgotten (Illeris, 2014). Learning in the social context occurs during interaction with the environment and others. When the process of reflection and practice is repeated and incorporated, the individual becomes changed (Jarvis, 2012).

Adult Development

As people age, they change in appearance, attitude and behavior; adulthood is a period of active change (Wortley & Ametea, 1982). Grand theories such as psychoanalytic, learning theory, and cognitive theory attempt to explain human behavior; these theories are the foundation

for future exploration (Berk, 2010). Grand theories provide comprehensive ideas concerning human behavior and development. From the fertile ground of these theories spring smaller theories, examining and attempting to explain an area of human growth and development. Most adult development theorists operate from within the concept of identifiable changes that characterize each stage or period of the adult life course (Wortley & Ametee, 1982). The following review explores literature examining adult development theories: Transition theories, Life Events theory, and Age – Stage theory both past and current literature is reviewed.

Transitions Theory

Adult development is affected by how an individual manages life changes is the belief common to transition theories. The basis of this adult development theory is that change, or transition follows a characteristic pattern through a person's life (Bridges, 1991). During adulthood, transitions follow a pattern of reaction, denial, letting go, testing, searching for meaning, and finally integration (Sugarman, 2001). Bridges (1991) combines the transitions into three events: the ending happens first (reaction and denial), followed by a period of neutrality (letting go, testing options, and the search for meaning) and the final characteristic of transition a new beginning (Integration). Transition theorist state the steps must be completed for an individual to adopt and accept the new life stage.

Life Events Theory

Life events theorist believe adult development coincides with major life events such as marriage, birth of a child or death of a spouse. The foundation of the life events theory is that adulthood is defined by time factors and events occurring in normative historical timeframe (Baltes, Staudinger, & Lindenberg, 1999; Neugarten, 1979). Gender is not an important consideration of this theory; importance is placed on the timing and acceptance of major life

events (Neugarten, 1979). According to life-events theorist, an adult is a changing person in a changing world and the events of change provide the opportunity for conflict and development (Riegel, 1975). Life changes and transitions that demand a response from an individual due to their disrupting nature are considered life-events (Hooyman & Kiyak, 2008). A crisis in development occurs when a life event happens at an inappropriate time, such as the death of a parent during adolescence or loss of a child.

Normative or non-normative timing of events creates adult personalities defining adult development (Neugarten, 1979). Coping with aging and accepting the changes and challenges of growing older develop the most common and successful adult, one with an integrated personality. The adult personality types span from desirable to the less common and least desirable what Neugarten (1979) terms disintegrated personalities and passive personalities. Disintegrated personalities live in a state of despair and are unable to accept the changes of age. Fear of illness and the future, an inability to cope with life changes is the characteristic of Neugarten's (1979) passive personality. The stability of society is dependent on events occurring according to the life event theory of adult development (Berk, 2010). An individual's ability to balance the timing of and reaction to life events effects adult development.

Age/Stage Theory

Age – Stage theorist promote the concept that development proceeds according to a series of stages adults pass through, it is perhaps the most widely known and investigated theory of adult development. This theory can be traced back to the Freud's psychoanalytic theory. Freud based his theory on psychosexual development and believed emotional disturbances were caused by unresolved conflicts. The layers of pain created by the unresolved conflict in childhood need to be confronted, leading to separating from assumptions and developing as an adult (Gould,

1978). Erikson (1963) moved from Freud’s psychosexual stages to eight psychosocial stages, five in childhood and three in adulthood: intimacy vs. isolation, generativity vs stagnation, and integration vs despair (Table 2.1). The stages correspond with young adult, mid adult and late adult age and are successfully or unsuccessfully negotiated.

Table 2.1 Erikson (1997) Three stages of adult development

Erikson three stages of adult development		
Intimacy vs Isolation	Young adult development Focus on close relationships outside immediate family. Fear of rejection is so powerful to some they do not attempt bonding and love.	Successful resolution: committed relationship with bonds of family and friends Unsuccessful resolution: Isolation loneliness, self-absorption, and likely depression
Generativity vs Stagnation	Mid adult development Focus on family and career. Work and the people one works and lives with are important	Successful resolution: Feeling of contribution to the world by being active at work, home and the community. Unsuccessful resolution: Feelings of being unproductive and unloved
Integration vs Despair	Late adulthood Focus on reflection, making meaning of life.	Successful resolution: Belief that life has been good, is proud of accomplishments, satisfied with life and has few regrets. Unsuccessful resolution: Belief that life has been wasted, feeling of bitterness and regrets.

Adults develop over time, each psychosocial task or stage must be undertaken, and the crisis resolved for a person to move on successfully (Erikson, 1963). The sequence of stages is representative of an individual’s life-cycle, the placement and resolution of the stage in the sequence distinguishes significance (Levinson, Darrow, Klein, Levinson, & McKee, 1978). To master a stage, an individual must experience conflict. It is during the time of conflict that the potential for personal growth is high, but so is the chance of failure (Erikson, 1963). Autonomy, which is a key part of Erikson’s (1963) second stage, is a sense of self-control, believing outcomes are consequences of one’s choices and behaviors (Barnett, Baruch, Dibner, & Parlea,

1976; Schutzenhofer, 1983). The social experience one encounters during each stage has an effect during the entire life span (Berk, 2010). The unsuccessful completion or resolution of one stage creates difficulty mastering and moving to the next stage. A limitation to Erikson's theory is the mechanism for conflict resolution is not identified, nor an explanation of a person returning to a previous stage.

Building on Erikson's theory of adult development, Levinson, (1986) viewed adult development as a series of distinct stages in the life cycle. Each stage begins with a period of transition, followed by a stable phase lasting from five to ten years, and culminating in a questioning or unsettled period that marks the beginning of another transition (Berk, 2010; Levinson et al., 1978). The sequence of transitions and stability is the concept of life structure; the underlying design of an individual's life, centered around relationships with significant people, groups and institutions (Levinson, 1986). Levinson (1986) identifies four development periods as the foundation of one's life structure, one in childhood from the age 6 -20, and three in adulthood: early adulthood 17 – 45, middle adulthood 40 – 65, and late adulthood 60+. During early adulthood the individual becomes independent and the concept of an idea life guides choices and decisions. Middle life is the time individuals become aware of the passing of time and begin to consider the amount of time left. This shift in thinking creates a time of reorganization and stress. The view of being "old" takes place during late adulthood, the loss of friends and loved ones causes individuals to feel the need to guide younger people (Levinson, et al., 1978). Levinson and Erickson have a similar view of life stages, but their theories are based on studies consisting primarily of men, little consideration is given to different life courses or motivations experienced by women (Schutzenhofer, 1983)

Woman's Perspective

Gilligan (2016) views adult development from a woman's perspective. She frames her theory on moral judgement and development, and points out that research on development has been limited by attention to the masculine idea of rights and justice with little attention given to the feminine idea of care and responsiveness (Berk, 2010). Development of adult women is characterized by the differentiation of self from others (Gilligan, 2016). Like Erikson and Levinson, Gilligan (2016) views adult development as a series of stages, referred to as levels of moral judgement. She identifies three levels joined by two transitions. In level 1, the focus is on self and individual survival. In level 2 the focus shifts to caring for others; goodness is considered the sacrifice of one's own desires for those of others. Gilligan (2016) considers level 3 to be a time of caring for others and the responsibility for individual need, avoiding harm to self and others is the foremost consideration. The levels are connected by transitions of selfishness to responsibility, and goodness to truth (Berk, 2010). Each level represents a deeper understanding of the relationship between self and others, and similar to Levinson's (1986) life course theory, moving from one level to the next is preceded by a conflict, Gilligan (1977) identifies the levels as "critical reinterpretation of the moral conflict between selfishness and responsibility" (p. 515).

Adult development theorist agree that people continue to develop throughout the life course; however, the theories vary concerning when, why and how change occurs (Wortley & Ametee, 1982). Transition theorist such as Bridges (1991) and Sugarman (2001) believe adult development is driven by how a person manages and adapts to life changes. Appropriate timing of life change events is the premise life events theory of adult development and a crisis in development occurs with an off timed life event (Riegel, 1975). Age-stage theorist support the

idea of adult development proceeding according to a series of stages that occur at specific ages and need to be effectively negotiated for successful development (Erikson, 1963; Levinson, 1986). Unlike most adult development theorist who fail to consider the different life course experienced by women (Schutzenhofer, 1983) Gilligan (2016) frames her theory on moral judgement, care, and responsibility experienced by women. Like many other theorists she believes adults travel through stages or levels that happen in an ordered fashion throughout the life cycle and each level must be resolved for positive development(Gilligan, 2016). The different adult development theories helped guide the understanding of informal learning.

Family Systems Theory

The family is special social setting that is the center for physical and emotional well-being. Development of children and older adults has been areas for research, and the importance of family processes have been carefully studied in relation to child development but the impact on adult development has been rarely considered (Fingerman & Berman, 2000).

A variety of perspectives and theories such as family life cycle, feminist, and family systems theory, were considered for this study. The multigenerational family life cycle perspective considers the impact and change on family members as the family moves through stages (Carter & McGoldrick, 1999). Family life cycle perspective respects the importance of all generations in a family and the changes within the family, but it fails to focus on the interaction and relationship between family members, specifically the mother daughter. Focusing more on the relationship between mothers and daughters, feminist theory was considered. This theory posits the different experiences in infancy experienced by sons and daughters direct them in different developmental paths, boys to separate from their mother and girls to form a symbiotic relationship with their mother (Chodorow, 1999). The family system theory states the family is

dynamic unit made up of individuals connected and influenced by interactions within and outside the family (Goldenberg & Goldenberg, 1991). To better understand the influence of the family process on adult development, family systems theory was employed.

General System

Family systems theory is derived from general systems theory. Biologist Ludwig von Bertalanffy (1934) was the early architect of the general systems theory based on the exploration of wholeness. Bertalanffy (1972) explains “it is generally agreed that a ‘system’ is *model* of general nature ... a conceptual analog of certain rather universal traits of observed entities” (p. 416). More clearly stated, a system is a complex of interacting elements that are both open and interacting with the environment (Broderic, 1993). A system cannot be explained by the characteristics of isolated parts, it is the interaction of the parts with each other and the environment that create a unique complex; the whole is more than the sum of its parts (Bertalanffy, 1972; Eye & Kreppner, 1989). General systems theory is employed to describe conduct as varied as mathematics and sociology.

Defined by their relationships, systems are interrelated elements in a bounded set, interacting as individual elements but exhibiting a coherent behavior (Bertalanffy, 1972). Systems are classified as either open or closed and all systems have boundaries. How the system interacts and is influenced by the external environment determines the system type. A closed system is one where once established the environment and entities can neither enter nor leave the system; the system is isolated from the environment (Bertalanffy, 1934). An example of a closed system is hot coffee in a carafe. Once the hot coffee is placed in the carafe the external environment has little effect on the temperature of the coffee and does not affect the volume of coffee. Systems are considered open when energy and information flow in and out of the

boundaries (Broderic, 1993). Due to this flow, open systems exchange with the environment and influence the components of the system and interaction of the system with the environment and the environment with the system (Katz & Kahn, 1978). Though Katz and Kahn (1978) focused on the open systems theory within organizations, the theory is not limited to formal organizations.

Both natural and social sciences use the systems theory approach to focus on interactions between identified subjects and their environmental context (Wedemeyer & Grotevant, 1982). The family is an example of an open system; individual members interact with each other and the environment, the interaction can alter the behavior of the individual, the group and the environment. This is demonstrated by the change in attitude and behavior of middle-aged children concerning their aging parents; the children are experiencing their parent's changes in needs, independence and abilities but still want them to offer advice and comfort (Fingerman, 1995, 1997). The change in interaction within the family alters the family system.

Family Systems

Bowen's (1978) family systems theory originally focused on the relationships between patients with schizophrenia and their mothers. Further research and observation of schizophrenic patient and the relationship with the entire family led Bowen to conclude that it was clear that all families were pretty much alike (Brown, 1999). Within families, patterns and problems tend to repeat over generations with emotional systems that reduce tension and maintain stability (Bowen, 1978). Family systems theory is based on the idea that families are continuous entities, shaped by beliefs, rules and values by the individual that in turn shape the individual (Fingerman & Berman, 2000). Within family boundaries, information, energy and experience flow

unrestricted in and out (Broderic, 1993). The flow of information influences the interactions of family members with each other and the environment.

Family system perspective is concerned with the assumptions, and beliefs of family members concerning how they act and their roles within the family (Fingerman & Berman, 2000). The interrelated nature of the family system influences human behavior, beliefs, and perceptions (Knudson-Martin, 1994). Understanding of the system provides insight in to how members come to share beliefs about themselves, each other and the world around them (Fingerman & Berman, 2000). Using family systems theory, family members are the identified subjects and society is the context (Wedemeyer & Grotevant, 1982). As children reach middle age and parent's age, the self-regulating nature of the family creates a change in roles and responsibilities for family members. Changes within the family lead to individuality and autonomy known as differentiation and are a key component of family systems theory (Goldenberg & Goldenberg, 1991; Knudson-Martin, 1994).

Family systems theory is useful in developing an understanding of the mother daughter relationship and how identity, beliefs, and assumptions are created and shared (Fingerman & Berman, 2000). However, there is some opposition to applying family systems theory to the mother daughter relationship. Feminist express concern that it fails to consider the power imbalance between men and women that is inherent in society (Goldenberg & Goldenberg, 1991). Another area of concern is with valuing of autonomy and individuality and giving less value to relatedness and caring, characteristics most typically associated with women (Lerner, 1986). Other researchers do not consider this a concern; Knudson-Martin (1994) states "...female development is becoming different while maintaining connection at the same time. Maturity is being able to integrate the self and other, that is, being able to listen to other's while

hearing one's own voice" (p. 36). For women, identity is not defined solely in the context of the relationship but how the relationship is part of the identity formation (Belenky, Clinchy, Goldberg, & Tarule, 1986).

Despite some thoughtful opposition, a feminist perspective of family systems theory is the selected framework to offer the ability to explore the female experience and individual development within the mother daughter relationship. The selection of this perspective and theory is in part based on Fingerman's (2000) defense of her use of family systems theory stating, "Family systems perspective addresses assumptions and beliefs that family members share concerning how they act, and about roles of individual members" (p.10). Knudson-Martin (1994) also selected family systems theory as her framework as it "integrates the female experience because it places individual development in the context of biologically rooted interdependence and conceptualizes the human family as an emotional unit or field influencing the functioning of each person" (p.37). When considering the development of women, both sexes are important in contributing to the connection of self and other (Chodorow, 1999). Based on these examples, a feminist perspective of family systems theory is the framework best suited to this study.

Family systems theory considers the family a dynamic unit where beliefs, roles, assumptions of individual family members are influenced by experiences and interactions within and outside the family (Chodorow, 1999; Goldenberg & Goldenberg, 1991). The interaction of the individual parts creates a unique relationship effecting the behavior of the individual and the whole system. Patterns of behaviors shaped by beliefs and values tend to repeat over generations shaping the individual (Bowen, 1978; Fingerman & Berman, 2000). Experiences, behaviors, and

assumptions shared by mothers and daughters shape both the perception of the individual and the mother-daughter relationship.

Mother-Daughter Relationship

The relationship between parents and their children is complex and plays an important part in human life. The mother-daughter relationship has a deeper bond and greater intimacy than other parent-child relationships (Arroyo & Andersen, 2016; Belenky et al., 1986; Berk, 2010; Cochran, 1985; Hooyman & Kiyak, 2008) and is considered the most significant intergenerational relationships (Bojczyk et al., 2011). Over the years researchers from many disciplines, sociology, biology, and psychology, have described the unique bond between mothers and daughters (Baruch & Barnett, 1983; Boyd, 1989; Carter & McGoldrick, 1999). This special bond is thought to emerge from the social construction of gender, Chodorow (1999) has proposed that the ability to mother is "reproduced" from mother to daughter and that the structure of family relationships is a crucial factor in creating a psychological basis for mothering (p. 39). A strong bond is created between mothers and daughters from the experience of being a mother and having a woman as a mother (Belenky et al., 1986). This bond influences both mother and daughter.

The bond between mother and daughter is considered the most profound early female relationship experienced by daughters and continues with significance and complexity into adulthood (Bojczyk et al., 2011; Notar & McDaniel, 1986). The influence of the relationship can affect development (Berk, 2010; Levinson et al., 1978), well-being, mental health and self-efficacy throughout the life span (Chodorow, 1999; Fingerman, 2001; Gilligan, 2016). Closeness, intimacy, support, and interdependency contribute to the impact of the emotional relationship (Fischer, 1991). Daughters develop their self-esteem, and learn patterns of

interaction from the connection to the relationship formed with their mother (Chodorow, 1999; Fischer, 1991; Notar & McDaniel, 1986). Both mother and daughter have significant roles in the relationship.

Mothers traditionally are the main caregiver and considered to be the most important role models for their daughters (Baruch & Barnett, 1983; Chodorow, 1999; Shannon & Shaw, 2008). Through this relationship a daughter often develops a strong identification with her mother, contributing to the mother's ability to serve as a powerful influence in her daughter's life (Shannon & Shaw, 2008). Daughters reflect and evaluate the mother's attitudes, assumptions, values and behaviors that are communicated both implicitly and explicitly (Abbey, 1998; Shannon & Shaw, 2008). A mother's experience and perceptions is shown to affect their daughter's perspectives on many topics (Arroyo & Andersen, 2016; Bergman & Fahey, 1997). The affect is illustrated in Arroyo and Anderson (2016) study of self-objectification between mothers and daughters, finding that "co-ruminating about weight can be seen as a way in which mothers perpetuate and daughters come to understand personal and social pressures and desires about weight and appearance" (p. 239). This is further illustrated in patterns and descriptions of family norms, values and perceptions that are passed from one generation to another (Bojczyk et al., 2011). The bond between mother and daughters continues throughout the life span.

The mother-daughter intergenerational relationship transfers family customs and systems from generation to generation. The influence of the mother may be unintentional and occur during common activities. (Hays, Flannery, Brooks, Tisdell, & Hugo, 2000). Patterns and behaviors are learned and acquired in part based on behaviors observed in others and the outcomes of those behaviors (Bandura, 1986). The relationship contributes to the development of personality characteristics in the daughter, and the daughter carries some of the mother's

characteristics and behaviors (Cochran, 1985; Fingerman, 2000). Bojczyk, et al.'s (2011) qualitative study using the life course perspective explored the relationship of 24 mother-daughter pairs the mothers mean age was 53.38 years and the daughters 25.57. Each woman's narrative indicated the belief that adult relationships are complex and the transfer of family values are derived from earlier generations and the generational influence on the mother is reflected in the daughter's values (Bojczyk, et al., p. 465).

Guiding Theories for Research

Learning takes place in the social setting, related to and affected by the world in which one lives (Jarvis, 1987). Informal learning is not confined to organized formal or non-formal settings. An individual's questioning, observing, creative mind is the setting for informal learning (Hayes, 2000; King, 2010). Learning that takes place informally is often unintentional and a by-product of an interaction or activity, it is ever present and life-long but is difficult to distinguish (Livingstone, 2001; Schugurensky, 2015). The structure of the mother-daughter dyad is a social setting where valuable learning can occur. The dyad provides the opportunity of history, and time for life experiences and the connection of family learning to occur (Cameron & Harrison, 2012). The learning of women in the home and family has been understudied by adult education educators (Hays et al., 2000). Knudson-Martin (1994) suggest that family systems theory provides a framework suited to explore the female experience. This perspective guides the investigation of how the perceptions and expectations of aging are influenced by learning from experiences and observation within the mother-daughter dyad.

