Genealogy and Generativity in Older Adults

by

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Abstract

The purpose of my quantitative and qualitative study was to investigate the correlation between older adult participation in genealogy and Erikson's theory of generativity. Specifically, do age and gender of genealogists, and length of involvement in genealogy and controlling for marital status, number of children, and race/ethnicity, predict levels of generativity. This is important to examine because it is estimated that 10-15% of older adults over the age of 65 and 25% of adults 85 years and older suffer from depression, and levels of generativity in older adults is a measure of healthy psychosocial well-being. Utilizing quantitative and qualitative research, 100 adults living in Central California and nationwide were selected through purposive and snowball sampling, and asked to complete a total of four self-administered questionnaires. Based on current literature, I expected to find a relationship between age, gender, and length of participation in genealogy and generativity. However, my research found that only length of participation was related to increased generative concern and generative acts. This research identified the cognitive, psychological and social benefits of genealogy for those who participate. I not only identified an opportunity for further research, but my findings illustrate the usefulness of genealogy as a tool for working with the increasing population of older adults, as well as other marginalized and disenfranchised groups. Specifically, my study's findings provides the field of social work with a psychosocial framework by which to design and implement programs for older adults and other marginalized disenfranchised that integrate genealogy either at an individual or group level.

Introduction

The United States is experiencing the beginning of a dramatic demographic change. The first baby boomers have begun to turn 65 years of age. The United States Census Bureau (2004) estimates between the years 2000 and 2050 the population aged 65-84 will grow by 131.4% and those aged 85 and older by 389.9%. As this population increases, the numbers of older adults suffering from depression will expand to unprecedented numbers (United States Department of Health and Human Services {USDHHS}, 2000). It is estimated that 10-15% of adults over the age of 65 suffer from depression; this increases to 25% for adults 85 years and older, and women are twice as likely to suffer from depression than men (USDHHS, 2000). The increase in older adults suffering from depression points to the importance of successful psychosocial development of older adults. As we age, our "strivings" change from extrinsic "goals" centered upon the materialistic to "intrinsic" goals of contributing to the "community", which Sheldon and Kasser (2001) suggest fulfill our deeper psychological goals of well-being. This need to fulfill a deeper intrinsic psychological goal is related to Erikson's psychosocial theory of generativity which is an essential psychosocial developmental stage that "obligates" older adults to assist the next generation to successfully transition to adulthood while benefiting their transition to end of life (Erikson, 1985). Many older adults fulfill this obligation through pursuit of *genealogy*, which allows them to assist the next generation, while providing the generative adult with an opportunity to leave behind a tangible accomplishment. Chance (1988) and Lindahl and Back (1987) argue that genealogy is "very beneficial" for older adults and is a valuable "tool" for those working with this population. Greenberg (1982) is more explicit and stresses the value of genealogy as a therapeutic tool, which may in part explain the popularity of genealogy, "Genealogy has clearly undergone an explosion of multifold increase and frequency. It seems

that many people all over the place with all kinds of backgrounds are trying to trace their family roots and connections" (Roach, 2008, p. 17). Controlling for marital status, number of children, and race/ethnicity, this exploratory research examines the correlation between genealogist's age, gender, and the length of time they have been participating in genealogy, and Erikson's theory of generativity.

Relevance to Social Work

My research is relevant to social work because genealogy is a useful tool for improving the psychosocial well-being of older adults and augments current literature on generativity. The USDHHS Healthy People 2010 initiative focuses on increasing the mental well-being of Americans. This initiative challenges social workers and social service agencies to provide interventions and services to improve the mental health of older adults. Interventions, services, and activities that are generative, such as genealogy, are beneficial for improving the mental health of older adults (Hart, 1997; Jeong & Cooney, 2006; Kinnevy & Morrow-Howell, 1999; Sheldon & Kasser, 2001). A number of studies found that older adults recognize the relationship between activities, such as hobbies, and higher life satisfaction (Brown, McGuire, & Voelkl, 2008; Gabriel & Bowling, 2004; Jamjan, Maliwan, Pasunant, Sirapo-ngam & Porthiba, 2002; Menec, 2003; Nimrod, 2007). Other studies indicate a positive relationship between older adult participation in hobbies and lower rates of depression (Kudo, Izumo, Watanabe, Hatakeyama, Fukuoka, et al, 2002; Pahkala, 1990). While Azarow (2003) found a relationship between generativity and psychological well-being and those who "oriented" themselves to the next generation suffer less from depression, and have higher self-esteem and less social isolation. This relationship between generativity, genealogy, and older adult psychosocial well-being may provide the impetus for agencies and social workers to incorporate genealogy into programs

serving this population. Because of their training and their position as change agents, social workers and social service providers are in an unique position to offer interventions and programs that include genealogy as a tool by which to address and support older adults to become more socially active through offering and facilitating activities that utilize genealogy, thus improving the psychosocial well-being of older adults.

Though literature exists exploring reasons why individuals participate in genealogy, little research has specifically analyzed why older adults pursue genealogy, and only Drake's "Successful aging: Investment in genealogy as a function of generativity, mobility and sense of place" (2001) examined the association between genealogy and generativity. This research reduces the gap in current literature between studies that examined why individuals participate in genealogy (Bishop, 2008; Fulkerson, 1995; Fulton, 2005; Greenberg, 1982; Lambert, 1996, 2002, 2003, 2006; Taylor, 1982) and the more specific question of the relationship between genealogy and generativity in older adults. As well as reducing the gap in current literature, my research is important for its potential to expand society's cultural knowledge through the promotion of genealogical activities that promote a transcultural perspective. Miller (2007) found that utilizing family history and family history research enabled low-income, first generation undergraduate students to "build a sense of their socio-historical family history" (p. 39), which expanded their teacher's knowledge and insight of what their students bring to the classroom. Thus, expanding our cultural knowledge will allow for a greater level of postionality through increased cultural competency.

Literature Review

Definition and Demographics of Genealogy

Though similar, genealogy and family history are different; genealogy is the compilation

of tangible items such as family trees and pedigrees, while family history situates ancestors in their time and place through biographies and written family histories (Lambert, 1996). Because individuals who participate in genealogy and family history often use the terms interchangeably, this study will use the term genealogy to refer to both genealogy and family history. Exactly how many individuals are currently active in genealogy is unknown. A poll conducted by Maritz in 2000 indicated 60% of Americans were interested in genealogy. Sink and Peters (1983) and Jacobson, Kunz, and Conlin (1989) are the most recent studies to examine the demographic characteristics of genealogists. In their Newberry Library Study, Sink and Peters (1983) found that of 536 survey respondents, 58.6% were women, and respondents ranged from 18 to 84 years in age. Currently there are over 500 hundred genealogical societies in the United States, with the National Genealogical Society and the New England Historic Genealogical Society being the most significant of the societies (Allen Public Library, 2008).

Erikson's Theory of Generativity and its Application to Genealogy

Erik H. Erikson's psychosocial theory of generativity is the theoretical framework that guides this research. Erikson positioned generativity vs. stagnation in the seventh stage of his life-cycle model (Erikson, 1985). Generativity "is primarily the concern with establishing and guiding the next generation" (Erikson, 1985, p. 267). Generativity is an essential stage in the psychosocial development of adults, "universal" to all societies, with older adults counted upon to pass culture, norms, and history to next generation (Erikson, 1985; McAdams, 2006; McAdams & Logan, 2004; Van de Water & McAdams, 1989). However, Kotre (1984) argues that generativity in of itself is not a virtue, that its virtue is how it is used. Generativity is "innate" in all humans, and consists of needs, instinct, desire for usefulness in guiding the next generation and for symbolic immortality through creation of a legacy (McAdams & Logan,

2004). McAdams and de St. Aubin (1992) rejected Erikson's assertion that generativity is a "cleanly demarcated" stage and argue that generativity may begin in any stage of psychosocial development. Failure to attain generativity, according to Erikson (1985), results in stagnation. Stagnation is a sense of being "stuck" and not helping the next generation (McAdams & Logan, 2004), and because generativity is essential in psychosocial development "stagnation status...represents the poorest psychosocial outcome" (Bradley & Marcia, 1998, p. 48). Stagnation places older adults at risk for physical and mental health issues such as depression (Azarow, 2003).