Summary

Learning is a fundamental human behavior, views, attitudes and behaviors are affected through experience and reflection. Adult learning occurs in numerous places, and holds varied

forms: formal, nonformal and informal. Informal learning is shown to require greater learner responsibility to reflect and make meaning from events and experiences in the context of daily living. A thorough review of the literature revealed that informal learning is considered valuable but remains an under researched form of adult learning, frequently defined by what it is not, not by what it is. The characteristics of informal learning have been identified in the work place but not with in the social setting of the family.

The literature regarding adult development, particularly female adult development, illustrated the importance of relationships and independence. The connection between adult development and informal learning guides understanding how social relationships, family interaction and experiences shape one's life. (Bandura, 1977). The literature revealed the role of informal learning within the mother-daughter relationship and the multiple influences on the understanding of family roles and aging.

Chapter 3 - Methodology

This qualitative study explored informal learning in mother daughter dyads demonstrated through the daughter's perceptions and expectations of aging. Havighurst (1961) theorized successful aging is "a statement of the conditions of individual and social life under which the individual person gets a maximum of satisfaction and happiness and society maintains an appropriate balance among the various groups which make it up" (p.80). How individuals' age is influenced by more than just health and mobility, beliefs about the elderly can have an effect on both cognitive and physical ability (Levy, Slade, & Kasl, 2002). Though the concept of successful aging has been a popular topic for research in recent years and researchers have sought to define successful aging, they have yet to achieve a consensus on not only a definition but also the process of successful aging (Duay & Bryan, 2006). The purpose of this study was to identify informal learning in the mother daughter dyad and understand the lived experiences and meaning making that influenced the daughter's perception of aging.

Research Questions

- 1: How are the characteristics of informal learning as outlined by Marsick and Volpe (1999) exhibited in the lived experiences of mother daughter pairs?
- 2: How is the influence of informal learning demonstrated in the daughters' insight and perception of aging?
3. How is learning in a social context demonstrated by the daughters?

Research Design

Methods are the techniques and procedures researchers use when collecting and analyzing data related to a research problem or question (Crotty, 1998). There are multiple research methods available, and each method has unique characteristics. Prior to the 1980's the

majority of research was quantitative in nature, relying on measuring data to determine results (Bogdan & Biklen, 2007; deMarrias & Lapan, 2004; Schwandt, 2007). Quantitative research is positivist in design and seeks to discover the forces that govern human behavior (Gilner & Morgan, 2000). Researchers in education and social science give weight to the importance of an alternative to the positivist methodology (deMarrias & Lapan, 2004). The design of qualitative research provides the alternative. Qualitative methodology examines individual perspectives in context and seeks to understand human interaction and behavior (Bogdan & Biklen, 2007). It involves the perspective of the participants, researcher insight, and inductive analysis of the data for understanding and meaning of complex human behavior (Heppner, Wampold, Owen, Thompson, & Wang, 2016).

Characteristics common to all forms of qualitative research help the researcher discover meaning in experiences and interactions that influence human behavior. Bogdan and Biklen (2007) identify five characteristics of qualitative research: naturalistic, descriptive data, concern with process, inductive meaning, and analysis. Qualitative research allows participants to be observed and interviewed in an environment that is natural and comfortable (Creswell, 2004; Crotty, 1998). The natural environment allows an unfiltered view of experiences and behaviors, captured from the participant's perspective (Bogdan & Biklen, 2007). Interviews and observations take place in the participant's natural environment, where the setting and interaction with the researcher contributes to the richness of the data (Bogdan & Biklen, 2007; Creswell, 2004; Heppner et al., 2016). Questions are framed to allow the participants to describe and extrapolate meaning from experiences (Creswell, 2004). The data gathered are descriptive, taking the form of words and pictures (Bogdan & Biklen, 2007). Through the process of analyzing and interpreting the data, relationships and patterns emerge. Through this inductive

process, conclusions are drawn from the data rather than identified to support a preconceived hypothesis (Gilner & Morgan, 2000). As the research process develops, new discoveries are made, and meaning is constructed (Crotty, 1998; Merriam & Tisdell, 2016).

Qualitative research seeks to understand the meaning experiences have for those involved (Merriam & Tisdell, 2016). The goal is to understand meaning and the how of human behavior, rather than just the what. To that end, the complexities of people's lives are examined within individual perspectives and context (Heppner et al., 2016). Merriam and Tisdell (2016) elaborate by stating a "qualitative researcher is interested in understanding how people interpret their experiences, how they construct their worlds, and what meaning they attribute to their experiences" (p.6). Based on research into the participants understanding of their learning through life events, meaning making, and interaction within the dyad, the research approach for this study was qualitative.

Methodological Framework

Philosophical assumptions guide the design of qualitative research using theory to shape the study (Creswell, 2007). The use of theory is not to test the theory as a product or provide a mere description it is rather a developing process used as a guide (Glasser & Strauss, 1967). Qualitative researchers employ theory on three levels: macro, meso, and micro (Kim, 2016). Macro-level theory is the theoretical or interpretive framework of a study, Kim (2016) considers this to be the "holistic level for all qualitative research" (p. 32). The methodology or blueprint employed by the qualitative researcher is the meso-level theory and adds academic rigor to the research (Bhattacharya, 2017; Kim, 2016). The final theory considered when designing qualitative research is the micro-level theory. This level is concerned with discipline specific theories (Kim, 2016). Symbolic interactionism is the selected macro-level theory for this study.

The meso-level theory, or methodology is thematic narrative inquiry and informal learning and family systems are the selected micro-level theory, Figure 3.1 illustrates the levels of theory.

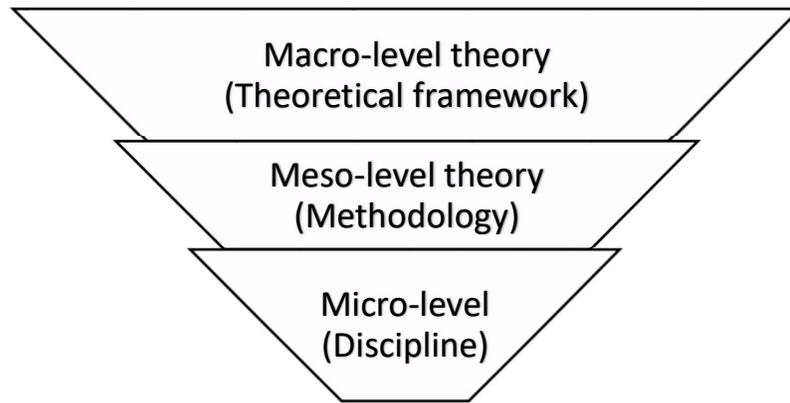


Figure 3.1 Adapted from Kim (2016, p.33) Theory levels

Theoretical Framework

Based on the nature of research into the participants understanding of their learning through life events, experiences and interaction within the mother-daughter pair the framework of this qualitative study was symbolic interactionism. Data analysis employed the tenets of symbolic interactionism seeking to understand social reality and culturally derived interpretations of the social world (Crotty, 1998) and recognizing the self-reflective nature of qualitative research (Creswell, 2004).

The importance of social interaction in forming human conduct and meaning is recognized when viewed through symbolic interactionism (Blumer, 1986). Herbert Blumer's theory is built on George Herbert Mead's teaching and is credited with founding the assumptions of symbolic interactionism (Crotty, 1998). Blumer (1986) identifies three underlying assumptions of symbolic interactionism: 1) People act toward things based on the meaning that the things have for them. 2) Meaning of things arises from social interaction. 3) Meanings are

modified through an interpretive process by the individual dealing with the things encountered. Crotty (1998) states “symbolic interactionism offers what is very much an American perspective on life, society and the world” (p, 72). The meaning of things or symbols is realized or modified by interacting with others (Bhattacharya, 2012). Individuals react and make meaning of situations based upon their assumptions and interpretation of words, actions and events.

Symbolic interactionism emphasizes understanding the meaning made from symbols in ones lived experience, how one views others and think others view them, and the experienced social reality during interactions with the world (Bhattacharya, 2017). This was the appropriate framework for this study due to the nature of inquiry into how participants make meaning of their life events, interaction within the mother-daughter dyad in relation to the process of aging. Based on this framework, there is not a single event or interaction influencing the understanding of aging universal to all participants. Individual participants are influenced by their interpretation and meaning of events and interaction (Bhattacharya, 2012). The meaning is formed and modified through interaction with others in the family and community and aligning with Blumer’s (1986) assumptions of symbolic interactionism.

Methodology

A methodology is a strategy or design process employed to link the research method to the experiences being studied (Crotty, 1998). This study explored the understanding of meaning making through informal learning on the expectation and experience of aging for each dyad member. Narrative inquiry is a methodology used when seeking to understand an experience and life story through the telling and interpretation of personal experience (deMarrias & Lapan, 2004). Narrative inquiry is flexible and can take many forms ranging from biographical, arts-based to thematic (Bhattacharya, 2017). Based on the nature of this study thematic narrative

inquiry was the preferred methodological approach. Thematic narrative as defined by Bhattacharya (2017) is a type of “narrative inquiry often centered around the idea that individuals live storied lives, and by recollecting these stories, they make meaning of their lives” (p. 94).

Exploring research questions through participant stories offered a variety of lenses and allowed different phenomena and perspectives to be revealed and understood (Baxter & Jack, 2008). The occurrences of the human experience are suited to be described through storytelling (Connelly & Clandinin, 1990). Narrative inquiry employs a mixture of approaches and lenses revolving around the stories of the participants (Kim, 2016). Exploring experiences through multiple approaches provided an opportunity for in-depth descriptions and interpretations (Hays, et al., 2000). Expressing lived experiences through told stories delivered depth, breadth, and richness vital to analyzing data within and across families (Creswell, 2004). Narrative inquiry was the means to study experiences as a story (Connelly & Clandinin, 1990).

To best capture the context and meaning of the participants told stories, I followed Clandinin & Connelly’s (2000) five guiding steps to conducting narrative inquiry.

1. Select a research problem that is best suited to narrative inquiry. Research on informal learning is included in adult learning but is limited when considering the family (Galanis, et al., 2015; Marsick & Watkins, 2001; Yanchar & Hawkey, 2014). The stories about experiences and memories add depth and an understanding of informal learning within the mother-daughter relationship; therefore narrative inquiry is my preferred method to explore this research problem.

2. Include participants who have stories and lived experiences that contribute to the research problem. Both the mother and daughter have individual and shared experiences that can contribute to understanding of the research problem.
3. Consider the context of the participant's stories and experiences. Context and the lived experience of the mother-daughter pairs selected for participation in this study are best examined through participant stories, relating meaningful experience that shape their expectations and perceptions of aging.
4. After analysis of participant's stories and experiences the stories were reorganized into a general type of framework with causal link among the ideas provided by the researcher. The stories of the participants were coded and analyzed to determine common themes. After analysis the supporting stories were organized to provide richer understanding.
5. Actively involve the participants in the research during collection and analysis of stories. The participants were actively engaged with the research during both data collection and analysis to effectively understand and tell and retell their stories.

Narrative inquiry is the study of experience and meaning through the telling and retelling of one's lived experience (Craig & Huber, 2007). Utilizing narrative inquiry situated me in an insider-outsider role (Mercer, 2007), sharing and understanding but being outside the participant's unique experience. As a middle-aged daughter of an aged mother, I identify with some of the issues expressed but am outside because each lived experience and story is different. Informal learning and meaning making within the mother-daughter dyad and the influence on expectations and perceptions of aging was best explored by collecting and analyzing the participants told stories (Creswell, 2007). Using the unique voices of participants is the strength of narrative inquiry.

Discipline

Focus was on the daughter's perceptions and expectations of aging to explore informal learning within the family and specifically the mother-daughter dyad. Jarvis (1987) states that learning takes place in the social setting, related to and affected by the world in which one lives. Informal learning is often unintentional and the by-product of experiences and interactions (Livingstone, 2001; Schugurensky, 2015). The mother-daughter dyad is a unique social setting to explore informal learning. The mother-daughter relationship provides the opportunity of history, and time for life experiences and the connection of family for informal learning to occur (Cameron & Harrison, 2012). This study utilized the expectations and perception of aging passed from mother to daughter to help understand informal learning within the dyad.

Symbolic interactionism and informal learning have a common thread; individuals make meaning based on observation and interpretation of events and behaviors of daily life (Merriam & Brockett, 2007). To gain deeper understanding of informal learning's influence in making meaning through interaction within the mother-daughter dyad this study utilized Bowen's (1978) family systems perspective. Family systems theory is based on the idea that families are continuous entities, shaped by beliefs, rules and values that in turn shape the individual (Fingerman & Berman, 2000).

Participants

The study focused on informal learning, and life events influencing and informing expectations of aging taking place within three mother-daughter dyads. Participation in this qualitative study was through purposeful sampling, participants were selected because they could inform the understanding of the research problem (Creswell, 2004). Potential participants were recruited through social contacts, clubs, and churches to find names of women who fit the

selection criteria. An email was sent to six dyads assumed to meet inclusion criteria. Five dyads responded expressing interest in participating in the study. After discussing the study, one dyad withdrew from consideration stating the burden may too great for the mother and another dyad was unable to fit participation into their schedule. The participants were selected for their ability to provide different perspectives and understanding (Bogdan & Biklen, 2007). The three mother-daughter pairs selected met the following criteria: willingness to participate in the study; both mother and daughter were without diagnosis of cognitive impairment or physical limitation requiring a full-time caregiver; the mother was above the age of 75 and live independently; the daughter was between the age of 45 and 60 and lived with the mother during the majority of her childhood and through high school. The mother-daughter pairs selected for participation self-reported a good relationship and came from different socioeconomic backgrounds and living arrangements. The mother-daughter dyads were limited to three to keep the amount of data collected and analyzed to a manageable level.

Research Site

All participants were located in the Midwest and within driving distance of the researcher. Participants were interviewed at a location of their choosing which were also good for recording. To create an environment where the participants felt safe to share their memories and experiences, the participants were first interviewed separately. Two of the dyads chose to be interviewed the same day at the home of the mother. One mother-daughter pair was interviewed in separate locations: the daughter at her home and the mother over lunch at a neighborhood restaurant. The final dyad (mother-daughter pair) interviews took place at a restaurant selected by the participants.

Human Rights Protection

Before starting the study, a signed informed consent was obtained from all participants and Institutional Review Board (IRB) approval from Kansas State University was secured. The value of the IRB was to ensure safety of all participants and guard against possible exploitation of participants (Bogdan & Biklen, 2007). The safeguard against exploitation was especially relevant to this study due to the inclusion of elderly participants. Elderly participants are considered a vulnerable population worthy of protection against manipulation.

Ethical Considerations

Each participant was provided anonymity through the use of pseudonyms, and the removal of all identifying information. I shared with the participants that I understand and appreciate their willingness to share and expose intimate family information. Care was taken to treat each participant with value and respect. To guard against possible participant discomfort each participant participated in member checks during data collection, analysis and before final write up. As expressed by Creswell (2004) this openness with the participants helped build rapport and lead to deeper understanding. The participants were compensated with a gift card to a local dining establishment after the interviews as a small token of appreciation.

Participant Consent

To gain consent I met with each dyad separately and explained the nature of the study, and time commitment involved in participation. During our first meeting I explained the purpose of study is to identify informal learning within the mother-daughter pair and understand how it influences and informs the daughters' expectation of aging. The participants were informed anonymity was assured with the use of pseudonyms, removal of all identifying details, and individual control over release of information. During this meeting I also informed each

participant they are not required to answer all questions and they can withdraw from the study at any time for any reason. Each participant was provided a written consent (Appendix A) detailing the time commitment, anonymity, and information release. A copy of the signed consent form was provided to the participants and I retained the original. Interviews were scheduled at an agreed upon time and location after receipt of signed informed consent form. The wellbeing of the participants was foremost during and after this study.

Pilot Study

To determine the effectiveness of data collection procedures planned for this study I performed a pilot study. A pilot study was designed to develop, test and refine the questions and procedures planned for data collection during the formal study (Yin, 2014). The pilot study participants were a mother-daughter dyad that met the inclusion criteria for the study. After a meeting to describe the purpose and nature of the pilot participants were interviewed in the same manner as planned for formal study participants and were also asked to engage in cognitive mapping. After transcribing the interview and analyzing the cognitive map, I scheduled a follow-up meeting to solicit participant feedback and observation. The instructions for the cognitive map were difficult for the participants to understand, leaving too much interpretation of the design to the participants. The pilot study participants provided simple brief answers to the questions. The answers did not encourage or support narratives. Based upon the feedback, modifications were made to the cognitive map instructions and interview questions provided to the participants. This pilot study was a valuable tool and helped refine my formal study.

Bracket Interview

To further analyze the questions, before interviewing any participant, I completed a bracket interview; answering the same questions, I later asked the participants. The use of a

bracket interview allowed the opportunity to gain understanding of assumptions and beliefs about the study (Kramp, 2004). Understanding my assumptions and subjectivities before interviewing the participants let me listen more openly to the experiences of the participants. The bracket interview also provided an occasion to examine the questions and clarify any misleading or misunderstood points.

Data Collection

The research focused on each participant's view of the aging process, identification of aging process and identifying the characteristics of informal learning through interaction within mother-daughter pairs. Data collection included interviews, observation, field notes, participant's family pictures and cognitive mapping. Each participant was interviewed twice, the first interview was individual and the final interview with the mother-daughter pair. The interviews consisted of open ended questions with follow up questions based on the response of participant, the goal was to provide the participant the opportunity to reflect on her lived experiences (deMarrias & Lapan, 2004; Kramp, 2004). Data collection also involved a degree of analysis and interpretation to provide direction and focus (Bogdan & Biklen, 2007). To add greater depth, I viewed and discussed family pictures selected by the participant. Family pictures provided an opportunity to develop an understanding of the family environment not always available during interviews (Schwartz, 1989).

The data for this study was collected over a period of eight month. The principal source of data for this study were interviews and observation, other data sources included family pictures, and cognitive maps provided by the participants. Documentation of observations and data analysis was recorded as field notes in my journal.

Initial Meeting

Prior to the beginning of the study, I met with the participant dyads to explain the purpose and time commitment of the study. During this initial meeting participants reviewed and signed the informed consent form (Appendix A) and a participant information form (Appendix B). Initial interviews were scheduled at a location of the participants choice. The prompts for the cognitive maps were provided during the first interview and each participant was asked to bring their cognitive maps and photographs to the dyad interview. Basic demographic information was collected from each participant on the participant information form. The information collected was to ensure the participants met the inclusion criteria and offer insight into the participants' family to provide depth to future interviews.

Interviews

The interviews for this study were semi-structured in design. This design allowed me the opportunity to examine every day experiences in as detailed manner as possible and the flexibility to probe participants' answers for details (Schwandt, 2007). The use of semi-structured interview methods encouraged the participants to reflect retrospectively on experiences they have already lived through (deMarrias & Lapan, 2004; Kramp, 2004). The goal of the interviews was to understand how the participant thinks and makes meaning from experiences (Bogdan & Biklen, 2007). Reflection on lived experiences and how they influence current expectations and stereotypes was best served by this design.

For this research, individual interviews with each participant were conducted and one interview with the mother-daughter pair. To create an environment where the participants felt safe to share their memories and experiences, the participants were interviewed separately. These

semi-structured interviews were between 45 and 60 minutes long and were conducted at a location of the participants choice.

I completed and transcribed the individual interviews of each participant before conducting the interviews with each mother-daughter pair. The interviews took place a location selected by the participants. With the participant's permission I recorded the interview for analysis and coding. The questions for the mother's interview are in Appendix C. The questions for the daughter's interview are in Appendix D.

The final mother-daughter pair interview questions were based upon answers from the initial individual interviews. The questions were designed to determine how each participant recalls an event or experience and to clarify and answer questions determined during transcription and analysis of individual interviews (Rose and Susan Appendix E, Lu and Becky Appendix F, Dot and Ginger Appendix G).

Each interview was transcribed, and a copy of the transcript provided to the interviewee. Schwandt (2007) suggests the use of member checks to furnish important feedback from the participant, ensuring the participant's perspective and understanding was captured.

Photographs

Prior to the mother-daughter interview each participant was asked to bring photographs she believes highlight her memories and understanding of events and experiences that influenced her perception of aging to the dyad interview. Photographs can capture memories and experiences that can be hard to put into words and allow examination into aspects of people's lives that may otherwise remain hidden (Bogdan & Biklen, 2007; Kim, 2016). Schwartz (1989) states the value of viewing and discussing photographs is "photographs elicit extended personal narratives which illuminate viewer's lives and experiences" (p. 122). Photographs do not hold all

the answers but are a valuable tool to discover new depth and an awareness of participant experiences and memories.

The photographs were snapshots, candid shots capturing an event, and family portraits. Understanding the context of the photograph-why it was taken, who's point of view is demonstrated, and when was it taken was important for accurate inductive analysis (Bogdan & Biklen, 2007) Even though family portraits are constructed images, poses are similar and fashioned by the photographer, it is the story behind the photograph that shows differences and understanding (Mitchell & Weber, 1998).

During the dyad interview the pictures were shared and discussed to encourage the participants to tell stories about their lived experience and memories. The pictures captured moments of experiences and memories that can be hard to put into words (Bogdan & Biklen, 2007; Kim, 2016). Each mother-daughter pair provided different types pictures ranging from posed portraits to snapshots taken during trips. Viewing and discussing the pictures allowed the moments and experiences to be revisited and examined. The discussion of the memories recalled from looking at the photographs was recorded in field notes.

Cognitive Mapping

Cognitive or mind mapping is a technique that allows individuals to demonstrate how they visualize the relationship between various concepts, thoughts and experiences (Wheeldon, 2010). This form of data collection has a history of being used by researchers seeking to understand the individual lived experience as diverse as living with chronic medical conditions and experiences of female doctoral students (Bellis & Grimley, 1999; Webber, 2017). Bellis and Grimley (1999) used mind maps to enhance data collection in their study to understand the experiences about women living with lupus and Webber (2017) asked the participants in her

study, understanding identity change in professional doctoral women, to map using provided prompt statements. Cognitive mapping is similar, and the term often interchanged with concept mapping. Concept mapping is a graphic tool to organize several statements linked and paired to concepts, best suited to depict hierarchical relationships (Hay & Kinchin, 2008; Wheeldon, 2010). Whereas cognitive maps are built of mental images designed to visualize and assimilate information (Bellis & Grimley, 1999), one's systems of constructs that is used to make sense and meaning of a lived experience can be elicited through cognitive mapping (Eden, 1988). Data provided through cognitive mapping can be used alone or with other data collection strategies to better investigate and consider meaning (Wheeldon, 2010). They are a tool to illuminate experiences and illustrate how one makes sense and understand the significance of their experiences (Eden, 1988; Sammut-Bonnici & McGee, 2015; Webber, 2017).

Participants in this study were provided with prompts, 3x3 post-it notes, colored pencils and poster board. The participants were instructed to write thoughts and memories related to the prompts and place the post-it notes as they see fit on the poster board.

The prompt questions for the mothers were:

You when you were your daughter's age

Your current age

The daughters were provided the following prompts

You when you will be your mother's age

Your current age

Collecting data from this technique proved to be challenging; only three of the six participants were comfortable with this process. They expressed concern over not knowing exactly what to include or how to illustrate their thoughts through a graphic. The cognitive maps

that were created did provide rich but limited personal data due to the lack of participant involvement. Creating a cognitive map requires the creator to be comfortable visualizing their thoughts and not worry about it being right. Half of the participants were too worried about getting it “right” and did not produce a cognitive map. More time was needed to be dedicated to helping participants understand and become comfortable with creating cognitive maps. As a data source this could be a valuable technique, but the time and training required is burdensome.

Data Analysis

Preparing and organizing data for analysis and interpretation is an important aspect of qualitative research (Creswell, 2007). Data must be carefully analyzed and interpreted to make sense of the abundance of data collected (Bogdan & Biklen, 2007). Analysis and interpretation are different but at times are hard to separate during the process of qualitative research. Bogdan and Biklen (2007) describe the difference as “Analysis involves working with the data, organizing them, breaking them into manageable units, coding them, synthesizing them, and searching for patterns. Interpretation involves explaining and framing your ideas in relation to theory” (p. 159). The analysis of this study was be inductive; the raw data placed into codes and categories and further separated by patterns and themes (Bhattacharya, 2017; Kim, 2016). The data was separated, explored, and reassembled during the process of analysis, synthesis, and interpretation, an intuitive process undertaken to search for meaning in seemingly unrelated data (Stake, 1995). Narrative inquiry requires the researcher to interpret the organized and analyzed data to understand the meaning participants give their lived experiences through storytelling (Kim, 2016).

Data analysis for this study began in the field during data collection. This early consideration creates the opportunity for reflection and insight; discovering how the theoretical

framework, interview method and analytic framework inform my approach to the data (Bhattacharya, 2012; Bogdan & Biklen, 2007). All interviews were recorded and transcribed verbatim then double checked and corrected against replay of audiotapes. I referred to field notes to help resolve questions of context while reading the transcribed interviews. While viewing participant photographs and cognitive maps, I took notes highlighting sections relevant to the study and recorded my reaction to various stories and representations.

During data analysis, attention was directed to the way individual components weave together to provide key words for coding (Saldana, 2014). Codes, then categories were created from codes and codes from the key words discovered in the transcript of each participant (Bogdan & Biklen, 2007). The categories for this study were suggested by the theoretical framework and research questions and included context, perspective and situation codes (Bogdan & Biklen, 2007). Context codes such as youth, adult and aged, help identify the time of the event, perspective codes provide insight into the participants thinking, and understanding of the time or place of an event was provided by situation codes (Bogdan & Biklen, 2007). Following this procedure allowed data analysis of both breadth and depth.

Data Interpretation

Narrative data interpretation works together with data analysis as process to find narrative meaning (Kim, 2016). During the fieldwork, I took careful notes about comments, connections, and insights as they emerged. Relating what I observed to the guiding theories and findings in the literature enhanced data interpretation (Bogdan & Biklen, 2007). Rereading my notes from fieldwork and coding provided an opportunity for reflection on the participants' and how they relate to the purpose of the research. Care was taken to support interpretations and conclusions with supporting excerpts of narrative data allowing the richness of the original data to be visible

(Elo & Kyngas, 2007). Interpretation of the stories told by the participants requires faith that the participants are “telling us a story that is true and meaningful to their sense of their subjective experience” (Kim, 2016, p.193).

Data Management

To facilitate meaningful data analysis and interpretation of the large amount of data collected I employed thoughtful data management. Managing large complex datasets is important to ensure access, tracking relationships, managing the flow and organization. Carefully managed data enables meaningful engagement and allows powerful theoretical development (Fielding & Warnes, 2009). Care was taken to manage the data in a manner that provided clear connections and relationships easily accessed while maintaining the integrity of the narrative data (Elo & Kyngas, 2007).

Data management for this study utilized word documents and Mp3 files identified by numbers corresponding to participant name, data type, and date collected. For ease of access and organization, the identifying numbers were entered into a database and the word documents placed in a password protected on-line file management system. Care was taken to protect the identity of the participants and reliability of the data.

Trustworthiness and Rigor

Trustworthiness is considered the quality and integrity of the inquiry and findings (Schwandt, 2007). Tracy (2010) developed a suggested “eight criteria of quality in qualitative research” to support the core values of qualitative research by following guidelines for practice. Tracy’s (2010) eight criteria are: worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethical, and meaningful coherence. This study adhered to the suggested criteria.

The topic of this study was relevant and interesting, close examination and disclosure of my subjectivities, my interest in the topic and my desire for understanding supported and established sincerity (Tracy, 2010). Rigor was first established by the selected design of the study and the use of multiple data sources, clear boundaries and thoughtful research questions (Baxter & Jack, 2008). Triangulation during data collection insured the data was viewed from more than one angle (Schwandt, 2007) and member checks, and peer debriefing helped ensure both rigor and credibility (Creswell, 2004). The participants were treated ethically by protection of their identity, informed consent, and input into what information was included in the findings.

Triangulation

The depth and variety of data sources, known as triangulation, lead to a deeper and broader understanding of the research topic (Bogdan & Biklen, 2007). Feilding and Warnes (2009) affirm collecting data from multiple sources established a logical chain and added depth and consistency of data. Data was collected by means of individual and dyad interviews, observation, photographs, and cognitive maps. The data collected from different sources was reviewed and compared to gain awareness of each participant's point of view. Themes, perspective, collaboration, and trustworthiness are achieved through triangulation (Creswell, 2007).

Member Checks

Member checks provide the opportunity for participants to review transcripts of interviews and rough drafts of writing for accuracy and palatability (Stake, 1995). I contacted each participant after the individual interview and prior to subsequent joint interview to corroborate time frame and context. Each participant was provided a rough draft of data analysis to obtain the participants view of quotations and language (Thomas, 2017). Obtaining the

participants view did not come with a promise of change but their perspective was considered important for inclusion in the final draft (Stake, 1995). I was mindful of the sensitivities of all participants by being selective of information provided where autonomy of the source could not be guaranteed (Krefting, 1991; Thomas, 2017). Member checks ensured the experiences of the participants was reflected correctly (Lincoln & Guba, 1985). Yin (1984) suggests that review by key participants is helpful at the end of the study to ensure validity. To establish trustworthiness member checks occurred during data collection and analysis. All participants approved of the transcripts and analysis of the interviews.

Peer Debriefing

An additional method to establish rigor and safeguard trustworthiness is employing peer debriefing throughout the research process. Lincoln and Guba (1985) stress the importance of trust when selecting a peer and the focus on methodology during the process. Peer debriefing requires the researcher to be vulnerable and expose their research to a peer who in turn explores for inconsistencies that may be hidden to the researcher (Lincoln & Guba, 1985). This process adds a set of detached eyes to check the quality of the research (Creswell, 2007). I regularly met with my Major Professor and trusted colleagues during all phases of research and analysis. The input provided by these trusted individuals added to the overall quality and value of this study.

Summary

Understanding informal learning within mother daughter dyads expressed through perceptions and expectations of aging was the objective of this qualitative research. With the desire to understand how participants construct meaning, the theoretical frame work for this study was be symbolic interactionism. Emphasis was placed on how the participants' experience reality and make meaning of experiences that shape how they see themselves as they age. The

selected methodology for this study was thematic narrative inquiry-the study of experience and meaning through the telling and retelling of one's lived experience. Informal learning and family systems theory was the conceptual framework of the discipline that guided the study.

People may construct meaning from experiences in different ways even when the experience is the same or similar, with this in mind, three mother-daughter dyads were selected to participate in this study. The daughters were between the age of 45 and 60 and the mother over 75 years old. Participant anonymity was provided with participant-selected pseudonyms All participants live in the Midwest United States but came from a variety of different life experiences to add differing perspectives and perspectives.

Data collection was designed to provide greater understanding through the stories of the participants. Data was collected through participant interviews, observations, pictures, and cognitive maps: focused on each participant's view of the aging process, identification of aging process and informal learning through interaction within mother-daughter pairs. During data collection, I considered how the theoretical framework, methodology, data collection method and analytic framework inform my approach to the data. Trustworthiness and rigor were ensured by observing the interaction between the mother and daughter, comparing data from the individual interviews to data obtained during the dyad interview and discussing the significance of the photographs. Combining multiple data sources provided context and depth to this study. Member checks and peer debriefing added to the trustworthiness and rigor of this study.

Chapter 4 - Data Analysis

This chapter discusses how data collected from interviews, conversations, observations, cognitive maps, and photographs from each mother-daughter pair was analyzed. Demographic information of the pool of participants is provided. The findings are presented as participant narratives with the women telling their lived experiences positioning them as the expert on their history and the mother and daughters' understanding and perception of aging. Data from participants provided background information, interviews, cognitive maps, photographs, and observation is included to fully address their perception of aging and demonstrate the six characteristics of informal learning.

Overview of Research

The purpose of this qualitative narrative inquiry was to understand how informal learning within three mother daughter pairs as demonstrated through mother daughter interaction and the daughters' insight and perception of aging. Informal learning was identified utilizing Marsick and Volpe's (1999) six characteristics: integrated with daily routines, triggered by an internal or external jolt, not highly conscious, haphazard and influenced by change, linked to the learning of others, and an inductive process of reflection and action. The daughter's perception of aging was explored by identifying the mother and daughters' similarities and shared beliefs of being old. The intimate social setting of the mother-daughter relationship was selected to explore meaning making derived from experiences, memories, and conversations as expressed through the telling of the participant's stories and reflections about their perception of aging.

Research Questions

RQ1: How are the characteristics of informal learning exhibited in the lived experiences of mother daughter pairs?

RQ2: How is the influence of informal learning demonstrated in the daughters' insight and perception of aging?

RQ3: How is learning in a social context demonstrated by the daughters?

Introduction to the Participants

The participants consisted of three mother-daughter dyads: The mothers ranged in age from 80 to 84 years and the age of the daughters ranged from 55 to 60. The daughters lived with their mothers through high school. At the time of the research all of the daughters were married and had adult children. The participants were a result of purposeful sampling; these participants responded to a request via email, met the inclusion requirements, were available, and agreed to provide artifacts and engage in interviews. The participants chose their own pseudonym. The three mother-daughter pairs were: Rose and Susan, Lu and Becky, and Dot and Ginger.

Rose and Susan

Rose (mother) and Susan (daughter) chose to be interviewed at Rose's house which happens to be Susan's childhood home. Prior to the interviews details about the study were provided and the informed consent signed. Susan was at her mother's home when I arrived and was attentive to her mother taking time to explain the details and laid out a time frame for the day; they were very relaxed in each other's company. Before the interviews, they asked if I would stay and share lunch with them when we were finished. Rose chose to be interviewed first. During the interview Susan moved through Rose's house and kitchen as if it were her own. The individual interviews were conducted in the dining room while the other busied herself in the kitchen. The atmosphere was relaxed and welcoming but designed so Susan could be nearby if Rose needed her.

The follow up dyad interview took place at a restaurant suggested by Rose and Susan. They chose to meet in the middle of the day after Rose finished her visit at a senior living home. Susan picked Rose up so they could drive to the restaurant together. When they arrived, Rose was dropped off at the door and Susan went to park the car. When she joined us, Susan discussed the menu with Rose; helping her decide what to order, much in the way a mother would guide a school age child. The change in roles, the daughter mothering the mother was subtle but obvious. Rose appeared comfortable with this behavior and seemed to welcome the concern. During the interview Susan and Rose supported each other's statements and often added to the story. This was demonstrated when Rose and Susan shared their memories of caring for Rose's dying mother. When sharing their memories they spoke to each other as if alone. Susan started the conversation remembering the schedule they kept and joking about her grandmother's age: *I remember with grandma, we made kind of a sign-up thing, it was not for 5 years because she was 100 and you know realistically it was not that inconvenient.* Rose jumped into the conversation: *and you know caring comes easy to me, and I think it does to you too.* Susan agrees and Rose continued: *I'd definitely say it was an honor – well she is your mother!* Susan interjected that it was a choice and Rose commented that *it was a choice but also a duty but not a negative thing.*

The pair continued to speak as if they were the only two in the room, pausing and reflecting on the time spent caring for Grandma. Susan reminded her mom of a conversation they had during that time: *and you always say everybody has their own way of handling that just like we talked before. So, you have to do what you can and that is the peace I have. I just do what I feel I need to do and not.* Rose interrupted: *Oh yeah, that is kind of what I was alluding to* And Susan agreed with her Mom, while reaching over and placing her hand on Rose's arm said: *right*

Mom, I know I think so. The pair was able to communicate their thoughts and feelings without long speeches; they completed each other's thought and responded to statements left unspoken.

Lu and Becky

Lu (mother) and Becky (daughter) chose Lu's home for the initial interview location. Before Becky arrived, I discussed the details of the study with Lu. While waiting for Becky to arrive Lu read the informed consent but asked if she could wait until Becky had a chance to look it over before signing. Soon Becky arrived with her dog and shared a brief conversation with her Mother; taking time to catch up on how things were going since her father's recent health scare. Becky's concern was for her father but also for Lu and how she was handling the extra stress. It was evident by their behavior and tone of their conversations they cared and respected each other but did not intrude, choosing to give each other room and independence. After a brief period of catching up Becky read the informed consent, went over the details with Lu and they both signed the document. Lu appeared more relaxed after Becky explained the reason for the consent. Becky excused herself to run errands when Lu was interviewed. Throughout her interview Lu would excuse herself to let the dog out and check on her husband and busied herself in her office during Becky's interview. The atmosphere of the home was pleasant and warm.

For the final interview together, Becky expressed concern about Lu driving any distance during rush hour traffic so chose a nice restaurant for dinner close to Lu's home. Lu arrived first and Becky joined a bit later, explaining she was held up at work. Lu did not seem fazed by Becky's late arrival, acting as if she expected it. Saying Becky was busy and always had so much on her plate. Becky sat next to her mother and focused her attention on Lu; asking how she was feeling and generally catching up sharing news about her family and their latest activities. Becky did not take an active mothering role with Lu but did take time to see if Lu needed anything and

was doing well. They behaved like good friends with a long history meeting for a bite to eat. During the dinner and interview Becky and Lu would randomly focus on each other and speak in abbreviated sentences, a rhythmic short hand developed overtime and unique to them. During the interview they seemed to forget I was there and had this separate conversation - their words blending as if they were one voice:

Becky: Did you get one of these? These are good

Lu: Are they

Becky: The one's at Holly Hill are unreal

Lu: what are they

Becky: hearts, artichoke hearts

Lu: oh

Becky: They're good. How about the salmon stuff? Good?

Lu: UMM these are good, so are you going to be in Holly Hill soon anyway?

Becky: No

During the dinner and the interview, the conversation shifted from interview questions to this private conversation. On occasion, Becky would talk as if Lu was not present similar to a parent talking to a teacher about their child. Then suddenly all of Becky's attention would be directed back to Lu. This shift did not seem to be noticed by Lu; she would nod and add to the conversation, as she desired. Lu and Becky have a comfortable relationship, not getting too involved in the details of the day-to-day routine while having a great deal of respect and affection for each other.