McAdams and Logan (2004) further defined generativity as consisting of ten characteristics or aspects including: concern for and commitment to the well-being of future generations, a developmental challenge for adults, springing from desires that are both selfless and selfish, generative strength differs among individuals, promotes psychological well-being for society and individuals, and is expressed in stories people construct to make sense of their life.

In "A Theory of Generativity and its Assessment" McAdams and de St. Aubin (1992) asserted that generativity is a configuration of seven psychosocial features centered on a cultural (societal) goal of "providing for the next generation" (p. 1004). These features are cultural demand, generative desire, generative concern and belief in worthiness, generative commitment, generative behavior, and narrative. Generative demand, along with inner desire promote a "conscious concern" for the next generation, and if demand and desire are the driving motivational reasons for generativity, then generative concerns are the thoughts about generativity "formulated" by adults (McAdams & de St.Aubin, 1992). Generative concern and generative acts resulting from generative behavior are the focus of my research.

Age, Genealogy, and Generativity

In extant literature, individuals asked why they pursue genealogy articulated generative themes of posterity, mortality, immortality, legacy, usefulness, and responsibility. Not explicitly stated as generative concern in these studies, these themes are consistent with definitions of generative concern outlined by Erikson (1985) and further expanded upon by McAdams and Logan (2004). Genealogists see themselves as looking to posterity, and posterity correlates to the generative aspect of concern for, and commitment to, the well-being of future generations (McAdams & Logan, 2004; Yankel, 2004). Other studies also established posterity as an important motivation for individuals to become active in genealogy (Fulton, 2005; Lindahl & Back, 1987; Taylor, 1982; Unruh, 1995). In Lambert (1996) 73.1% of 1,348 survey respondents answered that posterity is why they "do" genealogy, and posterity may be how they come to terms with their own mortality (Lambert, 2003). In addition, the above studies illuminated themes of posterity and mortality in self-reporting by genealogists as reasons why they pursue genealogy.

Generative concern increases with age according to Ackerman and Zuroff (2000), Bradley (1997), Drake (2001), Lang and Carstensen (2002), Miner-Rubino, Winter and Stewart (2004), and Sheldon and Kasser (2001). Thus is not wholly unexpected that concerns of posterity, mortality, immortality, legacy, usefulness, and responsibility to the next generations would be given as reasons by older adults that they pursue genealogy as they begin to approach the twilight of their lives and begin to come to terms with the end of their life.

Genealogy "assists" older adults' transition to the end of their lives by providing "its practitioners a framework within which to accommodate the passage of time and the certainty of death" (Lambert, 2003, p. 304). By normalizing death as a lineage chart the genealogist's oncoming death is placed in the larger context of who has come before (Lambert, 2003). The

death of loved ones often "triggers" thoughts of legacy and are more likely to occur in older adults (Kotre, 1984, 1995). Thoughts of legacy and concern for mortality may kindle generative concern in older adults, leading to generative behavior and resulting in the generative act of creating a legacy through an object. Twenty-six percent of 1,394 respondents in Lambert's 2006 study noted that a death in the family ignited their interest in genealogy. Yankel (2004) also concluded a correlation between death of a loved one and beginning genealogical research, 5.4% of 1,348 respondents to another survey indicated they are active in genealogy as a way to "deal" with their mortality and concerns about dying (Lambert, 1996).

Generativity creates a legacy allowing individuals to "claim" immortality and "generativity may be defined as the desire to...out live self" (Kotre, 1984, p. 10). The selfless and selfish aspect of generativity may be manifested in the desire of the genealogist for immortality. The "selfless" act of producing and sharing a family history is then balanced by the "selfish" desire to live on past one's natural life. Through their research, genealogists are kept alive "beyond the grave" (Bishop, 2008; Lambert, 2003). Thus, "reconstructing the past helps elders believe they too may 'outlive' their lifetimes" (Chance, 1988, p. 114).

Legacy, closely related to immortality, is leaving something to remind the next generation of the individual and their life. To have lived a life that matters, and to leave an object such as a written family history to the next generation, is related to the generative benefit of promoting the psychosocial well-being of society and of the individual. The desire to be remembered by future generations is a powerful draw for individuals to participate in genealogy. Genealogists asked why they are active in genealogy responded they did not want their lives to look like a "waste" (Lambert, 2003). A respondent to another survey put is succinctly "perhaps a genealogy will be my legacy" (Lambert, 1996, p 126).

The desire to be useful and responsible in guiding the next generation is important for the psychosocial well-being of older adults, 72.8% of 1,348 genealogist who responded to a selfadministered survey, stated that the role of family historian is important to them (Lambert, 1996). Expanding upon his 1996 study, Lambert (2003) surveyed an additional 1,652 adults finding that the "strategic position" between past and future fulfilled their need to be useful by allowing them to be the "gate keeper" of the family's history. This position as a "door" between generations brings with it a certain degree of "prestige" which can lead to and improved sense of self (Chance, 1988; Lambert, 1996; Lindahl & Back, 1987). The generative adult is responsible for the next generation knowing about who came before (Bishop, 2008). Concern for future generations comes about from assumed and delegated responsibility and is an important motivation for "doing" genealogy (Chance, 1988; Lambert, 2003). Participants in genealogy; report a "responsibility to past and future generations" (Bishop, 2008, p. 397). In part this responsibility comes from the "extra" time allowed by retirement "I feel obligated because I have the desire...and the time, to continue my family research...and (to) share it" (Lambert, 2003, p. 397).

Generative acts are tangible products resulting from generative behaviors stimulated by generative concern (McAdams & de St. Aubin, 1992). The psychosocial benefits of generative acts lie with fulfillment of generative concerns through production of an "object" that can be passed to future generations (Warburton, Mclaughlin & Pinsker, 2006). Genealogists who want to be remembered may produce a family history, which may be all an older adult has to pass on to the next generation (Lambert, 2003). The generative act of producing an object fulfills the generative concerns of posterity, mortality, immortality, legacy, and usefulness, by fulfilling these concerns; older adults receive positive psychosocial benefits (Kotre, 1984; Warburton,

Mclaughlin, & Pinsker, 2006). However, others argue that generative acts are not related to lifesatisfaction and by extension to psychosocial well-being, because generative acts may "require" older adults be more socially active, which may prove difficult for some older adults (de St. Aubin, & McAdams, 1995; Hart, McAdams, Hirsch & Bauer, 2001). For the purpose of this research, generative acts are any object that is produced to be shared or passed on to the next generation. These genealogical "products" include, but are not limited to family group sheets, family trees, family history websites, and published and unpublished family history books. Because generative acts are the tangible products of generative concern it is not surprising that Drake (2001) found that generative acts not only increase with age but also the longer an individual is active in genealogy. Even though McAdams, de St. Aubin, and Logan (1993) found that middle-age adults produced more generative acts than did younger and older adults, they unlike Drake (2001), did not specifically examine genealogists and their generative acts. Gender, Genealogy, and Generativity

McAdams and de St. Aubin (1992) found in their sample of 79 older adults that women score slightly higher on the Loyola Generative Scale (LGS) (women (n=56) M=42.00, SD=7.0, men (n=23) M= 40.80, SD=7.9). Although not detailed in their 1995 study, de St. Aubin and McAdams found that women scored higher than men on the Generative Behavior Checklist (GBC), which measures individual generative behavior. Higher scores on the GBC may also translate to the creation of more genealogy products. That women are more generative may be a factor in their higher participation in the generative hobby of genealogy. With women suffering from depression twice as much as men, and their higher level of generativity, genealogy might provide an excellent tool by which to address the psychosocial well-being of women by serving as a generative outlet.

Length of Participation in Genealogy, and Generativity

Other than Drake (2001), no other extant literature has examined the correlation between the length of participation in genealogy and a higher level of generativity. In her study of 4,109 adult genealogists Drake utilized the Loyola Generative Scale (LGS), the Generative Behavior Checklist (GBC), and two surveys that measured genealogical activities, determining there is a correlation between length of participation in genealogy and a higher level of generativity. However, she does not expand upon these findings by providing details as to how long individuals were active in genealogy and levels of generativity.

Hypothesis and Research Question

It is hypothesized, while controlling for marital status, number of children, and race/ethnicity, that there is a relationship between genealogist's age, gender, and length of participation and generativity. This research asks also asks, "what is the relationship between genealogy and Erikson's theory of generativity: and "will respondents self-report aspects of generativity as the reason why they are active in genealogy?"

Methodology

Research Design

My study used a mixed-methods design. First, for the quantitative component, crosssectional survey research was used with genealogists in Central California and nationwide to examine their level of generative concern and generative acts. Second, a phenomenological component via responses to seven open-ended survey questions was utilized to assess in their own words why these people are active in genealogy and what this participation means to them. Also utilized in the phenomenological component were 12 questions on the Genealogy Activities and Interest (GAI) survey, which asked participants to score on a four-point Likert scale the

reasons why they are active in genealogy.

Sample

Participants were selected using purposive and snowball sampling from the Genealogy Society of Santa Cruz (CA) (GSSC), the Santa Clara County (CA) Historical and Genealogy Society (SCCHGS), the Campbell (CA) Library adult education genealogy class, and the nationwide informal Imler family genealogy research group, and consisted of 100 adults active in genealogy who were 39 - 89 years old, with a mean age of 67.62 years (SD=10.02). Of the 100 participants, 72 were female and 26 male, with 2 participants not specifying their gender. The racial and ethnic composition of the study's participants was one Asian/Pacific Islander, three Hispanic, five Native American/Native Alaskan, and 91 Whites, this variable was collapsed in order to better analyze the results. Those respondents who checked a racial/ethnic category other than White, or more than one category, became Other (Bi/Multi-Racial). The final racial/ethnic composition of the study was 92% White and 8% Other, and the sample's lack of diversity limits its generalizability outside of those being from the mainstream American culture. As with race/ethnicity, the variable marital status was collapsed for better analysis. The pre-collapsed marital status of the participant was five single/never married, 59 married/life partner, 12 divorced/not remarried, six divorced/remarried, 16 widowed/not remarried, and two widowed/remarried. Theses variables were collapsed and became single and married. The majority of participants (70%) were married or in a long-term partnership. Length of participation in genealogy was collapsed from less than one year (n=6), 1 - 3 years (n=6), 3 - 5 (n=12), 6 - 10 years (n=16), 11 - 20 years (n=21), 21 - 30 years (n=16), 31 - 40 years (n=14), 41 -50 years (n=5), and 51-60 years (n=4). These categories were collapsed and became 10 years or less of participation (n=40), 11-20 years (n=21), 21-30 years (n=16), 31-40 years (n=14),

and 41 years or longer (n=9). The mean number of children for the participants was 2.39 (SD=1.50). Please see Table 1.

Study Site

The investigator distributed survey packets at one monthly meeting of the GSSC, SCCGHS, and the Campbell Library adult education genealogy class. Two notices recruiting participants was also placed in GSSC's weekly e-zine and one in the society's bi-monthly newsletter. Members of the open and informal and nationwide Imler family genealogy research group were recruited utilizing a one-time broadcast email.

Variables and Measures

Quantitative instruments. Survey packets that included the demographic, LGS, GBC, and GAI surveys and questionnaires were used to measure this study's independent and dependent variables. The independent variables of age and gender, and the control variables of marital status, number of children, and race/ethnicity, were measured utilizing a demographic questionnaire. The independent variable lengths of participation in genealogy were measured by the GAI questionnaire. The LGS, GBC, and the GAI measured the dependent variable generativity via the dependent sub-variables of generative concern, behavior and acts.

Four self-administered measurements were used to collect data for my study. The measurements included the LGS, the GBC, GAI, and a demographics questionnaire (see Appendices B, C, D).

The LGS was utilized to determine the participant's level of generative concern (see Appendix B). This scale consisted of 20 items that asked participants to rate questions such as "I try to pass along the knowledge I have gained through my experiences" and "I feel as though my contributions will exist after I die" on a four-point Likert Scale ranging from never, seldom,

fairly often, or nearly always apply to me. Questions 2, 5, 9, 13, 14, and 15 were reversed scored (i.e., 0 = 3, 1 = 2, 2 = 1, 3 = 0). The scale ranged from 60 points indicating highest score to 0 points indicating the lowest score.

The GBC is a checklist that examined the sub-dependent variable of generative behavior by assessing the participant's level of generative behavior over the two months previous to their participation (see Appendix C). With most questions corresponding to one of three generative behavioral manifestations, creating, maintaining, and offering (McAdams, de St. Aubin, Logan & 1993). The GBC asked participants to rate 50 items, such as "Did volunteer work for a charity" and "Taught somebody a skill" on a three point scale ranging from 0 have not performed behavior during last two months, 1 if performed behavior during last two months, and 2 if performed behavior more than once during last two months. The generative behavior score is determined by the sum of the responses to the 40 GBC items and range from 0 the lowest to 80 the highest. Included in the GBC are ten "filler" questions (3, 4, 8, 14, 18, 22, 33, 39, 46, and 47) that do not measure generativity and were not included in the GBC score.

The GAI questionnaire consisted of two quantitative items; one that measured the independent variable length of participation of the participants, and one the sub-dependent variable genealogical acts (see Appendix D). Item 2 measured length of time participant has been active in genealogy, which consisted of five categories; participation of less than 10 years, 11 - 20 years, 21 - 30 years, 31 - 40 years, and 41 or more years. Item 19 asked respondents to check generative products they created to be shared with their children, grandchildren, nieces, or nephews. These generative products were pedigree, descendant and family group charts, family tree, website, ahnentafel report, article, and book. The researcher as to the difficulty of its production weighed genealogical acts. Pedigree, descendant, and family group charts were

assigned a value of 1, as was family trees and ahnentafel reports. Creating a family history website and authoring an article was assigned a value of 2, and authoring a book 3. The score of genealogical acts as measured by the genealogical products range from 0 the lowest to 12 the highest.

Qualitative instruments and themes. The GAI questionnaire was also utilized for the qualitative portion of this study. Items 1, 3, 16, 17, 18, 20, 21, and 22 were open-ended and asked participants to respond in their own words to questions such as "In your own words, what value does genealogy have for you? And "What do your friends and family think of your genealogical work? How does this make you feel?" Items 4 – 15 on the GAI were utilized to measure participant's "reasons for being active in genealogy." A 12 question four-point Likert scale asked respondents to score on the GAI from 1 "irrelevant to me", 2 "somewhat irrelevant to me", 3 "somewhat relevant to me", and 4 "very important reason to me" why they are involved in genealogy reasons why they are active in genealogy.

Themes of generativity as self-reported on the GAI and identified by the researcher were analyzed using content coding. General themes, categories, and patterns were identified utilizing an initial first level of coding. Codes were assigned to responses that were later organized into a second level of coding by the researcher. The researcher then examined results from this second level of coding in order to determine their relationship to the independent variables of age, gender, and length of participation, and generativity via the sub-dependent variables of generative concern, behavior, and acts. For example, for the sub-dependent variable of generative concern, themes included posterity, mortality, immortality, legacy, usefulness (to next generation), and responsibility (to next generation). Posterity themes included death of genealogist. Mortality also included references to the death of a loved one as a 'trigger' for the

participants either being active or becoming active in genealogy. Themes of immortality included those that indicated the respondents not wanting to have a 'wasted life', and legacy includes the stated desire to 'live on', or to 'outlive themselves'. The related themes of usefulness and responsibility (to next generation) included stated responses that indicate roles such as 'guide', 'gatekeeper', 'teacher', along with the 'duty' and 'time' to pursue genealogy. *Reliability and Validity*

The instruments for this study consisted of the LGS and GBC scales, and the GAI adapted and modified by the researcher from Drake 2001 and Lambert 1996. The LGS was developed by McAdams and de St. Aubin (1992), and later refined by McAdams, de St. Aubin, and Logan (1993) to reduce "response style" and increase internal "discriminate" validity (Drake, 2001). McAdams and de St. Aubin (1992), and McAdams, de St. Aubin, and Logan (1993) successfully utilized the GBC, which reinforces the scale's reliability and increases its validity. Because the GAI survey was self-reported, to increase the instrument's reliability and validity questions were kept succinct and provided participants choices that were clear and unambiguous. However, Lambert (1996) noted that a challenge to the validity of items 4 through 15 is that genealogist know and are familiar with catch phrases and words as to why they "should" be interested and active in genealogy. Thus, answers to questions that asked why participants are interested and active in genealogy may reflect biases towards "correct" responses. As with other qualitative instruments, the GAI relies on self-reporting of the participant. Relying on self-reported survey research has led some researchers to question the reliability and validity of qualitative research (Rubin, Babbie, & Lee, 2008). However, this research included a quantitative component, which will increase its validity by triangulating this study's results.