Dot and Ginger

Unlike the other mother daughter pairs Dot (mother) and Ginger's (daughter) schedules did not allow them to be interviewed at the same time and place. Ginger chose to be interviewed in the evening at her house and Dot selected lunch at a restaurant near her home. Both Dot and Ginger were provided time to ask questions about the study and read the informed consent before signing. The separate interview locations did not provide the opportunity to observe the interaction between Dot and Ginger.

For the second interview, Ginger and Dot chose to meet for dinner. After getting off work Ginger picked Dot up at her house and drove her to the restaurant because she was concerned about her mother driving at night, especially in the rain. Similar to how Susan related to Rose, Ginger took time to go over the menu with her mother, making sure she understood the options and helping her order. Dot seemed to appreciate the care and attention. During the interview Dot and Ginger rarely responded to each other's comments, they were respectful of each other and did not attempt to interject their opinion. As I noticed the change of roles during the interview, I asked Ginger when she first noticed Dot needed more help. Ginger recalled when Dot first needed help bringing the plants in for the winter: *She (Dot) always had a lot of pretty plants on her deck and would always bring them in when the weather changed. One Fall a few years ago she could not physically carry those plants in anymore. I mean it wasn't a big deal but it kind of bothered her. It seemed like she couldn't do it but she didn't want to ask anyone to help.* Dot did acknowledge this was the beginning of a change in roles: *I look at it like caregiving because I couldn't so it anymore and still can't. I am limited and I know it and I try to stay within my limits.*

Photographs

The type of photograph selected, and the conversation of the pictures provided insight into the family and mother-daughter relationship. The importance of tradition, being a mother, and family events was the theme of the pictures Rose and Susan both provided. Interestingly, without consulting each other over half of the pictures they selected were of the same event and often the same picture. The importance Lu and Becky place on spending time together and staying active was evident in their photographs. Lu and Becky together selected the pictures they chose to share. The pictures were of trips, adventures, and landscapes; snapshots of exciting trips shared experiences. The pictures did not always include a person, rather a place that held a memory or a funny story. Though the pictures were not always of a person they told a story of shared time and the making of memories. Ginger selected and provided the pictures to represent her and her mother, Dot. The pictures were of family events and most were posed. The theme of the photographs was major life events of Ginger's daughter. Both Ginger, Dot and Ginger's daughter are in the pictures. The importance placed on hard work and dedication is evident in the pictures of graduations and awards ceremonies. The photographs were a valuable data point, adding depth and meaning to the study.

Findings

The findings were organized by the research questions and the themes that align with each question. Characteristics of informal learning are illustrated in the stories shared by the participants. The influence of informal learning within the mother-daughter dyad is demonstrated in their stories about aging. Learning in a Social context was demonstrated through Jarvis' (1987) model. Additional themes not contained in the research questions and apparent during data analysis are included at the conclusion of the findings.

Research Question 1

How are the characteristics of informal learning exhibited in the lived experiences of mother daughter pairs?

When telling their stories, the mother-daughter dyads demonstrated the six characteristics of informal learning: 1) taking place during daily routines, 2) triggered by an internal or external process of reflection and action, 6) linked to the learning of others. Each characteristic was listed with support provided by the words of the participants collected during the individual and combined interviews, descriptions of the photographs provided, and interpretation cognitive maps. Not every characteristic was demonstrated by each mother-daughter pair, many of the stories blended the characteristics. The findings are presented with the best representation provided by at least two of the participant pairs.

Daily routines. Daily routines are activities or routines that are performed without thought, they become part of who we are and what we do. The routines can be complex or simple; watching those near you participate in daily activities and routines provides the opportunity for informal learning (Marsick & Volpe, 1999). Rose and Susan told how volunteering has become a daily routine passed from the generations. Being organized and keeping a tidy house is routine for Dot and Ginger.

Rose (mother) and Susan (daughter) demonstrated learning through daily routines in their discussion of volunteering. As a teen and an adult, Susan watched Rose volunteer her time dedicated to helping the elderly through her church. Rose continues this activity today even though she can be considered elderly. Volunteering is part of Rose's routine. Rose explains why volunteering is important to her: *I think I chose doing that [volunteering] especially after I retired because why would you not? You realize how important it is to the whole system. It gives*

you self-worth. In a separate interview Susan shared why she volunteers her time and how she learned the importance of volunteering from her mother's routine. She described how she always knew she would volunteer and how she saw her mother's ease with speaking and helping the elderly.

Susan: I think I am like my mom doing the communion thing, doing that and visiting people and probably speaking to them. My mother speaks to elderly very easily and taught me that. It is probably one of the easiest things that probably would not have been something that I would have chosen to do but I love doing it. She did not really encourage me; I just saw a need. I started off well I always volunteered, and I knew I would volunteer.

During the conversation with Dot (mother) and Ginger (daughter), they shared how they are both neat and organized. I asked Dot if she ever sees herself in Ginger. She immediately started talking about Ginger's neatness and organization: *Her neatness, I have to be organized before I get started on anything and it all has to be put away when it is done.* Ginger was chuckling and nodding her head in agreement. Dot continued: *Ginger and her husband were redoing their house and living in pure chaos. I walked in one day and there were 40 pairs of sunglasses hanging across a pole inside the door and there were mittens and gloves there too. I just thought I would do that too.* Ginger said she absolutely agrees with what Dot was saying. As we continued the conversation about neatness and organization Ginger recalled: *I always saw it and Mom made us make our beds everyday* adding that she did the same with her daughter. She went on to say how her friends always wanted to come to her house because Dot kept it so neat and tidy. The memories shared were pleasant, but Ginger did say *sometimes I wish I could let go of it but I just can't.*

Unlike the other dyads, Lu (mother) and Becky (daughter) did not speak in detail about daily routines but the impact of everyday life was evident. Lu mentioned she is always busy and has projects she is working on and plans for new projects. When asked about her daily routine she mentions her “can-do” approach life: *whatever shows up shows up, I don't plan it I just get on with it*. Later when talking about Becky she says: *I'm glad she has a can-do attitude that I certainly have but I would do heart surgery and she would do brain surgery*. Taking life as it comes and stay busy with projects is a constant in Lu's life.

In a separate interview, Becky frequently mentioned how she is a lot like her mom: *We are both very busy-busy minds-always have a project always looking to do something*. She also mentioned how she takes life as it comes: *I've learned not to sweat the small stuff; not having so much anxiety over things. I mean you take what you can learn from and move on*. Becky frequently mentions her mother's active and can-do approach to living.

During the interviews, all of the mother-daughter pairs demonstrated learning that occurs during daily routines. Susan learned the value and need to volunteer from watching her mother volunteer. Being organized and keeping a tidy house was Dot's daily routine and is now part of Ginger's routine. Becky and Lu keep busy and take life as it comes. The daily routines demonstrated by the participants are different in scope and purpose but through observation and reflection have influenced the daughter's behaviors.

Internally or externally situated jolt. A serious illness that alters the independence of a parent is a major life event that can contest long held traditions and beliefs. When this illness is sudden the accustomed parent child roles can be challenged and often changed. This change or jolt provides the opportunity for reflection on the past and concern about the future. Susan tells of

Rose's sudden illness and surgery and Becky and Lu talk about how Becky's father's stroke caused them to think about the future.

Susan told the story of her mother's unexpected gall-bladder surgery that took her by surprise: *Maybe because she was never sick, it was a shock.* Rose's illness helped Susan realize how suddenly life can change and what was once taken for granted may no longer be available: *You know I always thought if anything happens you can go back to your mom's house or go to your mom, and you know when she's not there physically there is no place to go.* When she was talking about this Susan became very quiet and added how important preparing for the future has become: *So, like if she has a problem like walking, like if she hurt her knee, I say mom let's go see what the answer is and see if there is any solution to it because I know that in the future I might have the same issue and I am kind of curious if it can be helped.*

In a natural conversation as if the researcher was not in the room, Lu and Becky talked about Lu's husband's recent stroke. They share how their thoughts about getting older have developed and changed because of this unexpected health crisis. Becky seems concerned about her future and wants to make sure she is as strong as her mother when she is her age, because of what happened to her father. Lu shared: *I just think there's a lot of stuff that I would do* interrupting herself she adds *and I can do it now. I look forward to grand kids, what I dread a little but didn't really occur to me and maybe it is coming more into focus watching my parents to some degree, but um Todd (Becky's husband) is seven years older than me, what I dread I guess is that I could spend my old age either not dead but not in good shape or Todd.* Lu interjected: *taking care of him.* Becky continued, *yeah and I, that I kind of dread a little bit.* Lu: *yeah that.* Becky responded: *and that is kind of where you're at.* Lu agreed, *yes that's where I'm at.* Becky further explained *Cause that's a whole other like, especially because of our age*

difference, because I'm just going to be hitting my stride – think worse case scenario: Todd is 63 now (pause) so lets say I retire at 60. Todd's 70 when I am 70 he's going to be – and I just keep thinking like I have another 10 years and I could be in Iceland with Abbey [Becky's daughter]. She was referring back to Lu's 80th birthday when they went to Iceland. Becky went on to question when she was 80 if should be able to do a trip like that. She addressed her mother, *you know that kind of issue, that's when my dad had his little stroke and you're thinking can I go, can I not go and that kind of stuff.* Lu agreed with her comment as she remembered the event. However, Lu stated that 70 is not a barrier anymore. Becky: *and I agree – your 80.* Lu: *it's great.* Becky: *when I'm 80 Todd is going to be 87. With my dad's issues I have a little more to focus on, I'm more conscientious of staying all right. I want to be my mom when I am my mom's age. My mom for her 80th birthday was on a glacier in Iceland, right?* Becky pauses, looks away and softly says: *Well with dad, you know... so that is part of it.*

Not highly conscious. Informal learning is not consciously pursued by the learner; it is not structured and takes place during everyday interactions and experiences (Jarvis, 2012). This characteristic is illustrated in the varied stories of the mother/daughter participants. The area of learning is different: aging, confidence, and thoughts about work but happened without conscious thought or action.

Susan and Rose demonstrate how learning can be unconscious when expressing her thoughts about getting old. Rose shared on the same topic. Rose reflected: *life does change, some of it good and some of it not,* she became teary eyed as she continued: *you can't do everything you want to do but in many ways you have the time to move slower.* With a smile Rose talks about how she has time and says *my real joy is being able to interact with my kids and their friends.* When Susan talked about her thoughts on getting older, she voiced the same feelings as

Rose, nearly word-for-word; *Getting older does mean you have more time and it does mean there's an end to my life more so than a beginning.* Just as Rose, Susan mentioned not being able to do all of the things she once could and added: *in some ways I think that is okay because you have more time to do it.* Susan learned from her mom to value the time available to spend with family.

Becky tells how she learned many skills from watching her mother. Sitting in the corner of her patio is a brick pizza oven designed and built by Becky, she tells how she knew she could build it; *we are both very busy, always have a project going looking for something to do.* She starts to chuckle and her voice fills with pride; *I always describe her as Martha Stewart with a power tool.* Becky continues to talk about Lu's approach; *If it needs to be done you just find a way to do it.* Watching her mom helped Becky trust her creativity and consider taking on challenging projects as the norm *Mom is never limited in what she thinks she can accomplish. So, I had somebody comment to me one time when I made that pizza oven saying – what made you think you could even do this – and I was like – it never occurred to me that I couldn't, I was raised by Lu. You know you just do it so I think we are a lot alike in that regard.* Lu's attitude and willingness to tackle projects is reflected in Becky's confidence to take on exciting projects.

Finally, Dot and Ginger also demonstrated some unconscious actions. Dot and Ginger have a strong work ethic and find their work rewarding. So much so that Dot worked well past traditional retirement age. Dot is nostalgic when talking about her work and the importance of finding a way to enjoy your job: *Well it is something that makes life easier, you know no one wants to go through life doing something they don't like.* When she had to take a job she wasn't sure she wanted or liked she made the job fit. She continued to work until she turned 65 because

she liked working and wasn't ready to retire: *I retired when I was 76 and I was ready then, I was ready then but not before that.*

Ginger's work experience and view mirrors that of Dot: *I definitely got my work ethic from my parents; I mean they worked very hard. I don't ever see myself retiring before 70.* She attributes this to watching her mom and being aware of her mother's attitude about work, *I think my mom always liked what she did for all the jobs she had. She enjoyed going to work and I feel the same way. I don't wake up in the morning going AAHHG, I mean I don't, I feel great. I'm excited to go to work so that is probably one of the things I noticed about Mom, that she loves her work.* Ginger passed this same outlook onto her daughter.

Haphazard and influenced by change. Change that is either gradual or sudden is an opportunity for informal learning. Change is not always welcome and can be either gradual or sudden. Change was a theme present in many of the stories shared by the participants. Susan tells the story of the gradual change in relationships and thoughts of getting older. Becky and Lu share their experience of a change in physical ability during a family trip to Machu Picchu.

As Susan reflects on her current age and how her relationship with her mother is changing, she stated: *In some ways I feel like we are closer in age, umm, because I'm older too.* Her children have moved out, are married and are raising children of their own creating a gradual change in her role as a mother and her relationship with her mother. *I'm not mothering and she's not mothering either. So yeah, I kind of feel like we are closer in age.* Susan accepts the changes that come with aging, but it does not mean she always likes them. She chuckles while saying; *I am so thankful that we're not old! It is a relative thing you know, you're really not young anymore and you can't really change that, it is all on your attitude. I probably would say that I really didn't like turning 50 and between now and then a lot has happened.* Her demeanor

becomes somber as she continues, *I've gotten older and my dad passed away and those kinds of things that umm it kinda, I was scared. Now I'm not worried.* Susan returns the conversation to the importance of the relationships; *I am thankful that I have my mom around and that I can enjoy that time with her and my kids too as well and my husband, yeah* with a laugh and a smile she adds; *and my health.*

For Lu and Becky, the change was more physical. Both Lu and Becky love to travel and spend time together experiencing different cultures and experiences. They are very animated when telling their tale of a family trip to Machu Pichu. They were laughing and talking over each other in their customary banter as they spoke of the unexpected physical changes of aging they experienced. Becky turned to Lu and said; *Yeah well. That's the first time I heard you express frustration about your physical disconnect.* Lu nods and looks down and mumbles; *yeah, my physical thing.* Becky continued to tell of the frustration of her body not letting her do what she wanted Becky reaches out to Lu and attempts to offer support; *Um I guess I can relate to it [Lu's physical challenges] obviously on a much smaller level but I was very surprised at you know and how the girls where there and they were unphased by all of it, (chuckles) and you're over there and Tim and I are kind of like in here going damn, and the girls are like-you know –* While laughing Lu interjects; *Let's go, yeah!* Becky joins in the laughter and moves her arms gesturing like she is climbing; *Climbing up these huge you know. So, it is probably is hard.* Lu's demeanor changes and she looks distant. She interrupts Becky: *That thing in the train station was the worst part of the trip* [Becky is thinking out loud mumbling about the train station] Lu continues; *That was the beginning of it – remember we got off the train and we –* Becky excitedly exclaimed; *Oh we had to run to the train station* Lu nods her head and speaks over Becky: *Yeah.*

Unphased Becky continues *or run to the restaurant in the Tat-Tat the train station* Lu laughs and repeats Tat-Tat.

The story continues as if they are alone in the room getting lost in a memory. Lu recalls getting off the train. *But when you got off the train we were going to* (Becky nods in agreement) *the market* (Becky: *Oh yeah*) *and carrying something going up there and of course we were higher than we had been but I was just like in a fog and we had to hurry up and get to the hotel or something or other. And I was almost you know in a panic.* Becky tries to explain to Lu reminding her. *I wanted your back pack, wanted to help you with whatever and you were like – get the flip away from me, I got my own back pack – but I think you were also I want my own back pack.* Lu defends her actions telling how surprised she was: *I was just mortified that I that – I – the train station was literally a market, you had to weave your way through this market to get out of the train station, late at night and we weren't even climbing anything yet.* Becky becomes reflective adding her memory and feelings about the situation; *I probably also noticed getting older myself for the first time when we were in Peru, and the altitude was high and climbing up things which you know the altitude I'm sure would affect me, but not anywhere near the way it did and not adapting as quickly. We [Becky and her husband Todd] thought we were going to go mountain biking and we were like; I don't know we thought we were crazy that we were going to do that. But you know Grace and Abbey [Becky's daughters] could have done that without any problem, not even thinking about it, but me and Todd were feeling it.*

Inductive process of reflection and action. Informal learning is an inductive process; an individual adopts a behavior after reflecting on an experience, or conversation (Jarvis, 2012). The process of reflection and action and further reflection can take time. Based on the reflection and response the learned behavior is adopted or rejected. This process of reflection and action is

illustrated by Susan's story of no longer dying her hair; deciding to embrace her natural grey hair. Ginger tells the story how reflecting on her childhood shaped how she raised her daughter.

Susan started telling a story of her mother's friendly, active, and social life. Stating how her mom is relatively healthy and remains independent well into her 80's. Suddenly the story shifts and the focus is on her life: *Well, it is a funny phenomenon, I think that as you get older you know, things like that I took for granted*, she stops talking and looks down at her hands before adding: *I know this sounds silly but if I can stay healthy between 60 and 70 I'll be really happy, who cares after that*. She pauses and looks away before boldly stating; *After some thought I decided to stop coloring my hair and I went grey two years ago. I always say it was really liberating. It's like I don't*, another pause and looking down as if she is embarrassed before raising her eyes, grinning and saying *it's awesome. I know this sounds silly but okay I'm old, why not? I don't have to worry about it. No, I felt like I was looking older and I thought that um, I know I was older, so I thought just embrace it then*.

Ginger tells of how she remembers growing up. Though she has a fulfilling job she believes she could have achieved more; *I wished my mom would have pushed me harder in anything and I knew that*. She stops speaking for a moment, pausing as if she is trying to remember; *I don't know I recognized that at college I guess, and I think I always knew I was never gonna be that kind of parent*. As she shakes her head she continues; *I knew that I wanted – I was never pushed to my potential I don't feel like*. Ginger gathers herself and boldly says; *And so, I did the exact opposite with my child. I may be pushed too hard. I know I did. Pushed her right. Um but that's probably the one thing I look back on and wish she (Dot) would have pushed me harder*. She chose to act different than her mother, she chose not to replicate her experience.

Linked to the learning of others. Learning can occur when you watch someone perform a task or seek out advice growing from their knowledge and experiences. When experiencing the changes of menopause, Susan became concerned and had many questions. She shared her story of her desire to learn more about menopause partly by asking questions, but most importantly, by watching how the women in her life managed this life change. Becky and Lu tell how Becky learned to tackle non-traditional projects.