Human Subjects

The researcher recruited participants and collected data after San José State University's Institutional Review Board (IRB) granted approval to conduct the study. Before engaging in the study, all participants were provided with an implied consent Agreement to Participate in Research form. Confidentiality of the participants was maintained by not using any identifiable information as part of the self-administered questionnaires or the research report.

Procedures and Data Collection Techniques

This research utilized four recruiting methods; in-person recruitment at the January meeting of the GSSC, the February meeting of the SCCHGS and the February meeting of the Campbell Library adult education genealogy class, the second method was the placing of a recruitment notice in GSSC's weekly e-zine, including a follow-up reminder notice towards the end of the recruitment period, a third method was to place a recruitment notice in the GSSC's monthly newsletter, and the final method was via a broadcast email invitation to participate sent to the Imler family research group list.

At each meeting attended by the investigator a brief presentation on the project, including its purpose and its surveys, was provided verbally to potential participants. The investigator also informed potential participants the study should take no more than 30 minutes. Following the presentations, survey packets that included a self-addressed stamped envelope were distributed to interested participants. The investigator was available for questions regarding the project during and following the meetings.

The survey packet included an implied consent Agreement to Participate in Research form, instructions on how to complete the self-administered questionnaires, a demographic questionnaire, followed by the LGS, the GBC, and ending with the GAI questionnaire.

Following the completion of the self-administered surveys the participants returned the completed forms via the provided self-addressed stamped envelope. Those members of the Imler family research email group that participated received the survey packet either via email or the United States Postal Service. The email received by these participants included an introduction to the project along with an implied consent *Agreement to Participate in Research* form and instructions on completing and returning the questionnaires.

Analysis of Data

A series of univariate, bivariate, and multivariate tests were chosen for the quantitative portion of this study to determine if there was any relationship between genealogist's age, gender, and their length of participation in genealogy, and the sub-dependent variables of generative concern, behavior, and acts. Thematic analysis was conducted to analyze themes for the qualitative portion.

Quantitative Results and Discussion

This study hypothesized a correlation between genealogist's age, gender, and the length of time they have participated in genealogy and their level of generativity as measured by their LGS and GBC scores, and by their production of tangible generative acts.

Age and Generativity

The LGS and the GBC were used to examine the hypothesis that there is correlation between genealogist's age and generative concern and behavior. At the bivariate level of analysis, a Pearson's correlation test indicated there was no significant relationship between age and LGS and GBC scores, or generative acts at p < 0.05 (see Table 2a). However, at the multivariate level there was a relationship between age and GBC scores ($\beta = -.285$, p = .011), but not between age and either LGS scores or generative acts (see Tables 3a, 3b, 3c).

Gender and Generativity

The LGS, GBC, and GAI were also used to test the hypothesis that there is a relationship between genealogist's gender and generativity. LGS mean scores for females, was 37.79 (SD=8.98), and males 38.96 (SD=7.73). While mean GBC scores for females was 26.37 (SD=10.04), and males 24.88 (SD=11.20). Loyola Generative Scale and GBC scores did not differ significantly between female and male genealogists at p = 0.05 (see Tables 2a and 2b). Female participants had a generative acts mean score of 3.97 (SD=2.74) and males a 4.62 (SD=3.26). There was no significant relationship between gender and generative acts at p < 0.05 (see Table 2c). At the multivariate level of analysis no relationship was found between the gender of the genealogist and scores on the LGS, GBC, or generative acts. (See Tables 3a, 3b, 3c)

Length of Participation in Genealogy and Generativity

The LGS, GBC, and GAI also tested the hypothesis that there is a relationship between the length of participation in genealogy and generativity. Participants who were active in genealogy less than 10 years had mean score of 34.95 (SD=7.67) on the LGS and a mean score of 23.63 (SD=9.84) on the GBC. The mean score on the LGS for genealogists 11 - 20 years of participation was 38.10 (SD=7.39) and 26.10 (SD=10.55) for the GBC. A mean LGS score of 41.69 (SD=9.67) and a mean GBC score of 26.07 (SD=12.71) was recorded for genealogists with 21 - 30 years of active participation in genealogy. Those who had 31 - 40 years of involvement had a mean score of 38.14 (SD=7.95) on the LGS and 29.08 (SD=9.28) on the GBC. Participants with 41 or more years of involvement in genealogy had a mean score of 44.67 (SD=9.06) on the LGS and 29.88 (SD=7.72) on the GBC (see Tables 2a and 2b).

LGS scores indicated a significant difference in length of participation and generativity

across the five lengths of involvement categories (F(4,93)=3.704, p=.008) at the bivariate level. Post-hoc comparisons of the five categories indicate a significant difference in LGS scores (p=.017) between genealogists who have been active in genealogy for 41 years or longer and those active 10 years or less. A multi-linear regression also indicated a relationship between length of participation for those involved in genealogy for 21-30 ($\beta=7.67$, p=.004), and 41 or more years ($\beta=9.73$, p=.002), and LGS scores. No relationship was found between the length of a genealogist's participation in genealogy and scores on the GBC at the bivariate level of analysis, however a multi-linear regression indicated a relationship between length of participation of 41 years or longer and GBC scores ($\beta=7.68$, p=.041). Please see Table 3b.

Genealogists with less than 10 years or less of participation had a mean generative acts score of 2.93 (SD=2.60), 11 – 20 (M=3.76, SD=2.34), 21 – 30 (M=5.50, SD=2.68), 31 – 40 (M=5.29, SD=2.43) and those with 41 years or more of participation (M=5.47, SD=2.86). Results differed significantly between the lengths of participation (F(4,95)=5.183, p =. 001). A Scheffe post-hoc comparison of the five length categories indicated a significant difference between those genealogists with 21 – 30 years (M=5.50, p = .014) and 41 years or longer (M=5.47, p = .015) of participation and those with those with 10 years or less (M=2.93) (see Table 2c). At the multivariate level of analysis, there was a relationship between genealogists with 21 – 30 years (β =2.34, p=.006), 31 – 40 years (β =2.42, p=.005), and 41 years or more of participation in genealogy (β =2.76, p=.007) and generative acts. Please see Table 3c.

Marital Status, Number of Children, and Race/Ethnicity

There was no significant difference on LGS, GBC scores, or generative acts at p=0.05, between the two marital status categories, single/never married and married/long-term partner, and no relationship was indicated between number of children and scores on the LGS at both the

bivariate and multivariate levels of analysis. However, a relationship was indicated between the number of children and scores on the GBC r(96)= .267, p = .009, as well as between the number of children and generative acts r(100)= .200, p = .047 at the bivariate level of analysis. A multivariate regression indicated a relationship between number of children and GBC scores (β = 2.31, p = .003), but not between number of children and either LGS scores or generative acts.

The mean score on the LGS for Other, including multi and biracial genealogists was $39.38 \ (SD=8.94)$, and for White/Non-Hispanic $37.92 \ (SD=8.59)$. Other and multi and biracial genealogists also had a higher mean score on the GBC (M=29.13, SD=8.01) than White/Non-Hispanic (M=25.58, SD=10.45) participants. There was no significant relationship between race/ethnicity and LGS and GBC scores at p=0.05. White Non-Hispanic had a generative acts mean score of $3.29 \ (SD=1.16)$ and Other (M=2.83, SD=3.00). No relationship was found to exist between race/ethnicity and generative acts at p=0.05 at both the bivariate and multivariate level of analysis.