Susan tells about her concern when she started noticing changes associated with menopause: *I asked questions, like is this normal, should I feel like this?* Due to this concern she asked the women in her life, her grandmother, aunt, and mother about their experiences and feelings during menopause. *All three of them they came to visit me in Texas, and I was like I feel like I'm out of my mind, is that normal? They're like – oh yeah.* She was comforted by their answers but states she believes she learned more by remembering and thinking about them when they were the age she is now: *they gave me a great example of menopause in that it's not easy and I thought, if these women can do it and I never heard a word out of them I can do it too. And they made it through all of those weird feelings you feel during menopause, I never heard a thing out of them. Watching their example as well as getting older and going ok you can either fight this or just enjoy it you know that is how it is.*

Becky and Lu together told a story from Becky's childhood of Becky building a shelf in her bathroom. Lu was talking how she believes what you grow up with is what you think is normal; *what goes on in the life of kids growing up they take for the norm.* Turning to Becky she said; *I remember you from Grandview.* Becky smiled and exclaimed; *I remember that too!* She starts moving her hands like she is stacking bricks and measuring something while saying; *This was me trying to build a very simple bookcase over the toilet in my bathroom.* Taking on

household projects was a normal activity for Lu. If she wanted a new shelf or to replace a light fixture, she just did it. Becky wanted a bookcase and Lu told her to build it. Becky continued; I was in high school and my Mom said-just go build this thing or whatever-shaking her head and laughing she says; *I could not figure it out.* Nearly out of breath from laughing Lu interrupts; *six foot between her knees* (referring to the board Becky was trying to measure). Becky continues telling the story of trying to build the bookcase and what she learned from the experience; *I was trying to hang with just a board and saying I don't understand how to do it, but now I do know how to do stuff really well.* Lu places her hand on Becky's shoulder and says; *I don't know, four years later you were hanging dry wall.* Turning her attention completely to Lu Becky answers; *Yeah but that is absolutely from watching you!* Lu responded: *I never hung dry wall.* Becky looked directly at her mom and said: *you didn't have dry wall, but you always had the tools. You always fixed whatever needed to be fixed around the house.* Now including the researcher in the conversation, she continues; *It never occurred to me that there were men's work and women's work, that kind of thing. So, people will say to me – oh you do this stuff like this, they literally even to this day will say -oh is your dad handy? And I say no my mom is!* Both Becky and Lu chuckle enjoying the memory.

Research question 2:

How is the influence of informal learning demonstrated in the daughters' insight and perception of aging?

Early in the individual interview, each participant was asked to describe their thoughts when they think of an old person. The purpose of this question was to determine differences and similarities in the pair's thoughts of aging. Observation, content of their stories, and description of the pictures they selected provided insight into their perception of aging. The descriptions

provided illustrate the similar perceptions between daughter's and their mother. Rose and Susan embrace aging, considering the additional time to spend with family the benefit of aging. Lu and Becky look at others considered old but think an individual has control over how and when they become old. Dot and Ginger hold a dim view of getting old and hope they don't follow in the footsteps of their relatives.

Rose thinks aging makes one have a more realistic view of time, health, and relationships: being more realistic is part of the process; you walk slower and are much more careful. There is the fear of falling and being incapacitated. She does not believe fear of falling or cognitive decline should keep people from feeling grateful and enjoying life: At 80 I still enjoy my life, I have a great many friends that are not as lucky, living by myself I don't have to tell everybody everything. Rose pauses and tears come to her eyes not having my husband is the part I don't enjoy. She takes a moment and looks out the window, the sound of Susan working in the kitchen brings Rose back to the present and she continues my real joy in in all honesty is being able to interact with my kids, grandkids, and great grandkids. Seeing those children with their friends grow up and being around to know what they are interested in. She ends her story reflecting on her physical limitations but adds the benefit of time: Well your life does change, some of it good and some of it not. You can't do everything you want to do but in many ways you have the time to move slower. I mean I have time to interact with my kids and their friends also.

Susan also mentioned the benefit of time and family as part of aging. It does mean you have more time and it does mean there's an end to life more so than a beginning. Her words and attitude mirror those of Rose: I think physically not being able to do what you once did when you were younger. But in some ways, I think that is okay because you have more time to do it. They

both accept the physical limitations that come with added years but are grateful for the time they have.

Rose and Susan both share stories that illustrate the value of family, especially as they age. This value is demonstrated in the pictures they chose to share. They both provided pictures of family events. Without consulting each other over half of the pictures they selected were of the same event. They brought pictures of weddings and many posed pictures taken at birthday parties, graduations, and the baptism of a baby. All of the pictures included multiple generations. They are most proud of a picture that includes five generations of women in the family: Rose's mother (great-great grandmother), Rose (great grandmother), Susan (grandmother), Susan's daughter (mother), and Susan's first granddaughter. This picture was taken during a party after the granddaughter's baptism. The ladies are posed oldest to youngest and they are smiling looking more at each other than the photographer. This picture and the others provided represent the importance of family, being a mother, and grandmother for both Rose and Susan.

Lu and Becky's thoughts of aging are similar to each other's. Lu speaks of the difference she sees in people that are considered old: *I still often see somebody my age in a walker you know being very forgetful and thinking that's an old person even though I know they are younger than I am, considering many older people to be sort of set in their ways and not curious.* She realizes she is aging but believes the attitude and activity keep her from being old: *though me and my contemporaries that are my age or maybe a little younger we're all very curious and out doing something.* This view is echoed by Becky: *There are some people who are old but who are very active, very youthful, very engaged, and then there's people in their 60's who act like they've got one foot in the grave.* Without prompting or being aware of her mother's answer Becky continues *So, umm I think of old people really two different buckets, you know folks that*

are still vital and some that strike me as giving in to the end of life kind of attitude. She tells of what she likes about getting older *I like being comfortable with myself, sort of gotten over being overly focused or concerned with other people's judgement. I'm no longer self-conscious about things, I am just comfortable in my own skin, maybe because I don't act or look any older than I did a decade ago* (chuckling she adds) *I like to think. Well I'm sure I look older but in terms of engagement I'm not.* She provides more detail: *I don't feel old because I feel engaged, I feel like I'm always learning new things, not that old people don't but I don't feel old yet.* They both express the belief that an individual has control over how and when they become old.

Lu and Becky realize aging is inevitable. They feel they do not look or act old and that aging is more about attitude and curiosity. This mindset is supported by photographs Lu and Becky selected. The pictures were of trips and adventure and not always including a person. Many of the photos were of a place that held a memory or a funny story. They shared pictures of the cabins at a river where they spent Labor Day weekend for many years canoeing with friends and family. They were excited to share pictures of their trips to exciting places and adventures. The importance Lu and Becky place on staying active and curious was evident in their photographs.

By contrast, Dot and Ginger each describe aging as something that happens and is outside personal control. They share a dim view of being old, both mentioning a grandparent with a bad outlook. Dot tries to describe a positive image of aging: *you get old only by age. At first you don't even notice it, but sooner or later things slow down.* Her voice begins to fade: *Your mind doesn't work as well as it did and that can be real annoying.* Dot suddenly stops herself, sits up straight and proclaims *but that's genes we have them. If we got em we got em if you don't you don't.* She tells a story about her grandfather and how *as he aged, he got cranky and I consider*

him old because he did get cranky. Going on to say how old people are often cranky and short-tempered relating to her experiences. *I started tripping because I had neuropathy in my feet, well nobody wants that. I am limited, I've accepted it. I can't do somethings, so I don't try. Cause why try if you know you are not able.* She seems to catch the negativity in her story and changes the tone *getting old is a privilege for most of us. We are so glad we are still here.* Ginger's thoughts of aging are similar to her mother's, but she mentions she does not want to be that way. She starts by telling a memory from when she was young: *When we were little, we looked at people that were my age now and we thought WOW they are really old. And now I think 60's the new 40 an um I guess.* Just as Dot spoke of her grandfather Ginger speaks of her grandmother – *My grandmother was always kinda old, my mom's mom. She was always grumpy and stuck in her ways; I never saw her do anything out of her comfort zone. She never ran, I never saw her do anything athletic ever. I thought WOW I don't know if I ever want to be that old.* Ginger stopped and looked down at her hands as if transported back to that time. She suddenly looks up and in a very serious tone continues her story *I think it is a natural transition, it's just an attitude. I mean I can sit here and grouse about being 60 years old but what is that going to do.*

Ginger provided the pictures of family events and most were posed. The theme of the photographs depicts major life events of Ginger's daughter. Both Ginger, Dot and Ginger's daughter are in the pictures. The most valued picture is of Ginger, Dot, and Ginger's daughter Ashley during the Ashley's college graduation. The pictures illustrate that time goes on and aging just happens.

Research Question 3:

How is learning in a social context demonstrated by the daughters?

Following Jarvis' (2012) learning in the social context, three of the six characteristics of informal learning: daily routines, internally or externally situated jolt, and inductive process of reflection and action was conceptualized illustrating informal learning in the social setting of the mother-daughter dyad.

Daily routines Susan's experience of watching her mother's routine of volunteering her time caring for elderly people in nursing homes demonstrated how Susan learned and integrated volunteering into her daily routine. Susan is a woman, mother, daughter, and wife, she remembered watching her mother volunteer her time visiting nursing homes and caring for the elderly residents. During her story she tells me: *My mother speaks to elderly very easily and taught me that. It is probably one of the easiest things that probably would not have been something that I would have chosen to do but I love doing it.* Susan now takes her granddaughter with her when she volunteers; she thinks it is important to share that time and experience. Figure 4.1 conceptualizes Susan's informal learning as a result of watching her mother's routine.

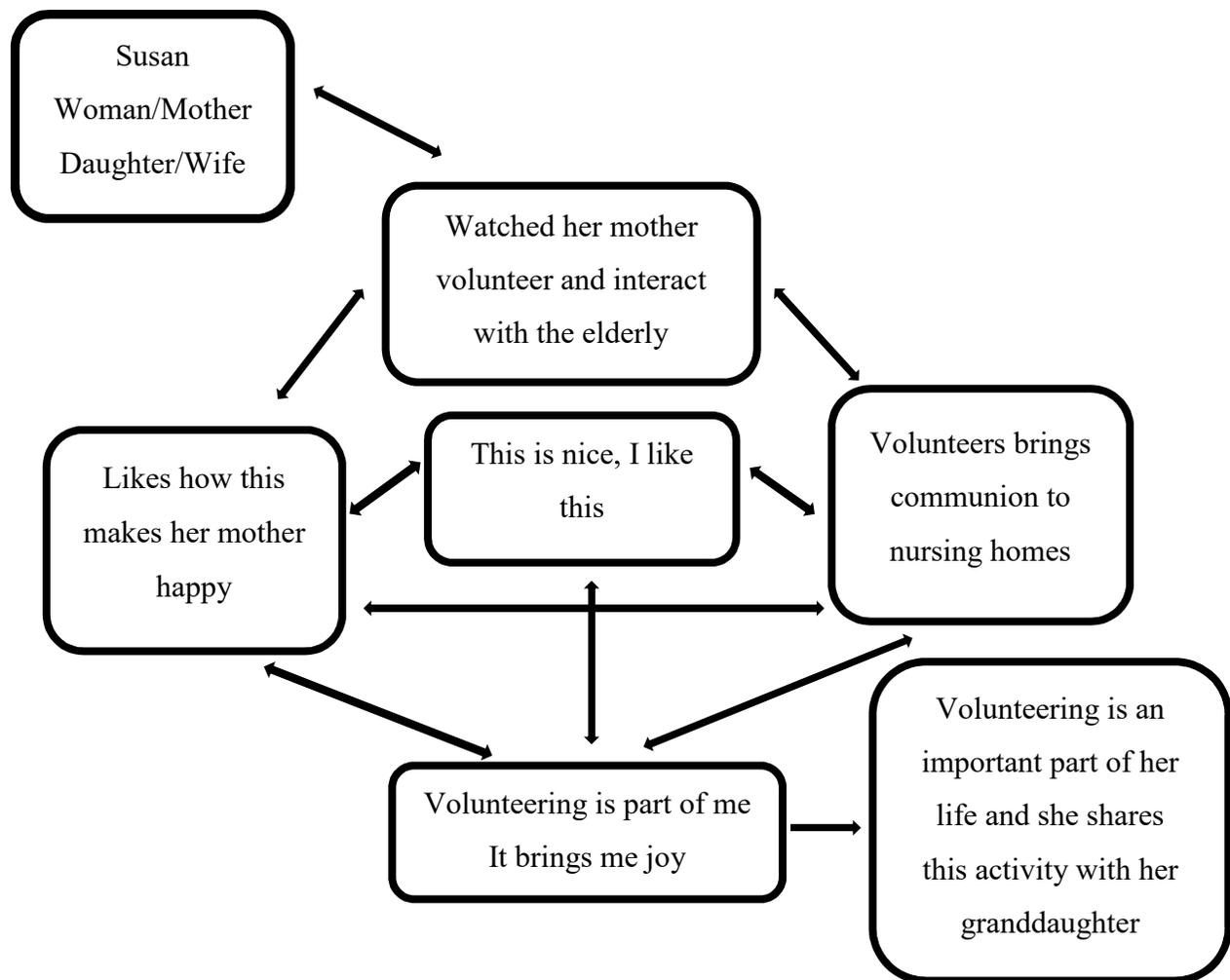


Figure 4.1 Susan conceptualized daily routines

Internally or externally situated jolt Becky shared the story of her thoughts and reactions after her father experienced a mild stroke and the impact of the stroke on her mother's life. Her father's illness was a shock to her and how her mother had to assume the role of caregiver was unsettling and caused Becky to have concern for her future. When reflecting on the stroke and her reaction to the changes she came to understand life can change without warning. Leading her to take action and make changes to protect her health and stay active. This process is revealed in Becky was telling the story of life after her dad's stroke Becky shared:

With my dad's issues I have a little more to focus on, I'm more conscientious of staying all right.

I want to be my mom when I am my mom's age. My mom for her 80th birthday was on a glacier

in Iceland. As a result of this experience, reflection and action Becky has learned to value the time she has and worry less about the future: *I just think there's a lot of stuff that I would do- and I can do it now,* changing how she plans her life as conceptualized in Figure 4.2.

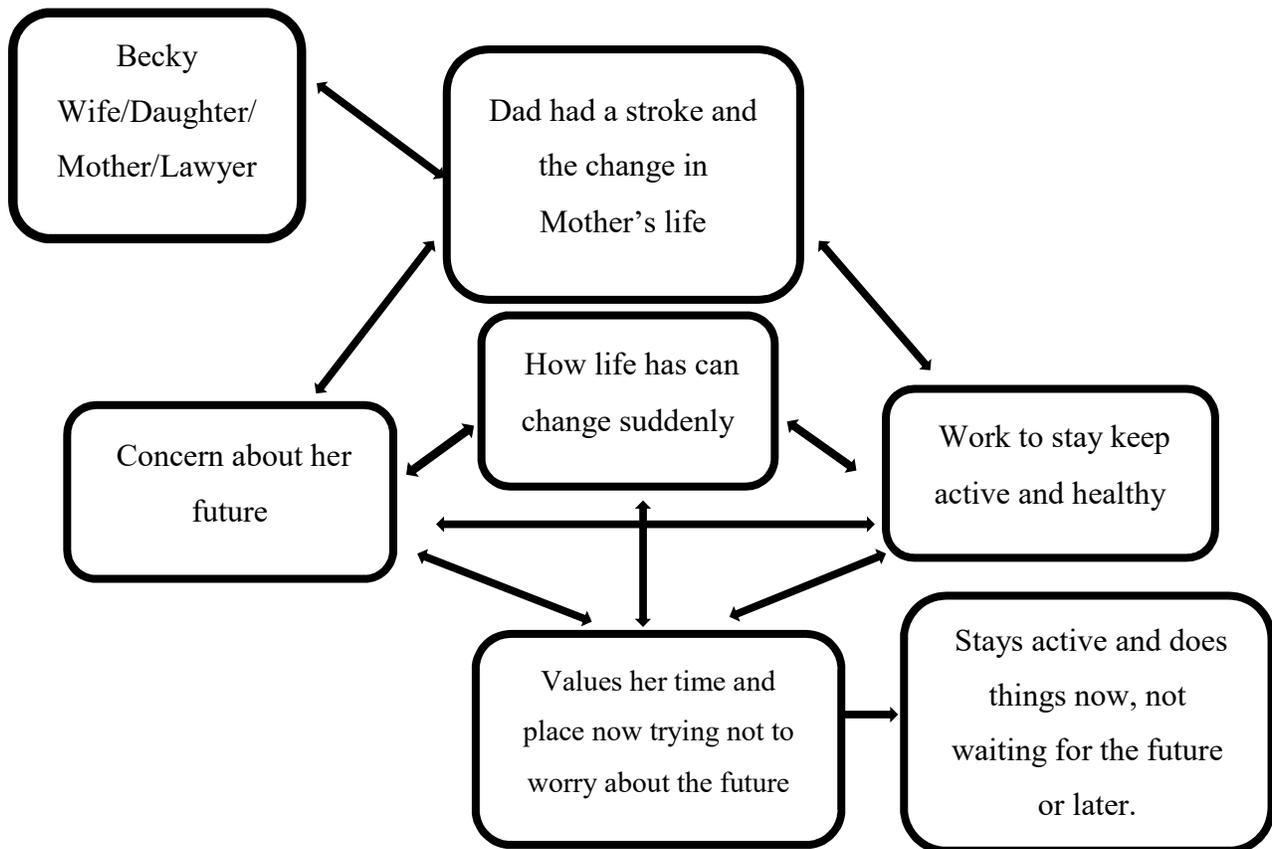


Figure 4.2 Becky's internal or external jolt conceptualization

Inductive process of reflection and action. Ginger's story described how she learned from her mother's attitude and behavior then rejected that behavior by doing what she believed was the opposite. When she was in college Ginger reflected on how her mother raised her. She knew her mother loved her but believed her mother was too easy on her, not pushing her to try harder or move outside her comfort zone. Coming to believe she had more potential and would have been more successful if she was only pushed harder by her mother, Ginger decided when

she had a daughter she would push her hard saying: *I wished my mom would have pushed me harder in anything I don't know, I recognized that at college I guess, and I think I always knew I was never gonna be that kind of parent.* She later stated: *I did the exact opposite with my child. I may be pushed too hard. I know I did. Pushed her right.* Figure 4.3 conceptualizes Ginger's story.

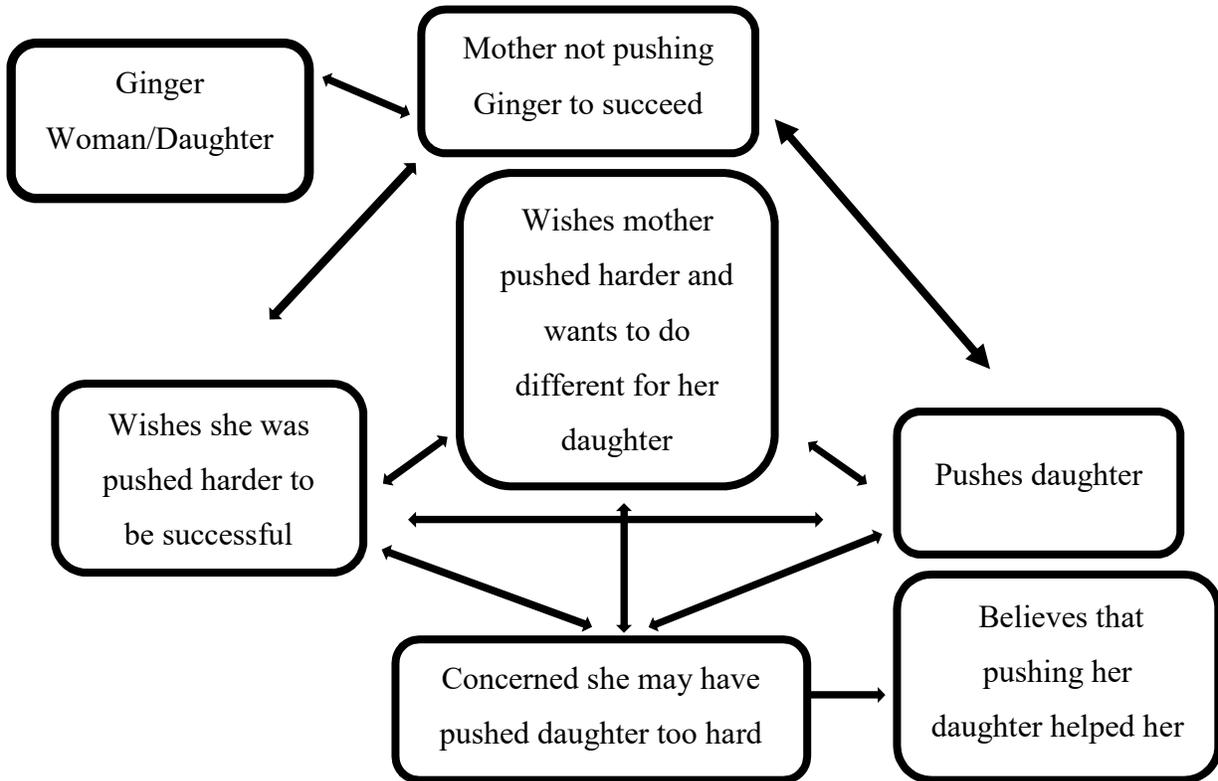


Figure 4.3 Ginger's inductive process of reflection and action

Other Themes

Themes not directly related to either research question emerged during data analysis. Though these are not directly related to the research questions, they provided insight into the influence and nature of informal learning. The other themes revealed were the daughters' expressed belief that they are more like their father and a change in family roles as the mother/daughter pair ages.

More like father

During their individual interviews each daughter expressed her belief that they inherited or learned strong personality characteristics or an outlook from her father. When asked if they are more like their mother or father, the daughters expressed love for their mother but felt they were shaped more by their father. Susan's father passed away when she was in her 40's. She remembers him fondly and told how her father's view of life and death shape her thoughts and actions. Becky's father recently suffered a mild stroke and she told how her work life, in a high-pressure career, is much like her fathers but hopes she can manage a better work/life balance. Ginger's father died of cancer shortly after being diagnosed, she told the story of how her ability to talk to anyone is just like her dad. She said her never met a stranger and neither has she.

Susan approaches life with a one day at a time outlook. She lives by the family saying, *nobody wants to be around a complainer*. She credits her grandmother (Rose's mother) with this statement but believes her father helped with understanding what that means to how to live each day: *I think my dad taught me more than anyone else*. [he died of cancer when Susan was an adult and she spent a great deal of time with him while he was fighting cancer] *he would say I am not talking dying today so let's talk about something else. So, I would hang out and we would just talk about everything and life*. Susan became very calm when she spoke of her dad, smiling and remembering his company. *It was a great example of being old and frail, well he wasn't that old, but he was just dying. He helped me learn to enjoy the time you have. I think I am a lot like him, at least I hope so*.

Becky's mother did not work outside the home, she ran the house and took care of the children because her husband (Becky's father) had a job that kept him away from home for periods of time and required frequent family moves. Becky told how she also chose a high stress

career *I've had more of a high-pressure job; I am more like my dad in that regard and quick to add but not by intention. Literally I just put one-foot in front of the other and this is where I end up. The majority of my energy to my career.* She pauses, reorders her thoughts, and ruminates about her parents and slowly says; *Now I think I'm better about balancing it and that's where I think I have the best of both, my dad's focus but leaving space for what I admire about my mom, her creativity and attitude about life.*

Ginger is very outgoing and friendly, as the saying goes-she's never met a stranger. When asked about this ability she says she got it *definitely form my dad because he's the same way!* She continues telling a story about her father. *He can tell you a story and you become completely engrossed.* She smiles and chuckles at the memory, *you feel like you have run 5 miles just listening for 15 minutes.* Her demeanor changed as her focus shifted to her mother, *my mom isn't like that at all, she doesn't have much of a sense of humor. She would always criticize my dad because he would embellish on stories* She looked away and said, *what she did always frustrated me. I mean it is his story let him tell it. She's not like us, she has always been really dry. I just think I'm not wired like her.*

Changing roles

During the interviews all of the participants demonstrated a subtle changing of roles, the daughters acting as their mothers' needed guidance and oversight and the mother's accepting the actions of their daughter. The daughters adopted the role of care giver while being considerate of their mothers' feelings. The shift in roles was done with care and understanding, and it appeared they were not consciously realizing the roles had changed. Rose and Susan tell how being the oldest in the family comes with responsibilities to her mother and her siblings, Lu and Becky recall caring for her Lu after a fall, and Ginger tells how family activities have changed.

The similarities between Rose and Susan's thoughts of family roles and responsibilities are striking and clearly illustrated in their cognitive maps. When responding to the prompt 'you at your daughter's age' Rose included the following assertions: increasing care for my parents, health concerns for husband, available to help children's families, fulfilled, and trying new things. Susan's map about her current age included: caring for my mother-in-law, enjoying and supporting her children's happily married lives, fulfilled with Wednesday ministry, having time to sew, travel with her husband, and thankful for her health and her husband's health. Both Rose and Susan mentioned involvement in caring for older family members and being concerned about health and taking a new supportive role in their children's family. Middle age appears to be a time of change for Rose and Susan.

The importance of the responsibility and one's role in the family was repeated by Susan when she talked about her mother: *She's the oldest in her family and was respected as the oldest so her sisters looked to her [for guidance] as the oldest. I think that it is just the era you lived and grew up in. My mom's family is very close, and it is a generational thing. This generation does this and this generations does this.* She stops then added: *I'm the oldest daughter also so it is kind of the same with my siblings.* She continued to tell how her role has changed: *I'm not sure my mom likes it that I step in and go ok Christmas is here Mom and we are going to bring this for dinner.* Susan explained why she takes charge of the details: *You know I do it more to make it so she doesn't have to work so much or worry. She told me there comes a time you have to trust your children and the decisions they make. I feel I've reached that point with my children too; I may not like or agree with all their decisions, but I have to trust them.* Susan affords her children the same trust that Rose shows her.

A few years ago, Lu fell and broke her hip and stayed with Becky during her rehabilitation. Lu is laughing and told how she remembered staying with Becky: *They took me to this park like I was a little kid she exclaims they were pushing me around this lake in a wheelchair and it was not a motorized wheelchair, I was thinking they don't have to do this. I could be at home reading a book or something. As soon as I could drive, I wanted out of there and back in my own home.* When sharing her side of the story Becky is clear that she let Lu be in charge as much as possible: *There was no real caregiving, she just couldn't walk the stairs to her home. When we had Lu at our house, she would cook dinner and do the laundry.* Lu and Becky are both laughing and Lu chimed in: *I didn't need any care taking!* Becky becomes serious and said: *I wouldn't want to be patronized and I know she (Lu) doesn't either, in a sense it is let me handle this. I think she would feel uncomfortable if she thought she couldn't take care of things. I mean I do check in on things and stuff, but only because I am close and care.* Beck and Lu value independence and being self-sufficient. Becky looks in on her Mother and asks questions, but does not interfere in her day to day life.

Ginger reminisces about holidays when she was younger and how her mother always worked hard to make sure everything was just right. She begins telling how things have changed: *Mom's obviously the matriarch of our family and I think everybody cares enough to um you know respect her and her feelings and so for holidays we always try to get together.* Under her breathe and with a little chuckle she says, *weather we are looking forward to it or not.* Ginger becomes serious again and continues: *But I think as I get older and she's aging the roles kind a turning to me because I'm the oldest and you know now, we host the parties and we host the holidays. And you know Mom gets to relax a little bit and just kind of enjoy it. And I hope that you know I've*

learned from her how to be a good hostess and be gracious and I think she feels ok letting go of that role.

Summary

Informal learning occurs without intent as a byproduct of an activity or interaction often outside formal and non-formal settings making it difficult to discern when it has occurred (Hayes, 2000; King, 2010; Schugurensky, 2015). Stories of three mother-daughter pairs demonstrate six characteristics of informal learning: integrated with daily routines, triggered by an internal or external jolt, not highly conscious, haphazard and influenced by change, linked to the learning of others, and an inductive process of reflection and action (Marsick & Volpe, 1999). The stories of each pair are varied and demonstrate the informal learning that occurs in the unique mother-daughter relationship and the influence on the daughter's insight and perception of aging as well as learning in the social context.

Chapter 5 - Conclusion

Introduction

This study examined informal learning within the mother-daughter dyad and explored the influence of informal learning within the dyad on the daughter's perception and understanding of aging. The preceding chapter provided the findings from the stories and artifacts collected for this study. The review of the purpose of the study as well as data analysis, narrative interpretation, and synthesis of the findings are included in this chapter. This chapter also includes implications for practice, recommendations for further research and conclusions drawn from the research.

Purpose of the Study

Informal learning is recognized as life-long learning happening outside traditional learning environments. Most empirical research has focused on informal learning that takes place in work environments leaving the social setting of the family under researched (Eraut, 2000; Marsick, 2009; Schugurensky, 2000). This study explored informal learning in the family concentrating on the mother-daughter dyad. Within the dyads six characteristics of informal learning are identified through analysis of participant narratives, photographs, cognitive maps and observation of the interaction between the mother and daughter. Insight into the influence of informal learning within the mother-daughter dyad as reflected in the middle-aged daughters' perception and expectation of aging.

Research Questions

RQ1: How are the characteristics of informal learning exhibited in the lived experiences of mother-daughter pairs?

RQ2: How is the influence of informal learning demonstrated in the daughter's perception of aging?

RQ3: How is learning in a social context demonstrated by the daughter?

Discussion of Findings

The concept of informal learning occurring in the family is widely accepted even though research on formal learning has primarily focused on learning in the workplace (Galanis et al., 2015; Marsick & Watkins, 2001; Overwien, 2000; Yanchar & Hawkley, 2014). The unique social setting of the mother-daughter relationship provided rich stories to identify and examine informal learning. The participant narratives supported the six characteristics of informal learning: 1) taking place during daily routines, 2) triggered by an internal or external jolt, 3) not a highly conscious, 4) often haphazard and influenced by change, 5) an inductive process of reflection and action, 6) linked to the learning of others. Through these examples, the influence of informal learning on the perception of aging, female adult development, and family roles are exposed.

Informal Learning

Adult learning takes place in different forms and in different locations with varying levels of intention (Livingstone, 2001; Schugurensky, 2000) and is commonly described as formal, non-formal and informal learning. Formal learning is part of a system and takes place in traditional learning institutions (Coombs, 1985; Merriam & Brockett, 2007). Learning that follows a loosely structured, socially driven process based on the needs and interest of the learner is considered non-formal learning (Coombs et al., 1973; Merriam & Brockett, 2007). Informal learning is different from other forms of adult learning due to the unplanned and unintentional

nature occurring outside traditional learning environments during everyday activities and experiences (Hayes, 2000; King, 2010).

During the process of living, informal learning takes place but is often hard to determine and identify due to the unplanned nature (Schugurgensky, 2015). To understand the social reality and self-reflective nature of informal learning participant stories were analyzed through the theoretical framework of interpretivism. The occurrence of informal learning within the participant dyads was identified in participant narratives, interactions and artifacts utilizing six characteristics of informal learning: integrated with daily routines, triggered by an internal or external jolt, not highly conscious, haphazard and influenced by change, linked to the learning of others, and an inductive process of reflection and action (Marsick & Volpe, 1999).

Theories of informal learning share the idea that informal learning happens through lived experiences, the context of the experience, reflection, and behavior (Bandura, 1989; Jarvis, 1987; Kolb & Frye, 1975; Mezirow, 1978). The lived experiences exemplified in the stories of the three mother daughter dyads participating in this study support Jarvis' (2012) theory of learning in the social context where informal learning takes place during interaction with others and the environment through a process of reflection, experimentation, and altered behavior or beliefs that change the individual.

The narratives of the mother daughter participants allowed informal learning to be identified through the telling and retelling of their lived experiences. The dyads shared stories of daily life and shared experiences. First, the mothers were interviewed individually, sharing stories of what it means to get old and what they think of older people. They also told stories of their daughters and experiences they shared. When the daughters were interviewed individually, without prompting each shared stories of similar experiences and themes as their mothers. These

stories illustrated the informal learning taking place in the social context of the mother-daughter dyad. The daughters were impacted by an experience, often times without realizing the impact, and the impact elicited an emotional response. The daughters then reflected on the experience leading to an action where the behavior or belief was applied or tested. This was followed by another period of reflection. After this reflection the daughter was transformed, and the new belief or behavior was accepted or rejected and became part of the daughter thus changing the daughter and her interactions with others.

Moral Development

Through the analysis of the stories shared by the participants, characteristics supporting Gilligan's theory of moral development emerged. Gilligan (2016) theorizes female adult development occurs in stages referred to as levels of moral judgement and connected by transitions. The levels of development range from focus on self and personal survival moving to the stage of caring for others at the cost of sacrificing personal desires and dreams. During level 1 the woman's focus is on herself and survival, level 2 the woman's attention is on caring for others and sacrificing one's desires to meet the needs of others. The development is completed by level 3; a time of caring for others and taking responsibility to meet personal needs. These stages are connected by transitions moving between selfishness, responsibility, goodness, and truth (Gilligan, 1977). Moving through the stages and transitions creates moral conflict that leads to development (Gilligan, 1977). These stages of moral judgement were revealed during the participants' narratives.

Rose and Susan shared the story of the time they were taking care of Liza (Susan's grandmother and Rose's mother) in the final weeks of her life. Their experience illustrated how informal learning guided their moral development. As they shared their story of Liza's final days

they reflected on the shared experience. Rose said to Susan: *caring comes easy to me, and I think it does to you too*. After reflecting on the time spent caring for Liza and her feelings of duty she continued: *I'd say it was an honor*. Rose and Susan continue to talk about caring for Liza and after a pause, Rose expanded on her previous statement saying: *It was a choice but also a duty, but not a negative thing*. Rose's reflection is an example of stage 3 of Gilligan's theory of moral development, a time of caring for others while taking care of personal needs. The thoughts Susan revealed support how she has learned and developed from watching her mother and sharing the caregiving experience Susan said to her mom: *you always say everybody has their own way of handling that [providing care for family members while balancing their own needs] just like we talked before. So, you have to do what you can and that is the peace I have*. Susan has come to understand not everyone can provide the same amount of caregiving but that does not mean they are less concerned; they are finding balance in their life. Based on Susan's comments she experienced a transition stage of moral development, finding goodness and seeking truth (Berk, 2010).

As exposed by Rose and Susan's story, adult development does not take place in a vacuum. Informal learning within the mother-daughter dyad influences and guides the development of the adult daughters. The stages and transition between the stages is not always smooth. Understanding and accepting the influence of informal learning on moral development provided insight into the behaviors and attitudes of women as they develop and age.

Lu and Becky's stories followed a similar path of moral development, Becky's concern about the increasing needs of her mother and father are balanced by her devotion to work and her family. Becky relates the evolution of her relationship with her mother *I really love my Mom. I like my Mom. UMM Yeah I think I really pretty lucky! I mean I think when I was younger we had*

a I wouldn't even say that much tension so much as didn't really you know I kinda I did my thing she did her thing but UMM I think that after that period which is probably like middle school high school you know what I mean. I think we always had a good relationship. Becky's reflection illustrated the general stages of moral development. As an adult, during stage 2, she has focused on her career and considers herself different from her mother *different - probably in terms of more like experience cause I've had more sort of more of a high pressure career. And my mom did work but it's different, you know.* As Becky ages and Lu becomes aged Becky reflected on their relationship and her responsibilities *well the age I'm at now I think its ahh with age comes a lot of wisdom and a lot of like not sweating the small stuff and a lot of perspective Not having so much anxiety over things. With older age comes umm the ability to just kind of settle in, well trying to be helpful and more cautious and that sort of thing.* Becky's story tells of her moral development and transition to stage 3, caring for others while meeting her personal needs.

Family Roles

Family system theory concerns how family members act within their family and their shared beliefs about themselves and the world in which they interact (Fingerman & Berman, 2000). When parents age and children reach middle age shifts in ability and focus lead to changes in the roles and responsibilities of family members (Goldberg & Goldberg, 1991; Knudson & Martin, 1994). The females in the family are especially affected by behaviors, values and beliefs concerning their role in the family (Bowen, 1978; Fingerman & Berman, 2000). The influence of informal learning was demonstrated in the daughter's narratives of how they understand and accept the changing roles in the family.

Susan is the second born but the oldest girl in her family and so is her mother. Susan views of the role of the oldest sibling are telling: *She's [her mother] the oldest in her family and was respected as the oldest so her sisters looked to her [for guidance] as the oldest.* Susan's statement about herself illustrated what she believes about her role as the oldest *I'm the oldest daughter also, so it is kind of the same with my siblings [looking to her for guidance].* She continued to tell how now it is her responsibility to take over the planning of holidays and special occasions which was a job her mother did in the past. She believes her mother may not like the changes but trust Susan and in turn Susan trust her children *She told me there comes a time you have to trust your children and the decisions they make. I feel I've reached that point with my children too; I may not like or agree with all their decisions, but I have to trust them.* This is how Susan understands how roles in the family change and how to accept that change by trusting how you raised your children.

Becky has also experienced the changing of roles in her family, but the transition has not been as smooth as Susan's. Becky's mother Lu married and moved away from her mother, never providing Lu the opportunity to learn from her mother how roles in the family shift. Becky never intimately experienced the subtle and gradual role change between Lu and her mother. Lu provided little insight into when the roles should change and how it should happen. Lu is very independent and resents needing help; when Lu fell and broke her hip, she stayed at Becky's house until she was strong enough to go to her home. When telling of her time at Becky's home Lu said, *as soon as I could drive, I wanted out of there and back in my own home.* Becky also down played the caregiving she provided while Lu recovered: *There was no real caregiving, she just couldn't walk the stairs to her home.* Lu's reluctance to accept the increased attention and less independence is evident in Becky's view of the change on family roles: *I wouldn't want to*

be patronized and I know she (Lu) doesn't either, in a sense it is let me handle this. I think she would feel uncomfortable if she thought she couldn't take care of things. I mean I do check in on things and stuff, but only because I am close and care. Lu married and moved away from the family home at a young age, never having the experience of being involved in the change of roles between her mother and grandmother. The distance between Lu and her mother did not provide the opportunity for Becky to experience or witness the changing of roles between her mother (Lu) and grandmother. Without this experience neither had the opportunity to learn how to adjust and accept the subtle change in roles. As illustrated by Becky's story, the lack of learning does not prevent the role changes from happening; it causes that change to be uncomfortable and often resented.

The change of roles in Ginger's family has been subtle and accepted by both Ginger and Dot. Ginger remembers watching her mother interact with her grandmother and other older family members. Living through this experience and reflecting on how she saw her mother care for her grandmother allowed time for Ginger to reflect on her feelings and try different behaviors, becoming comfortable about the change in family roles: *as I get older and she's aging the roles kind a turning to me because I'm the oldest and you know now, Mom gets to relax a little bit and just kind of enjoy it. I think she feels ok letting go of that role.* Ginger has accepted the role of family planner helping her mother and siblings. Taking comfort in thinking that Dot appreciates the change in responsibility and the new role in the family.