The hypothesis that there is a relationship between genealogist's age and generativity was partially supported. This study's quantitative findings regarding age and its relationship to the sub-dependent variable of generative concern, as measured in this study by the LGS, is not in agreement with Ackerman and Zuroff (2000), Bradley (1997), Drake (2001), Lang and Carstensen (2002), Miner-Rubino, Winter and Stewart (2004), and Sheldon and Kasser (2001) who found that generative concern increases with age. This study's findings regarding generative behavior and generative acts largely concur with Drake's (2001) findings that generative acts increase with age. However, this study found that generative behavior as indicated by GBC scores does not increase with age of genealogists, but paradoxically found a relationship between

age and generative acts as manifested in the production of genealogy products, which conflicts with the findings of McAdams, de St. Aubin, and Logan (1993) which found that middle age adults produce more generative products than younger or older adults.

This study's hypothesis that there is a relationship between genealogist's gender and generativity was not supported. The relationship between gender and generativity was not found to be significant in this study. Men scored slightly higher (M=38.96, SD=7.73) on the LGS than women (M=37.79, SD=8.98), and women scored slightly higher (M=26.37, SD=10.04) on the GBC than men (M=24.88, SD=11.20). While in McAdams and de St. Aubin's 1992 study, women scored slightly higher (M=42.0, SD=7.0) than men (M=40.80, SD=7.9) on the LGS and on the GBC. It was also determined in this current study that no relationship exists between gender and the production of genealogical products as a manifestation of generativity of participants. If women are more generative than men, we would then expect this to be reflected in the production of generative acts. It is important to note the number of female participants (76) was nearly three times the number of males (26). With the mean age of participants being 67.72, it is possible that potential male genealogists are not alive as long as female genealogists, which could explain the discrepancy between the two numbers. This is an opportunity for future researchers to determine if men are not active in genealogy at the same level as women because they are not living long enough to do so, or is there possibly another reason or reasons for lower genealogy participation among men.

This study's hypothesis that there is a relationship between length of participation in genealogy and generativity was supported. This research has indicated that generative concern as measured by the LGS increases the longer a genealogist participates in genealogy. Length of participation in this study was linked to higher generative behavior as reflected in GBC scores

for genealogists with 41 years or longer participation, which is in agreement with Drake's (2001) findings. There was also a relationship between length of participation and generative acts, and this is also in agreement with Drake's (2001) findings that generative behavior increases with the length of participation in genealogy.

Tests conducted on the demographic factors marital status, and race/ethnicity were not significant. However, this study did determine there is a relationship between children and higher behavior as indicated by GBC scores. Though this current research did not compare the levels of generativity between those participants who had children and those who did not, McAdams and de St. Aubin (1992) did find those who had children had higher scores on the LGS, but they did not compare the generative levels between numbers of children, nor did they utilize the GBC. Further research is needed to examine the relationship between the number of children, generative concern, and in particular its relationship to genealogy.

Qualitative Results and Discussion

To answer my study's research question and to complement the quantitative component, the qualitative portion of this study consisted of six open and 12 close-ended questions that were used to get a better understanding of genealogists and their thoughts and what value genealogy has for them and why they participate. This study's research question asked whether respondents would self-report aspects of generativity as the reason why they are active in genealogy. Though not always the most common response, generative themes were present among participants' answers. Emerging from the open-ended questions where three general themes: generativity, well-being, (including cognitive, psychological, mental, and socialization benefits of participation), and historical.

Themes of Generativity

When asked to define a genealogist, 17 of the 94 participants defined a genealogist as someone who passes on family history to the next generation, a preservationist of family history, and "a keeper of the flame." As one participant wrote, a genealogist is "one who researches family history and strives to preserve that information for future generations." However, when asked specifically to identify what triggered their interest in genealogy it wasn't a conscious decision to become the "keeper of the flame" for any of the respondents. In fact it was the generative acts of others that peaked their interest. These generative acts included listening to family stories "told by my parents, grandparents, and other relatives," picking up where parents or grandparents had stopped because of their death:

"I developed an interest from his (grandfather) work and then was passed on all of his research and materials after his death," and for one genealogist, the answer was obvious "doesn't everyone have this curiosity eventually?"

Lambert's 2006 study found that 26% of genealogists stated that the death of a loved one "triggered" their interest in genealogy. None of this study's participants identified the death of a loved one, or concerns regarding mortality, as the "trigger" that sparked their interest in genealogy, which conflicts with Korte's (1984, 1995) assertion the deaths of loved ones "trigger" thoughts of legacy among older adults. However, 28 participants stated they became interested in genealogy through the generative behavior of parents, grandparents, or uncles and aunts, specifically family stories, or research passed down to them. Genealogists also noted the importance of discovering family photographs after a loved one's death as sparking their interest in genealogy. Genealogists in my study rejected the idea that genealogy helps them deal with their own mortality and dying. It is important to note that 57% of genealogists stated this reason was "irrelevant" to their participation in genealogy, and only 8% responded this was "very

important" to them. This finding is in agreement with Yankel (2004), who found only 5.4% of genealogists are involved in genealogy as a way to deal with their own mortality and death.

Although participants did not identify themes of generativity as the primary reason why they became active in genealogy, they did express generative themes when asked what value genealogy has for them, such as "contributing to the present and helping for the future (generations)," by passing on or preserving the family's history. Themes of generativity were the second most common primary reason identified by genealogists for their participation in genealogy. Generative responses included preservation of the past "to make sure that someone knows of their (immigrant grandparents) struggles and (they) are not forgotten," and passing on family history to next generation, "I want my grandchildren to learn about their ancestors." Previous studies (Fulton, 2005; Lambert, 1996; Lindahl & Back, 1987; Taylor, 1982; Unruh, 1995; Yankel, 2004) stressed that genealogists are driven to be involved in genealogy by both their concerns for, and as a way to look towards, posterity. About 73% of participants in Lambert (1996) indicated that posterity is why they "do" genealogy, which largely parallels my study's finding that 63% of genealogists rated posterity as a "very important" reason why they are active in genealogy. However, this is not reflected in the self-reported responses of the participants when asked for the primary reason for their involvement.

That generativity was not the primary reason for participation of most individuals is inconsistent with responses to item 9 on the GAI, which asked individuals to score "because I enjoy being the family historian" as a reason for their being active in genealogy. This reason was "irrelevant" for 13% (n=13), and "very important" for 36% (n=36) of genealogists in this study. This is also incongruent with Lambert (1996; 2003) and his finding that 72.8% of genealogists identified with the role of family historian and its importance to them; only 36% of this study's

participants did so. However, 56% of genealogists answered "very important" to the question of how important it was to them to restore ancestors to the family memory, thus, being responsible to the next generation and to those who came before. Please see Table 4.

When asked for the second most important reason they participate in genealogy most individuals answered with generative themes including posterity, helping others in their research, and passing on history and research to the next generation, "our children and grandchildren will one day have a better understanding of who they are," and as another genealogists stated "hopefully I can keep our history alive and it will be there for others who are interested later." The incongruence between the scoring of posterity as a "very important" reason for participants being active in genealogy, and the open-ended responses to primary and secondary reasons for participating, may be explained by the ease of scoring posterity on a scale in comparison to the more complicated self-reporting via open-ended questions.

Even more telling is when asked how genealogy affected their well-being, only one respondent answered this question with a generative theme, "yes, it gives me great pleasure...making it available to others now or in the future." Furthermore, when asked for the main benefit of genealogy, responses of a generative nature were the fewest. The generative benefits for those individuals was the passing of family history to the next generation, helping others research, and volunteering at the local genealogical society. One person wrote they get "satisfaction of finding information and documenting it for future generations," and another wrote of the importance of the "legacy of information I can leave to future generations." *Themes of Well-Being*

Cognitive benefits. A consistent theme throughout the open-ended questions was the cognitive benefits of genealogy. Only a small number of participants identified a genealogist as

someone who loves research, a mystery, being a detective, or "loves to put a puzzle together." For many genealogists, genealogy's value is the challenge of solving puzzles "I enjoy the 'search'. It's like a giant puzzle," mysteries, or the research process, "I enjoy the challenge of foreign research." These cognitive benefits were also the third most common response among genealogists when asked what their primary and secondary reason for their being active in genealogy. For these genealogists, it is the enjoyment of being a detective solving mysteries and puzzles, "the main reason is to find a missing piece of my puzzle," or "I love the hunt and solving the mystery. It's like a puzzle," and for the love of research that they are active. The role of a detective solving mysteries and puzzles was a cognitive behavior that genealogists identified as important to their well-being and as one wrote genealogy "keeps my reasoning skills sharp." Many genealogists wrote the main benefit of participation in genealogy is the enjoyment of solving mysteries and puzzles, and the thrill of the research process, "I enjoy the research and the associated process."