Experiences, beliefs, and assumptions shape individual family members ideas about family roles (Chodorow, 1999; Goldenberg & Goldenberg, 1991). Over generations the behaviors and beliefs repeat and the roles within the family are understood by individual family members (Bowen, 1978; Fingerman & Berman, 2000). The experiences and reflections shared

by the participants support informal learning within the social setting of the family creates an environment that allows acceptance of role transitions inside the family.

Perception of Aging

The mother's aging experience and her beliefs about what it means to be old contributes to the formation of the daughter's perceptions and expectations of aging. The influence of informal learning on the perception of aging is important to recognize due to the impact of stereotype threat. A negative belief about aging and towards older people is demonstrated in an individual's beliefs and reactions toward aging and can influence the aging process when he/she believes the negative views are true about them as they age (Bennet & Gaines, 2010; Levy, 1996). Informal learning was recognized in all of the participants through the daughter's view of aging. A view developed by experiencing their mother's attitude about being old and watching their mothers' age.

Like her mother, Susan thinks older people have the benefit of time to enjoy friends and family; she considers getting old as something to embrace and accept. Rose, Susan's mother, responded to the question of getting old: *Well your life does change, some of it good and some of it not. You can't do everything you want to do but, in many ways, you have the time to move slower. I mean I have time.* Without knowledge of what her mother said Susan answered the same question saying *I think physically not being able to do what you once did when you were younger. But in some ways, I think that is okay because you have more time to do it.* The influence of informal learning is evident in Susan's statement; her mother's attitudes and beliefs of aging have shaped Susan's idea of what it means to be old. Classifying old as having limitations but also having more time to spend with those you love.

Becky's thoughts of being old were not as upbeat but reflect the thoughts and actions of her mother, Lu. When asked what old looks like Lu said: *in a walker you know being very forgetful and thinking that's an old person, sort of set in their ways and not curious*. She continued to talk about her experience getting older: *me and my contemporaries that are my age or maybe a little younger we're all very curious and out doing something*. This conflicting view of what it means to be old is expressed in Becky's thoughts about old people: *think of old people really two different buckets, you know folks that are still vital and some that strike me as giving in to the end of life kind of attitude*. Stemming from what she has experienced and heard growing up and watching her mother age Becky classified old people into two groups, giving up and no longer curious about life and active, vibrant, and engaged.

The beliefs Ginger has about the old are influenced by the experiences and the thoughts of her mother. Dot shared: *things slow down, your mind doesn't work as well as it did and that can be real annoying*. She added that when you get old you get cranky. Ginger shared similar views about being old: *My grandmother was always kinda old, my mom's mom. She was always grumpy and stuck in her ways; I never saw her do anything out of her comfort zone*. This idea of what it means to be old made Ginger not want to get old: *I thought WOW I don't know if I ever want to be that old*. How Ginger thinks about being old reflects what she learned from listening to her mother talk about being old and watching those around her age.

Thoughts about old people and getting old form at a young age and continue to be reinforced throughout one's life (Devine, 1989). The participants stories demonstrate the formation and reinforcement of stereotypes through informal learning in the mother-daughter dyad. Without prompting all of the daughter's in this study shared a similar view of aging that their mothers expressed. Their perception of aging shapes how the daughters will age and how

they view their aging mothers. Understanding the influence of informal learning on an individual's perception of aging is indispensable when seeking to understand their behavior or resistance to change.

Implications

There are three implications for practice that can be drawn from this research. This research demonstrated informal learning takes place within the family. This has implications for understanding the role of informal learning in the social context of the family on shaping behaviors and closely held beliefs. How children should be dressed to what behavior is appropriate in different situations can be influenced by the views and behaviors learned from the family. When a daughter becomes a mother, she may believe a mother should look or act a certain way. These thoughts may not be directly expressed to her but she learned what a mother should be and how a mother acts from experiences with her mother. Through reflection on experiences and discussions that take place during everyday interactions, informal learning within the mother-daughter dyad appears to strongly influence how daughters view and interact with the world.

First, while the primary research on informal learning is in the workplace, this research documented informal learning in the family system. Educators have ignored the family as a context for the learning process which influences everything from the food we eat and the attitudes and behaviors developed. The attitudes and beliefs can be contrary to some of the experiences and goals of formal learning. Seeing the family system as a place of informal learning and the influence of that learning could assist teachers and other professionals in creating effective and relevant learning. Learners could be motivated and encouraged by drawing from past and present everyday experiences.

Second, informal learning appears to contribute to the subtle change of roles that occurs within the family. Experiencing how one's mother adapts to accepting the responsibility of coordinating family events and monitoring her mother's health helps the daughter understand how to manage changing family roles. When a daughter watches how her mother negotiates family role changes, she has the opportunity to reflect on the experience and her emotional response to the role changes. This time of reflection can lead to a conscious or unconscious learning and how she will manage the changing family roles throughout her life.

Third, understanding the learning that has occurred throughout life provides insight into why an individual may be resistant to change or fail to accept advice. While working as a physical therapist assistant in an inpatient rehabilitation hospital, I frequently worked with two types of older female patients. The first type who hate aging, complain and act as if they dread each new day. Conversely, the second type are happy to be alive and thankful to enjoy what they can. The level of disability or illness did not seem to determine their attitude and willingness to participate. It is possible informal learning of what one becomes when aged is responsible for the level of disparity in the behavior and attitudes of my patients. For example, middle aged women are often encouraged by her doctor to participate in an exercise program to improve health and she is reluctant to participate. This may be due to informal learning that took place in her family. Her mother may have unknowingly taught her daughter that exercise is not ladylike, real women do not sweat, and exercise means sweating. The doctor needs to understand that past informal learning influences current thoughts and behavior. Accepting the impact of informal learning can help all adult educators understand the adults they instruct. When experiencing resistance from a learner, deconstructing previous knowledge to remove the barrier from previous informally learned behaviors or knowledge may be beneficial.

Areas for Further Research

This qualitative study explored informal learning within in the unique social relationship of the mother-daughter dyad and how it is reflected in the daughter's perception of aging. This study was limited to the stories of three Caucasian mother-daughter dyads living in the Midwest who self-report a good mother-daughter relationship. Due to the homogenous sample, research in the following areas is recommended.

1. Expand the study to include culturally diverse families to understand the difference cultural norms play in informal learning. The participants in this study all currently live in the Midwest area of the United States and have for the majority of their lives. Further research focusing on the influence of culture, and regional customs on informal learning is warranted.
2. Explore informal learning within estranged mother-daughter pairs. This study focused on mothers and daughters who reported a good relationship and demonstrated that the informal learning did occur. Estranged mothers and daughters may not experience the same level of informal learning due to the estranged relationship.
3. Explore the father-daughter dyad. The daughters' narratives demonstrate the influence of informal learning within the dyad by the similarity of behaviors and beliefs shared by mother and daughter however the daughters stated they were most like their father. The influence of fathers on their daughter's development is evident in the participant stories (Allgood & Beckert, 2012; Zia, Malik, & Ali, 2015).

Concluding Remarks

This study's findings support Jarvis' (2012) theory of learning in the social context. Informal learning was found to take place during interactions within in the mother-daughter dyad

during every day events. After a process of reflection on events and interactions, behaviors and beliefs are formed changing how the daughters interact with others and the family environment. Previous research of informal learning focused on the more controlled environment of the workplace (Eraut, 2000; Marsick, 2009) due to the challenge of distinguishing the learning activities (Livingstone, 2001; Schugurensky, 2009). Informal learning in the family and specifically the mother-daughter dyad was identified in this study by utilizing Watkins and Volpe's (1999) six characteristics of informal learning. The stories of the mother-daughter pairs demonstrate that informal learning takes place in the family and influences the daughters' perception of aging.

Informal learning within the participant dyads was identified as an integral part of family interaction; shaping the behaviors and beliefs of individual family members. The lessons learned joined the family members in an intimate manner. The daughters in this study learned how to mother by watching and interacting with their mothers and developed a bond as mothers. The influence of informal learning bonded family members through shared beliefs and unspoken understanding of behaviors.

References

- Abbey, S. (1998). Mentoring my daughter: Contradictions and possibilities. *Canadian Woman Studies, 18*(2/3), 22-29.
- Allgood, S. & Beckert, T. (2012) the role of father involvement in the perceived psychological well-being of young adult daughters: A retrospective study. *North American Journal of Psychology, 14*(1), 95-110.
- Anderson, J. (2015). A transactional way of analyzing the learning of tacit knowledge. *Interchange, 46*, 271-287. doi:10.1007/510780-015-9252
- Arroyo, A., & Andersen, K. (2016). The relationship between mother-daughter self-objectification: Identifying direct, indirect, and conditional direct effects. *Sex Roles, 74*(5-6), 231-241. doi:10.1007/s11199-015-0554-1
- Baltes, P. B., Staudinger, U. M., & Lindenber, U. (1999). Lifespan psychology: Theory and application to intellectual functioning. *Annual Review of Psychology, 50*, 471-507.
- Bandura, A. (1977) Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review, 84*(2), 191-125. Doi.org/10.1037/0033-295X.84.2.191
- Bandura, A. (1986). *Social foundations of thought and action: Issues and perspectives* (3rd. ed.), Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Annals of child development: Six theories of child development* (6th ed), (pp.1-60). Greenwich, CT: JAI Press.
- Barnett, R. C., Baruch, G. K., Dibner, S., & Parlea, M. B. (1976). Will the real middle-aged woman please stand up? toward an understanding of adult development in women. Paper presented at the *Eastern Psychological Association*, New York, NY.
- Baruch, G., & Barnett, R. (1983). Adult daughter's relationship with their mothers. *Journal of Family and Marriage, 45*(3), 601-606.
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementations for novice researchers. *The Qualitative Report, 13*(4), 544-559.
- Belenky, M. F., Clinchy, B. M., Goldberg, N. R., & Tarule, J. M. (1986). *Women's way of knowing: The development of self, voice and mind*. New York: Basic Books.
- Bellis, J. M., & Grimley, D. M. (1999). Cognitive mapping: Capitalizing on listening. *Health, Education, and Behavior, 26*(4), 454-456.
- Bennett, E. (2012). (2012). A four part mode of informal learning: Extending Schugurensky's conceptual model. Paper presented at the *Adult Education Research Conference*.

- Bergman, A., & Fahey, M. (1997). Love, admiration, and identification: On the intricacies of mother-daughter relationships. *Issues in Psychoanalytic Psychology, 19*(2), 167-184.
- Berk, L. E. (2010). *Exploring lifespan development (2nd ed.)*. Boston, MA: Pearson.
- Bertalanffy, L. (1934). *Modern theories of development* (J. H. Woodger Trans.). Oxford, UK: Oxford University Press.
- Bertalanffy, L. (1972). The history and status of general systems theory. *Academy of Management Journal, 15*(4), 407-426. doi:193.10.199.184
- Bhattacharya, K. (2012). *Introduction to qualitative methods in education: A student handbook*. Corpus Christi, TX: Bhattacharya.
- Bhattacharya, K. (2017). *Fundamentals of qualitative research: A practical guide*. New York, NY: Routledge.
- Bigler, R. S., & Liben, L. S. (2006). A developmental intergroup theory of social stereotypes and prejudice. *Advances in Child Development and Behavior, 34*, 39-89.
- Blumer, H. (1986). *Symbolic interactionism: Perspective and method*. Berkeley, CA: University of California Press.
- Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theory and methods* (5th ed.). New Jersey: Pearson Prentice Hall.
- Bojczyk, K. E., Lehan, T. J., McWey, L. M., Melson, G. F., & Kaufman, D. R. (2011). Mothers and their adult daughters' perceptions of their relationship. *Journal of Family Issues, 32*(4), 452-481. doi:10.1177/0192513x10384073
- Bowen, M. (1978). *Family therapy in clinical practice*. New York, NY: Aronson.
- Boyd, C. J. (1989). Mothers and daughters: A discussion of theory and research. *Journal of Marriage and Family, 51*(2), 291-301.
- Bridges, W. (1991). *Managing transitions: Making the most of change*. New York, NY: Perseus Books.
- Broderic, C. (1993). *Understanding family process: Basics of family system theory*. Thousand Oaks, CA: Sage Publications.
- Brown, J. (1999). Bowen family systems theory and practice: Illustration and critique. *Australian New Zealand Journal of Family Therapy, 20*, 94-103.

- Cameron, R., & Harrison, J. L. (2012). The interrelatedness of formal, non-formal and informal learning: Evidence from labour market program participants. *Australian Journal of Adult Learning, 52*(2), 277.
- Carter, B., & McGoldrick, M. (1999). *The expanded family life cycle: Individual, family, and social perspectives* (3rd ed.). Boston: Allyn & Bacon.
- Chodorow, N. (1999). *The reproduction of mothering*. Los Angeles, CA: University of California Press.
- Clandinin, D. J., & Connelly, F. M. (2000) *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass
- Cochran, M. (1985). The mother-daughter dyad throughout the life cycle. *Women & Therapy, 4*(2), 3-8.
- Connelly, M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher, 19*(5), 2-14.
- Conole, G., & Dyke, M. (2003). Towards a meta-framework for learning. Paper presented at the British Educational Research Association Annual Conference, Heriot-Watt University, Edinburgh.
- Coombs, P. H. (1985). *The world crisis in education: The view from the eighties*. New York, NY: Oxford Press.
- Coombs, P. H., Prosser, R. C., & Ahmed, M. (1973). *New paths to learning for rural children and youth*. NY, NY: International Council for Education Development.
- Craig, C., & Huber, J. (2007). Relational reverberations: Shaping and reshaping narrative inquiries in the midst of storied lives and contexts. In D. J. Clandinin (Ed.), *Handbook of narrative inquiry: Mapping a methodology* (pp. 251-279). Thousand Oaks, CA: Sage Publications.
- Cranton, P., & Taylor, E. W. (2012). Transformative learning theory: Seeking a more unified theory. In E. W. Taylor, & P. Cranton (Eds.), *The handbook of transformative learning: Theory, research, and practice* (pp. 3-20). San Francisco, CA: Jossey-Bass.
- Creswell, J. W. (2004). *Qualitative inquiry research and design: Choosing among five approaches* Thousand Oaks, CA. Sage Publications.
- Creswell, J. W. (2007). Five qualitative approaches to inquiry. In J. W. Creswell (Ed.), *Choose among five approaches (2nd ed.)*, (pp. 53-84). Thousand Oaks, CA: Sage Publications.
- Crotty, M. (1998). *The foundation of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage Publications.

- deMarrias, K., & Lapan, S. D. (2004). *Foundations for research: Methods of inquiry in education and the social sciences*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Devine, P. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, *56*, 5-18.
- Dewey, J. (1997). *Experience and education*. New York, NY: Touchstone.
- Dewey, J. (2008). *Democracy and education*. Radford, VA.: Wilder.
- Duay, D. L., & Bryan, V. C. (2006). Senior adult's perceptions of successful aging. *Educational Gerontology*, *32*, 423-445. doi:10.1080/03601270600685636
- Dyke, M. (2017). Paradoxes of a long-life learning: An exploration of Peter Jarvis's contribution to experiential learning theory. *International Journal of Lifelong Learning*, *36*(1-2), 23-34.
- Eden, C. (1988). Cognitive mapping. *European Journal of Operational Research*, *36*, 1-13.
- Elo, S., & Kyngas, H. (2007). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107-115. doi:10.1111/j.13652648.2007.04569.x
- Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, *70*, 113-136.
- Eraut, M (2004). Informal learning in the workplace. *Studies in Continuing Education*, *23*(2), 247-273
- Erikson, E. (1963). *Childhood and society*. New York: W. Norton and Company.
- Erikson, E. (1997) *The life cycle completed*. New York: W. Norton and Company.
- Ex, C., & Janssens, J. (1998). Maternal influences on daughters' gender role attitudes. *Sex Roles*, *38*(3/4), 171-186.
- Eye, A., & Kreppner, K. (1989). Family system and family development: The selection of analytical units. In K. Kreppner, & R. M. Lerner (Eds.), *Family systems and life-span development* (pp. 247-269). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Fenwick, T. (2003). *Learning through experience: Troubling orthodoxies and intersecting questions*. Malabar, FL: Krieger.
- Fielding, N., & Warnes, R. (2009). Computer-based qualitative methods in case study research. In D. Byrne, & C. C. Ragin (Eds.), *The sage handbook of case-based methods* (pp. 271-288). Los Angeles, CA: Sage Publications.

- Fingerman, K. L. (1995). Aging mothers' and their adult daughter's perceptions of conflict behaviors. *Psychology and Aging, 10*, 639-650.
- Fingerman, K. L. (1997). On being more than a daughter: Middle-aged women's conceptions of their mothers. *Journal of Women and Aging, 9*, 55-72.
- Fingerman, K. L. (2000). "We had a nice chat": Age and generational differences in mother's and daughter's descriptions of enjoyable visits. *Journal of Gerontology, 55*(B), 95-106.
- Fingerman, K. L. (2001). A distant closeness: Intimacy between parents and children in later life. *Generations, 25*, 26-33.
- Fingerman, K. L., & Berman, E. (2000). Applications of family system theory to the study of adulthood. *International Journal of Aging and Human Development, 51*(1), 5-29.
- Fischer, L. R. (1991). Between mothers and daughters. *Marriage and Family Review, 16*(3/4), 237-248. doi:10.1300/j002v16n03_02
- Galanis, N., Mayd, E., & Garcia-Penalvo, F. (2015). Supporting, evaluating and validating informal learning: A social approach. *Computers in Human Behavior, 55*, 596-603.
- Gilligan, C. (1977). In a different voice: Women's conceptions of self and of morality. *Harvard Educational Review, 47*, 481-517.
- Gilligan, C. (2016). *In a Different Voice: Psychological Theory and Women's Development*. United Kingdom: Harvard University
- Gilner, J. A., & Morgan, G. A. (2000). Overview of research approaches and questions. In J. A. Gilner, & G. A. Morgan (Eds.), *Research methods in applied settings: An integrated approach to design and analysis*, (pp. 61-80). Mahwah, NJ: Lawrence Erlbaum.
- Glasser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago, IL: Aldine Publishing Company.
- Goldenberg, I., & Goldenberg, H. (1991). *Family therapy: An overview* (3rd ed.). Belmont, CA: Brooks Cole.
- Gould, R. L. (1978). *Transformations: Growth and change in adult life*. Oxford, England: Simon & Schuster.
- Green, M., & Peil, J. A. (2016). *Theories of human development: A comparative approach* (2nd ed.). New York, NY: Routledge.
- Grover, K., & Stovall, S. (2013). Student-centered teaching through experiential learning and its assessment. *NACTA Journal, 57*(2), 86-87.