Psychological and mental health benefits. Themes that reflected psychological benefits included feeling valuable and important, feelings of gratification, satisfaction, a sense of accomplishment, and an improved self-esteem. The value of genealogy for many was put in terms of the psychological benefits it has provided them, "it has made me realize my worth as a person." Another wrote that genealogy "makes me feel connected and valuable." The psychological benefits of genealogy for those who stated this was the primary reason for their participation included, serves as a distraction from life's problems, gives me a sense of purpose, a feeling of being part of something positive, for the enjoyment and just for the "plain old fun" of it. Others were more specific in stating that genealogy keeps them mentally active and keeps them busy. As a secondary reason for their participation, a few noted they "do" genealogy

because it gives them a sense of purpose and accomplishment "as a hobby, it gives me purpose in this time of my life," while a few said they "do" it for the enjoyment. Asked to identify how genealogy has affected their well-being a large number of participants wrote they received psychological benefits from their participation in genealogy, and that "it (genealogy) matters to me," and "I am totally happy when I am in the library." Other psychological themes included giving participants a sense of purpose, accomplishment, usefulness, satisfaction, and a role "I feel good about myself and my family. I like being the family historian." Asked the main benefit of genealogy, one respondent wrote genealogy gives them "personal satisfaction," another wrote they have "a feeling of accomplishment" and a feeling of being appreciated for "the service to others." These self-reported findings are supported by the scoring of item 10 on the GAI "doing genealogy gives me a feeling of competence," which 35% (n=35) of respondents scored as "somewhat irrelevant" to them and 32% (n=32) of participants scored this as "somewhat important," with only 17% (n=17) scoring this reason as a "very important" for their being active in genealogy.

Participants were asked what their friends and family think of their genealogical work and how this makes them feel. Of the 95 genealogists who answered this question, 81 stated that their family and friends appreciate their genealogical activity. This appreciation of their work elicited feelings of respect, appreciation, satisfaction, worthwhile, accomplishment, and usefulness among genealogists. One genealogists stated their "family is very appreciative" and this makes them "feel great," another "the excited ones makes me feel happy, like I have done something special," and one individual wrote that even if their family is or isn't interested in their work "they (the family) like to know that I have assumed the family historian role." For the remaining genealogists whose families were uninterested in their genealogical work two themes

emerged in their responses. First, many expressed feelings of sadness and disappointment, a "majority of my family ...don't care about what I am doing, which saddens me." Others were more defiant in their reaction to uninterested family members, "some friends and family don't understand why I do it, but so what," or "they don't care, but I don't do it for the benefit of others or for the aforementioned." What is striking about responses to this question is the relationship between positive support of friends and family, and positive psychological feelings of genealogists. Conversely, negative or indifferent attitudes of friends and family elicited negative psychological feelings among genealogists.

Closely related to psychological benefits were themes that reflected mental health benefits. One respondent wrote that the second most important reason for their being active in genealogy was "to keep my mind sharp." Keeping one's mind active affected the well-being and life of several individuals "It has kept me busy and my mind sharp." One genealogist specifically noted that genealogy provides "solace as I have aged," and another that genealogy "has helped me to cope with difficult times in my life." For many genealogists, the main benefit of their participation in genealogy has been mental in nature. One noted that genealogy "keeps my mind active. Focuses my attention," and another that "learning can continue through-out one's life and new skills can learned." These responses are not reflected in responses to items 13 and 14, which asked participants to score the importance of genealogy in occupying themselves in either their spare-time or in retirement. Twenty-two percent (n=22) of genealogists scored "to occupy myself in my spare time" a "somewhat irrelevant" and "somewhat important" reason for their genealogical activity. With only 9% (n=9) scoring this reason as a "very important" reason for their involvement in genealogy. Scoring of "to occupy myself in retirement" was similar with only 9% (n=9) scoring this "very important" and 52% (n=52) as "irrelevant."

My research found that participants consistently identified genealogy as beneficial to their mental and psychological health, as well as improving their social well-being. This complements Chance (1988) and Lindahl and Back's (1987) arguments that genealogy is "very beneficial" for older adults and is a valuable tool for those working with this population.

Participants consistently stressed the benefits of genealogy on their mental health in that it keeps things their minds "sharp," and the enjoyment of cognitive pursuits such as solving mysteries and puzzles, and also identified the importance of genealogy in their psychological well-being. Indeed when asked how genealogy affected their well-being on an open-ended question, psychological benefits such as giving them a sense of purpose and accomplishment, usefulness, and a sense of well-being was the second most common answer.

Socialization benefits. Themes that reflected the importance of socialization to participants included, meeting new friends, and "discovering" new relatives. The value of genealogy for a number of participants included socialization through meeting living relatives and making new friends, "it has given me important interactions with others over the years." The second most important reason some participate in genealogy is the socialization "friendships and camaraderie with fellow genealogists." The benefit of socialization was the most frequent response given as to how genealogy as affected genealogist's well-being, genealogy according to one individual "stimulated many meetings with old and new relatives enabling feelings of usefulness," and another noted "it has kept me in touch with people and allowed me to get in touch with other people." Most respondents described various aspects of socialization as the main benefit of their participation in genealogy, "the main benefit is meeting people," another wrote that for them it is "the marvelous people I've met." Scores on item 12 on the GAI, which asked genealogists to score the importance of "to meet living relatives" as a reason for their

being active in genealogy reflect the genealogist's open-ended responses to their primary reason for being active in genealogy. Genealogists were almost evenly split as to the importance of participating in genealogy to meet living relatives from 29% (n=29) for both "somewhat irrelevant" and "somewhat important," and 25% (n=25) for those who responded "irrelevant." *Historical Themes*

Historical themes included discovering and placing your ancestors in their historical context, and learning more about their decisions and their struggles. It is not surprising that answers that reflect historical themes are the most common in responses to what value genealogy has for participants. Nor is it surprising that individual's answers reflected historical themes as the primary reason for their being active in genealogy, and the second most common response to the question that asked for the second important reason for their involvement, "I've always had an interest in history." For many, the main benefit of genealogy has been that it has increased their knowledge and understanding of history "genealogy has expanded my knowledge of history," and how their family fits into the historical context. Scoring on items 4, 5, 6, and 7 on the GAI reflect the historical themes on the open-ended questions. Seventy-six percent (n=76) of participants indicated that it is "very important" "to come to know my ancestors as people". Fifty-six percent (n=56) responded that it is "very important" "to restore ancestors to my family memory". The highest percentage, 32%, (n=32) indicates that "to go back in time, in my imagination" was "somewhat important". For 59% (n=59) of genealogists it was "very important" "to learn about my roots, about who I am."

Strengths and Limitations

Although the overall results of the quantitative portion did not support the overall hypotheses of my study, the qualitative portion of this study illustrates the important benefits of

genealogy for those who participate. This is an important strength because this study goes a long way to raise the stature of genealogy from simply being a hobby or past time, to being an extremely important and beneficial part of participant's lives, as well as having positive implications for the field of social work. Another strength of this study lies in the large amount of quantitative and qualitative data that it was able to draw from, and although my study's qualitative portion largely does not support the hypothesis, it does provide important insight into the self-identified benefits of genealogy and provides an important opportunity for further research. Among the most important and serious limitations to this study, is its lack of diversity either in its racial/ethnic composition (94% White), the very small number of participants under the age of 50 (6), and the biased sample drawn only from genealogists. In order to determine if genealogists are more generative than non-genealogists, further research is needed that specifically compares generativity of genealogists to non-genealogists. It is also important for future research to include more racial/ethnic and age diversity. Future research should also include a more in-depth quantitative analysis of the relationship between genealogy and generativity. My research also identified an opportunity for other researchers to examine the relationship between genealogy and its cognitive, psychological, mental, and psychosocial benefits as they relate to an individual's well-being.

Implications for Social Work

There are several implications for the social work profession regarding the importance of genealogy in working with older adults and other marginalized and disenfranchised groups.

According to Hutchison (2003), the humanistic perspective of human behavior is driven by the desire for personal growth and a sense of meaning and competence in their lives. Included in these desires, is the desire to "experience" bonding with other individuals. Participants in my

study consistently expressed they received pleasure in genealogy because it provides them with a sense of adequacy, satisfaction, sense of accomplishment, and an improved self-esteem. They also wrote that genealogy provides them with opportunities to socialize with other genealogists and "new" found relatives. Genealogy also provided participants with a creative challenge in solving puzzles and mysteries. Identifying the benefits received by those individuals who participate in genealogy is an important implication for the social work. This is because older adults suffer from higher rates of depression than do other age groups (USDHHS, 2000); older adult depression places them at great risk of suicide (McInnis-Dittrich, 2002). Participants in my study recognized and identified the usefulness of genealogy in reducing their social isolation and increasing the psychosocial well-being. Thus, genealogy is an important and useful tool for social workers and providers working with older adults. Social workers could utilize genealogy as an activity with either individuals or in group settings, or as McInnis-Dittrich (2004) suggests, through reminiscence therapy. As detailed in McInnis-Dittrich (2002), older adults need to reduce their isolation, and stay connected to people or activities for good psychosocial health. Older adults also need to have a sense that they are being productive and useful through activities such as volunteering or hobbies, or they are at risk for depression, which could led to suicide (McInnes-Dittrich, 2002).

Genealogy has implications for the social work profession and is important in the context of a transcultural perspective because it expands and increases our cultural competency and knowledge through the resulting research, which is in turn incredibly useful for social workers and others to understand their privilege and postitionality as it relates to their clients and to society as a whole. The generalizability of my research's findings illustrates the benefit of genealogy as a tool to assist people of color, and other marginalized and oppressed groups

address issues of oppression, correct historical deficiencies in our national memory, and increase our cultural knowledge of marginalized groups, as well as provide them with a means by which to improve their psychosocial, psychological, cognitive, and mental well-being. Most participants of in my study identified to know where they "come" from and to contextualize their ancestor's place in history as both the primary reason they are active in genealogy and what gives them the most value. Thus, this desire to know where they "come from" and know about those who came before is an important reason they are involved in genealogy. However, for marginalized groups tracing one's roots takes on the additional dimension of claiming their place in the nation's past, correcting the historical paradigm presented by the dominate group, and passing onto the next generation an awareness of historical belonging (Parham, 2008). Genealogy functions to recover generational memory, especially of racial and ethnic groups lost during immigration, assimilation, and oppression (Hareven, 1978). Indeed the work of genealogists of color "provides opportunities for critical reflection (on), dynamics of race, identity and inequality" (Parham, 2008, p. 4). It is these transcultural opportunities that results from genealogical research that can lead to an increased understanding and awareness of culture by social workers and by those who run social service programs that focus on improving the lives of disenfranchised and oppressed populations, including older adults (Greenberg, 1982).

References

- Ackerman, S. & Zuroff, D. (2000). Generativity in midlife and young adults: Links to agency, communion, and subjective well-being. *International Journal of Aging & Human Development*, 50(1), 17-41.
- Allen County (IN) Public Library. (2008). Website. Retrieved on November 20, 20008 from http://www.acpl.lib.in.us/genealogy/stateres.html
- Azarow, J. (2003). *Generativity and well-being: An investigation of the Eriksonian hypothesis*. Ph.D. dissertation, Northwestern University, Illinois, United States.
- Bishop, R. (2008). In the grand scheme of things: An exploration of the meaning of genealogical research. *Journal of Popular Culture*, 41(3), 393-412.
- Bradley, C. (1997). Generativity-stagnation: Development of a status model. *Developmental Review*, 17(3), 262-290.
- Bradley, C., & Marcia, J. (1998). Generativity-Stagnation: A five-category model. *Journal of Personality*, 66(1), 39-39.
- Brown, C., McGuire, F., & Voelkl, J. (2008). The link between successful aging and serious leisure. *International Journal of Aging and Human Development*, 66(1), 73-95.
- Chance, S. (1988). The psychological functions of genealogy in the aged. *Journal of Geriatric Psychiatry and Neurology, 1*(2), 113 -115
- de St. Aubin, E., & McAdams, D. (1995). The relations of generative concern and generative action to personality traits, satisfaction/happiness with life, and ego development.

 Journal of Adult Development, 2(2), 99-112.
- Erikson, E. (1985). *Childhood and society, 35th anniversary edition*. New York, NY: W.W Norton

- Fulkerson, J. (1995). Climbing the family tree. American Demographics, 17(12), 42.
- Fulton, C. (2005). Finding pleasure in information seeking: Leisure and amateur genealogists exploring their Irish ancestry. *Proceedings of the American Society for Information Science and Technology, USA, 42*(1).
- Gabriel, Z., & Bowling, A. (2004). Quality of life from the perspectives of older people. *Ageing* & *Society*, 24(5), 675-691.
- Greenberg, N. (1982). Gerontology and genealogy: Family research as a therapeutic tool for the aged. (ERIC Document Reproduction Service No. ED235455)
- Hart, H. (1997). *Generativity and social involvement*. Ph.D. dissertation, Northwestern University, Illinois, United States.
- Hart, H., McAdams, D., Hirsch, B., & Bauer, J. (2001). Generativity and social involvement among African Americans and White adults. *Journal of Research in Personality*, 35(2), 208-230.
- Hareven, T. (1978). The search for generational memory: Tribal rites in industrial society.

 *Daedalus, 107(4), 137-149.
- Hofer, J., Busch, H., Chasiotis, A., Kärtner, J., & Campos, D. (2008). Concern for generativity and its relation to implicit pro-social power motivation, generative goals, and satisfaction with life: A cross-cultural investigation. *Journal of Personality*, 76(1), 1-30
- Hutchison, E. (2003). *Dimensions of Human Behavior: Person and Environment* (2nd ed.). Thousand Oaks, CA: Sage

- Jacobson, C., Kunz, P., & Conlin, M. (1989). Extended family ties: Genealogical researchers. InS. Bahr & E. Peterson (Eds.), Aging and the Family (pp. 193-205). Washington DC:Lexington Books.
- Jamjan, L., Maliwan, V., Pasunant, N., Sirapo-ngam, Y., & Porthiban, L. (2002). Self-Image of aging: A method for health promotion. *Nursing & Health Sciences*, 4(3), A6.
- Jeong, S., & Cooney, T. (2006). Psychological well-being in mid to late life: The role of generativity development and parent—child relationships across the lifespan. *International Journal of Behavioral Development*, 30(5), 410-421.
- Kinnevy, S., & Morrow-Howell, N. (1999). Perceived benefits of intergenerational tutoring.

 Gerontology & Geriatrics Education, 20(2), 3-17.
- Kotre, J., (1984). *Outliving the self: Generativity and the interpretation of life*. Baltimore, MD: The Johns Hopkins University Press
- Kotre, J. (1995). Generative outcome. *Journal of Aging Studies*, 9(1), 33-41.
- Kudo, H., Izumo, Y., Kodama, H., Watanabe, M., Hatakeyama, R., Fukuoka, Y., et al. (2007). Life satisfaction in older people. *Geriatrics & Gerontology International*, 7(1), 15-20.
- Lambert, R. (2003). Constructing symbolic ancestry: Befriending time, confronting death.

 Omega: Journal of Death & Dying, 46(4), 303-321.
- Lambert, R. (2006). Descriptive, narrative, and experiential pathways to symbolic ancestors. *Mortality*, 11(4), 317-335.
- Lambert, R. (1996). The family historian and temporal orientations towards the ancestral past.

 *Time & Society, 5(2), 115-143.
- Lambert, R. (2002). Reclaiming the ancestral past: Narrative, rhetoric and the 'convict stain'.

 *Journal of Sociology, 38(2), 111-127.