- Havighurst, R. J. (1961). Successful aging. *The gerontologist*, 1, 8-13.
Doi.org/10.1093/geront/1.1.8
- Hay, D., & Kinchin, I. (2008). Using concept mapping to measure learning quality. *Quality Education*, 50(2), 167-182. doi:10.1108/00400910810862146
- Hays, E., Flannery, D. D., Brooks, A. K., Tisdell, E. J., & Hugo, J. M. (2000). *Women as learners: Significance of gender in adult learning*. San Francisco: Jossey-Bass.
- Heppner, P. P., Wampold, B. E., Owen, J., Thompson, M. N., & Wang, K. T. (2016). *Research design in counseling*. Boston, MA: Cengage Learning.
- Hooyma, N. R., & Kiyak, H. A. (2008). Personality and mental health in old age. In J. Lasser, & C. Bellanton (Eds.), *Social gerontology: A multidisciplinary perspective* (8th ed., pp. 208-270). New York, NY: Pearson Education.
- Illeris, K. (2014). Transformative learning and identity. *Journal of Transformative Education*, 12(2), 148-263. doi:10.1177/154134461548423
- Jarvis, P. (1987). *Adult learning in the social context*. NY: Crom Helm.
- Jarvis, P. (2012). Learning from everyday life. *HSSRP*, 1(1), 1-20.
- Jarvis, P., & Parker, S., (2006). *Human learning: An holistic approach*. New York, NY: Taylor & Francis.
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). New York, NY: Wiley.
- Kim, J. (2016). Philosophical/theoretical underpinnings of narrative inquiry. In Felts D. C., Bergstad K. (Eds.), *Understanding narrative inquiry*. (pp. 27-77) Las Angeles, CA: Sage Publications.
- King, K. P. (2010). Informal learning in a virtual era. In C. E. Kasworm, A. D. Rose & J. M. Ross-Gordon (Eds.), *Handbook of adult and continuing education* (2010th ed., pp. 421-429). Thousand Oaks, CA: Sage Publications.
- Knowles, M. S. (1980). *The modern practice of adult education: Andragogy versus pedagogy* (2nd ed.). New York: Cambridge Books.
- Knowles, M S. (1984). *Andragogy in action: Applying modern principles of adult learning* (pp. 1 – 21). San Francisco, CA, Jossey-Bass
- Knudson-Martin, C. (1994). The female voice: Applications to Bowen's family systems theory. *Journal of Marital and Family Therapy*, 20(1), 35-46.

- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall.
- Kolb, D. A., & Fry, R. E. (1975). Toward an applied theory in experiential learning. In C. Cooper (Ed.), *Theories of group processes* (pp. 33-57). NY: John Wiley & Sons.
- Kramp, M. K. (2004). Exploring life and experience through narrative inquiry. In K. deMarrias, & S. D. Lapan (Eds.), *Foundations for research: Methods on inquiry in education and the social sciences* (pp. 103-122). Mahwah, NJ: Lawrence Erlbaum Associates.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *American Journal of Occupational Therapy*, 45(3), 214-222.
- LaSorda, V. A., & Fodor, I. G. (1990). Adolescent daughter / mid-life mother dyad. *Psychology of Women Quarterly*, 14, 593-606.
- Lawler, S. (2000). *Mothering the self: Mothers, daughters, subjects*. New York, NY: Psychology Press.
- LeJune, M. (2011). Tacit knowledge: Revisiting the epistemology of knowledge. *Journal of Education*, 46(2), 91-105.
- Lerner, G. (1986). *The creation of patriarchy*. New York: Oxford University Press.
- Levinson, D. J. (1986). A conception of adult development. *American Psychologist*, 41(1), 3-13.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1978). *The seasons of a man's life*. New York: Kopf.
- Levy, B. R. (1996). Improving memory in old age through implicit self-stereotyping. *Journal of Personality and Social Psychology*, 71(6), 1092-1107. doi:10.1037/0022-3514.71.6.1092
- Levy, B. R., Slade, M. D., & Kasl, S. V. (2002). Longitudinal benefit of positive self-perceptions of aging on functional health. *Journal of Gerontology: Psychological Sciences*, 57(5), 409-417.
- Lincoln, Y. S., & Guba, E. A. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Livingstone, D. (2001). Adults informal learning: Definitions, findings, gaps, and culture research. *NALL Working Paper #21*. Toronto, ON: Centre for the Study of Education and Work. Retrieved from <https://tspace.library.utoronto.ca/retrieve/4484/>
- Marsick, V. J. (2009). Toward a unifying framework to support informal learning theory research and practice. *Journal of Workplace Learning*, 21(4), 265-275. doi:10.1108/13665620910954184

- Marsick, V. J., & Watkins, K. E. (2001). Informal and incidental learning. *New Direction for Adult and Continuing Education*, 89, 25-33.
- Marsick, V. J., & Volpe, M. (1999). The nature of and need for informal learning. *Advances in Developing Human Resources*, 1(3), 1-9.
- McCormick, M. J., & Martinko, M. J. (2004). Identifying leader social cognitions: Integrating the casual reasoning perspective in to social cognitive theory. *Journal of Leadership and Organizational Studies*, 10(4), 2-11.
- Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, 33(1), 1-17.
- Merriam, S. B., & Brockett, R. G. (2007). *The profession and practice of adult education: An introduction*. San Francisco, CA: Jossey-Bass.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). San Francisco, CA: Jossey-Bass.
- Merriam, S., Caffarella, R., & Baumgartner, L. (2007). *Learning in adulthood: A comprehensive guide*. San Francisco: Josey-Bass.
- Mezirow, J. (1978). Perspective transformation. *Adult Education Quarterly*, 28, 100-110.
- Michelson, E. (1996). Usual suspects: Experience, reflection, and the (en)gendering of knowledge. *International Journal of Lifelong Learning*, 15(6), 438-454.
- Mitchell, C., & Weber, S. (1998). Picture this! class line ups, vernacular portraits and lasting impressions of school. In J. Prosser (ed) *Image-based research: A source book for qualitative researchers* (pp. 197-213). New York, NY: Routledge.
- Moser, C., Spangnoli, J., & Santos-Eggiman, B. (2011). Self-perception of aging and vulnerability to adverse outcomes at the age of 65 - 70 year. *The Journals of Gerontology, Series B: Psychological and Social Sciences*, 66(6), 675-680. doi:10.1093/geronb/gbr052
- Muro, M., & Jeffery, P. (2008). A critical review of the theory and application of social learning in participatory natural resource management processes. *Journal of Environmental Planning and Management*, 51(3), 325-344.
- Neugarten, B. L. (1979). Time age and the life cycle. *American Journal of Psychiatry*, 136, 887-894.
- Notar, M., & McDaniel, S. A. (1986). Feminist attitudes and mother-daughter relationships in adolescence. *Adolescence*, 28, 221-225.

- Overwien, B. (2000). Informal learning and the role of social movements. *International Review of Education*, 46(6), 621-640.
- Palmore, E. B. (1999). *Ageism negative and positive* (2nd. ed.). New York, NY: Springer.
- Peshkin, A. (1988). Insearch of subjectivity. One's own. *Educational Researcher*, 17(7), 17-21.
- Poirier, L. (2015). Stories of breast feeding advocates: The significance of informal learning. In O. Mejiuni, P. Cranton, & O. Taiwo, O. (Eds.), *Measuring and analyzing informal learning in the digital age* (80-90). Hershey, PA: Information Science References
- Polanyi, M. (1966) The logic of tacit interference. *Philosophy*, 42(155), 1-18.
- Riegel, K. F. (1975). Toward a dialectical theory of development. *Human Development*, 18(1-2), 50-64. doi:10.1159/000271475
- Saldana, J. (2014). *The coding manual for qualitative researchers* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Sammut-Bonnici, T., & McGee, J. (2015). *Cognitive map*. San Francisco, CA: John Wiley & Sons. Ltd. doi:10.1002/978118785317.weom120127
- Schugurensky, D. (2000). The forms of informal learning: Towards a conceptualization in the field. *Wall Working Paper #19*.
- Schugurensky, D. (2015). On informal learning, informal teaching, and informal education: Addressing conceptual, methodological, institutional, and pedagogical issues. In O. Mejiuni, P. Cranton & O. Taiwo (Eds.), *Measuring and analyzing informal learning in the digital age* (18-36). Hershey, PA: Information Science Reference.
- Schutzenhofer, K. K. (1983). The development of autonomy in adult women. *Journal of Psychosocial Nursing and Mental Health Services*, 21(4), 25-30.
- Schwandt, T. A. (2007). *The sage dictionary of qualitative inquiry* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Schwartz, D. (1989). Visual ethnography: Using photography in qualitative research. *Qualitative Sociology*, 12(1), 119-154.
- Seaman, J. (2007). Taking things into account: Learning as kinesthetically-mediated collaboration. *Journal of Adventures and Outdoor Learning*, 7(1), 3-20. doi:10.1080/14729670701349673
- Shannon, C. S., & Shaw, S. M. (2008). Mothers and daughters: Teaching and learning about leisure. *Leisure Sciences*, 30(1), 1-16. doi:10.1080/01490400701544659

- Shawler, C. (2004). Aging mothers and daughters: Relationship changes over time. *Aging International*, 29(2), 149-177.
- Sholomskas, D., & Axelrod, R. (1986). The influence of mother-daughter relationships on women's sense of self and current role choices. *Psychology of Women Quarterly*, 10(2), 171-182.
- Sipsma, H., Biello, K. B., Cole-Lewis, H., & Kershaw, T. (2010). Like father, like son: The intergenerational cycle of adolescent fatherhood. *American Journal of Public Health*, 100(3), 517-524.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Stiffler, D., Sims, S. L., & Stern, P. N. (2007). Changing women: Mothers and their adolescent daughters. *Health Care for Women International*, 28(7), 638-653.
- Sugarman, L. (2001). *Life-span development: Frameworks, accounts, and strategies* (2nd ed.). New York, NY: Taylor and Francis.
- Thomas, D. R. (2017). Feedback from research participants: Are member checks useful in qualitative research? *Journal of Qualitative Research in Psychology*, 14(1)
doi:10.1080/14780887.2016.1219435
- Toom, A. (2012). Epistemology of tacit knowledge and knowing. *Educational Theory*, 62(6), 621-640.
- Tracy, S. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 14(10), 837-851. doi:10.1177/1077800410383121
- Updegraff, K. A., Delgado, M. Y., & Wheeler, L. A. (2009). Exploring mothers' and fathers' relationships with sons versus daughters: Links to adolescent adjustment in Mexican immigrant families. *Sex Roles*, 60(7-8), 559.
- Utz, R. L. (2008). Like mother, (not) like daughter: The social construction of menopause and aging. *Journal of Aging Studies*, 25, 143-154.
- Wagner, J., & Lang, F. (2011). Principles of interpersonal competence and motivation: Distinguishing reciprocity and affect in social contexts of learning. *Oxford handbook of reciprocal adult development and learning* (2nd ed.). NY, NY: Oxford Press Inc.
- Webber, L. (2017). Supporting professional women students through identity change and turbulent times: Who cares? *Pastoral Care in Education*, 35(3), 152-165.
doi:10.1002/9781118785317.weom120127

- Wedemeyer, N. V., & Grotevant, H. D. (1982). Mapping the family system: A technique for teaching family system theory concepts. *Family Relations*, 31(2), 185-193. doi:192.211.20.240
- Wheeldon, J. (2010). Mapping mixed methods research: Methods, measures, and meaning. *Journal of Mixed Methods Research*, 4(2), 87-102. doi:10.1177/1558689809358755
- Wortley, D. B., & Ametee, E. S. (1982). Mapping adult life changes: A conceptual framework for organizing adult development theory. *Personnel and Guidance Journal*, 60(8), 476-482.
- Yanchar, S. C., & Hawkley, M. (2014). "There's got to be a better way": A qualitative investigation of informal learning among instructional designers. *Education Tech Research Development*, 62, 271-291. doi:10.1007/s11423-014-9336-7
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Zia, A., Malik, A., & Ali, S. (2015). Father and daughter relationship and its impact on daughter's self-esteem and academic achievement. *Academic Journal of Interdisciplinary Studies*, 4(1), 311-316. doi:10.5901/ajis.2015.v4n1p311

Appendix A - Informed consent

PROJECT TITLE: Informal learning in the mother-daughter dyad

PROJECT APPROVAL DATE:

PROJECT EXPIRATION DATE:

LENGTH OF STUDY: 1 year

PRINCIPAL INVESTIGATOR: Royce Ann Collins, Ph.D., Associate Professor, Adult Learning and Leadership, Educational Leadership Department

CO-INVESTIGATOR(S): Deanne Yates, Doctoral Dissertation Research

CONTACT DETAILS FOR PROBLEMS/QUESTIONS: Dr. Royce Ann Collins, (913) 307-7353

IRB CHAIR CONTACT INFORMATION: Rick Scheidt, Chair, Committee on Research Involving Human Subjects, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224; Cheryl Doerr, Associate Vice President for Research Compliance, 203 Fairchild Hall, Kansas State University, Manhattan, KS 66506, (785) 532-3224

PURPOSE OF THE RESEARCH: The purpose of this study is to examine the relationship between three mother-daughter dyads in relation to their understanding of the role of informal learning based on their perception and expectation of aging. The focus will be on how mothers and daughters understand the importance making meaning from an experience, memory, or conversation for learning to occur. Finally, the research will examine informal learning within the mother-daughter dyad demonstrated in the expectation and perception of aging.

PROCEDURES OR METHODS TO BE USED: This is a qualitative research study. The data collection methods include interviews, cognitive maps created by the participants, and photographs supplied by the participants for the co-investigator to view. Interviews will be audio recorded and transcribed by the co-investigator. Participants will be given opportunity to

check the transcriptions of the interviews for accuracy.

RISKS OR DISCOMFORTS ANTICIPATED: There are no expected discomfort or risks related to this study. Participants may withdraw from the study at any time.

BENEFITS ANTICIPATED: Participants may gain a better understanding of their perception of aging.

EXTENT OF CONFIDENTIALITY: All of the participants will be identified with a self selected pseudonym. The original mp3 recordings and transcripts will be safeguarded by the co-investigator in a password protected file. The recordings will be kept for 5 years and then securely destroyed.

IS COMPENSATION OR MEDICAL TREATMENT AVAILABLE IF INJURY OCCURS? No

Terms of participation: I understand this project is research, and that my participation is voluntary. I also understand that if I decide to participate in this study, I may withdraw my consent at any time, and stop participating at any time without explanation, penalty, or loss of benefits, or academic standing to which I may otherwise be entitled. I verify that my signature below indicates that I have read and understand this consent form, and willingly agree to participate in this study under the terms described, and that my signature acknowledges that I have received a signed and dated copy of this consent form.

PARTICIPANT NAME: _____

PARTICIPANT SIGNATURE: _____

Date: _____

WITNESS TO SIGNATURE: _____

Date: _____

Appendix B - Participant Information Form

Name

Birthdate

Number of siblings, name and date of birth

Marital status

Number of children, name and date of birth

Appendix C - Questions for Mothers

1. How do you describe your relationship with your daughter? What does that relationship look?
2. Do you have a particular saying or phrase that is instantly understood by you and your mother? How did that phrase come about and how is it used?
3. Describe what getting old means to you. Tell me about how you think your life will change? Why do you think so?
4. Can you tell me about the first time you became aware that your mother was aging? How did that make you feel?
5. Did you talk about her getting older? Who initiated the conversation? Can you tell me about the conversation?
6. How do you describe your mother at her current age?
7. What do you like most about your current age? Do you consider yourself old?
8. What do you like least about your current age? Can you tell me about a time you felt old? Or what would make you feel old?
9. Tell me about your mother when she was your age?
10. How have your thoughts of aging changed throughout your life? Why did they change?
11. Describe someone or an event in your life that made you understand aging better.
12. Describe some of the experiences or memories shaped your thoughts about getting older.
13. What do you wish you knew when you were younger about aging?
14. Did you talk to your mother about what to expect as you age? Will you tell me about those conversations?
15. How do you believe your experience aging will influence how your daughter ages?
16. What do you think about getting older as you spend time with your daughter?
17. Tell me about an event or time that helped you understand your mother as she got older, how she felt about getting older?
18. Describe how your role in your family has changed throughout your life?
19. What do you think your daughters future will look like?
20. What do you do differently now that she is older, tell me how that makes you feel?
21. Can you tell me a story about aging and how it effects your life and relationships?

Appendix D - Questions for Daughters

1. Describe your relationship with your mother? What does that relationship look like?
2. Do you have a particular saying or phrase that is instantly understood by you and your mother? How did that phrase come about and how is it used?
3. Describe what getting old means to you. Tell me about how you think your life will change? Why do you think so?
4. Can you tell me about the first time you became aware that your mother was aging? How did that make you feel?
5. Did you talk about her getting older? Who initiated the conversation? Can you tell me about the conversation?
6. How do you describe your mother at her current age?
7. What do you like most about your current age? Do you consider yourself old?
8. What do you like least about your current age? Can you tell me about a time you felt old? Or what would make you feel old?
9. Tell me about your mother when she was your age?
10. How have your thoughts of aging changed throughout your life? Why did they change?
11. Describe someone or an event in your life that made you understand aging better.
12. Describe some of the experiences or memories shaped your thoughts about getting older.
13. What do you wish you knew when you were younger about aging?
14. Have you talked to your mother about what to expect as you age? Will you tell me about those conversations?
15. How do you believe your experience aging will influence how your children age?
16. What do you think about getting older as you spend time with your mom?
17. Tell me about an event or time that helped you understand your mother as she got older, how she feels about getting older?
18. Describe the roles you and your mother play in the family, how are they demonstrated?
19. What do you anticipate for the future?
20. What does your mother do differently now that she is older, tell me how that makes you feel?
21. Can you tell me a story about aging and how it affects your life and relationships?

Appendix E - Questions for Rose and Susan

What characteristics do you see in Susan that remind you of yourself? How do you think she came to have those characteristics?

Susan: Do you see those same things? Do you know or understand why you do certain things like your Mom?

Can you give me an example of a time you reflected on how your mom acted in a certain situation?

Could you tell me what it was like taking care of Grandma during the last part of her life, can you tell me what you learned from that experience and how you will care for other family members at that time.

You both have mentioned a limit in what you can do physically. Can you describe how the limitations effect you daily life and how they have prevented you or caused you to alter an activity. How do you think you learned to manage these challenges?

You both volunteer and active people – why? How did you learn the value of giving of your time? How that ability is demonstrated in other areas of your life?

What do you look forward to as you age?

Could you tell me what you hope to be like and doing in 10 years?

Appendix F - Questions for Lu and Becky

Lu What characteristics do you see in Becky that remind you of yourself? How do you think she came to have those characteristics?

Becky: Do you see those same things? Do you know or understand why you do certain things like you Mom?

Can you give me an example of a time you pondered on how your mom acted in a certain situation?

Tell me about the time LU broke her hip. What was it like – a mother living in a daughter's home?

You both have mentioned a limit in what you can do physically. Can you describe how the limitations effect you daily life and how they have prevented you or caused you to alter an activity. How do you think you learned to manage these challenges?

You both are very creative and active people – why? How did you learn or discover your creativity? Do you think that ability is demonstrated in other areas of your life?

What do you look forward to as you age?

Could you tell me what you hope to be like and doing in 10 years?

Appendix G - Questions for Dot and Ginger

Dot What things do you see in Ginger that remind you of yourself?

How do you think she came to be that way?

Ginger Do you see those same things? Do you know or understand why you do certain things like your Mom?

Ginger Can you give me an example of a time you pondered on how your mom acted in a certain situation?

Dot Can you tell me of a time when you looked at your daughter and said man that is just like me?

Ginger Can you tell me of a time when you said I am just like my mom?

You both have mentioned a limit in what you can do physically. Can you describe how the limitations effect you daily life and how they have prevented you or caused you to alter an activity?

How do you think you learned to manage these challenges?

What do you look forward to as you age?

Could you tell me what you hope to be like and doing in 10 years?