- Lang, F., & Carstensen, L. (2002). Time counts: Future time perspective, goals, and social
- Lindahl, M., & Back, K. (1987). Lineage identity and generational continuity: Family history and family reunions. *Comprehensive Gerontology*, *1*(1), 30-34.

relationships. Psychology and Aging, 17(1), 125-139.

- McAdams, D., & de St. Aubin, E. (1992). A Theory of Generativity and Its Assessment Through Self-Report, Behavioral Acts, and Narrative Themes in Autobiography. *Journal of Personality & Social Psychology*, 62(6), 1003-1015.
- McAdams, D., de St. Aubin, E., & Logan, R. (1993). Generativity among young, midlife, and older adults. *Psychology and Aging*, 8(2), 221-230.
- McAdams, D., & Logan, R. (2004). What is generativity? In E. De St. Aubin, D. McAdams, & T. Kim (Eds.), *The Generative Society: Caring for future generations* (pp.15-31). Washington DC: American Psychiatric Association.
- McAdams, D. (2006). The Redemptive Self: Generativity and the Stories Americans Live By.

 *Research in Human Development, 3(2), 81-100.
- Maritz. (2000). *Recent poll shows explosion in popularity of genealogy*. Public Relations

 Newswire. Retrieved on October 7, 2008, from

 http://www.genealogy.com/genealogy/press-051600.html
- Menec, V. (2003). The relation between everyday activities and successful aging: A 6-year longitudinal study. *Journal of Gerontology: Social Sciences*, 58B(2), S74-S82.
- McInnis-Dittrich, K. (2002) Social Work with Elders: A biopsychosocial approach to assessments and intervention. Boston, MA: Pearson Education

- Miller, R. (2007). The Association of Family History Knowledge and Cultural Change with Persistence among Undergraduate Low-Income, First-Generation College Students.

 *Research & Teaching in Developmental Education, 24(1), 29-45.
- Miller-McLemore, B. (1989). Produce or perish: A feminist critique of generativity. *Union Seminary Quarterly Review*, 43(1-4), 201-222.
- Miner-Rubino, K., Winter, D., and Stewart, A. (2004). Gender, social class, and the subjective experience of aging: Self-perceived personality change from early adulthood to late midlife. *Personality and Social Psychology Bulletin*, 30(12), 1599-1610.
- National Institute of Mental Health. (n.d). *Older adults: Depression and suicide facts*. Retrieved on October 28, 2008, from http://www.nimh.nih.gov/health/publications/older-adults-depression-and-suicide- facts.shtml#role
- Nimrod, G. (2007). Expanding, reducing, concentrating and diffusing: post retirement leisure behavior and life satisfaction. *Leisure Sciences*, 29(1), 91-111.
- Pahkala, K. (1990). Social and environmental factors and depression in old age. *International Journal of Geriatric Psychiatry*, 5(2), 99-113.
- Parham, A. (2008,). Race, memory and family history. *Social Identities*, 14(1), 13-32.
- Roach, R. (2008). The new genealogy. *Diverse: Issues in Higher Education*, 25(1), 16-18.
- Rubin, A., Babbie, E., & Lee, P. (2008). *Research Methods for Social Work* (2nd ed). Mason, OH: Thomson Wadsworth.
- Rubinstein, R. (1996). Childlessness, legacy, and generativity. *Generations*, 20(3), 58.
- Sheldon, K., & Kasser, T. (2001). Getting older, getting better? Personal strivings and psychological maturity across the life span. *Developmental Psychology*, *37*(4), 491-501.

- Sinko, P., & Peters, S. (1983). A survey of genealogists at The Newberry Library. *Library Trends*, 32(1), 97-109
- Taylor, R. (1982). Summoning the wandering tribes: Genealogy and family reunions in American history. *Journal of Social History*, 16(2), 21-37.
- United States Census Bureau. (2004). *Projected Population Change in the United States, by Age*and Sex: 2000 to 2050. Retrieved on September 10, 2008, from

 http://www.census.gov/population/www/projections/usinterimproj/
- United States Department of Health and Human Services (November, 2000). *Healthy People*2010. Retrieved October 28, 2008 from

 http://www.healthypeople.gov/Document/[df/Volume2/18Mental.pdf
- Unruh, D. (1983). Death and personal history: Strategies of identity preservation. *Social Problems*, 30(3), 340-351
- Van de Water, D., & McAdams, D. (1989). Generativity and Erikson's 'belief in the species.'. *Journal of Research in Personality*, 23(4), 435-449
- Warburton, J., Mclaughlin, D., & Pinsker, D. (2006). Generative acts: Family and community involvement of older Australians. *International Journal of Aging & Human Development*, 63(2), 115-137.
- Willenbring-Drake, P. (2001). Successful aging: Investment in genealogy as a function of generativity, mobility and sense of place. Unpublished master's thesis, California State University, Fullerton, California, United States.
- Yakel, E. (2004). Seeking information, seeking connections, seeking meaning: genealogists and family historians . *Information Research*, 10(1) paper 205.

Appendix A

Demographic Questionnaire

The questions below are to assess basic demographic information. All answers will be reported in aggregate form for any reports and none of the information provided below will identify you personally. Please mark appropriate answers with an X or fill in the space provided.

1. Marit	al Status
- - - -	SingleMarried/Long Term PartnerDivorced/Not RemarriedDivorced/RemarriedWidowedWidowed/Remarried
2. Numl	per of Children
3. Gend	er
-	FemaleMale
4. Race	Ethnicity
_	African-American
-	Asian/Pacific Islander
-	Hispanic
-	Native-American/Native-Alaskan
-	White non-Hispanic
-	Other (please specify)
5. Age_	

Appendix B

LGS

<u>Instructions</u> . For each of the following statements, please indicate how often the statement applies to you, by
marking either a "0," "1," "2, " or "3" in the space in front.
Mark "0" if the statement never applies to you.
Mark "1" if the statement only occasionally or seldom applies to you.
Mark "2" if the statement applies to you <u>fairly</u> often.
Mark "3" if the statement applies to you very often or nearly always. 1. I try to pass along the knowledge I have gained through my experiences.
2. I do not feel that other people need me.
3. I think I would like the work of a teacher.
4. I feel as though I have made a difference to many people.
5. I do not volunteer to work for a charity.
6. I have made and created things that have had an impact on other people.
7. I try to be creative in most things that I do.
8. I think that I will be remembered for a long time after I die.
9. I believe that society cannot be responsible for providing food and shelter for all homeless people.
10. Others would say that I have made unique contributions to society.
11. If I were unable to have children of my own, I would like to adopt children.
12. I have important skills that I try to teach others.
13. I feel that I have done nothing that will survive after I die.
14. In general, my actions do not have a positive effect on other people.
15. I feel as though I have done nothing of worth to contribute to others.
16. I have made many commitments to many different kinds of people, groups, and activities in my life.
17. Other people say that I am a very productive person.
18. I have a responsibility to improve the neighborhood in which I live.
19. People come to me for advice.
20. I feel as though my contributions will exist after I die.

Appendix C

GBC

<u>Instructions</u>. Below is a list of specific behaviors or acts. Over the past <u>two months</u>, it is likely that you may have performed some of these behaviors. It is also likely that you have not performed many of them as well during this time. Please consider each behavior to determine whether or not you have performed the behavior during the past two months. If you have performed the behavior, please try to determine how many times you have performed it during the past two months. For each behavior, provide one of the following ratings:

Write a "0" in the blank before the behavior if you have <u>not performed</u> the behavior during the past two months.

Write a "1" in the blank if you have performed the behavior <u>one</u> time during the past two months.

Write a "2" in the blank if you have performed the behavior <u>more than once</u> during the past two months.

1. Taught somebody a skill.	
2. Served as a role model for a young person.	
3. Won an award or contest.	
4. Went to see a movie or play.	
5. Gave money to a charity.	
6. Did volunteer work for a charity.	
7. Listened to a person tell me his or her personal problems.	
8. Purchased a new car or major appliance (e.g., dishwasher, television set).	
9. Taught Sunday School or provided similar religious instruction.	
10. Taught somebody about right and wrong, good and bad.	
11. Told somebody about my own childhood.	
12. Read a story to a child.	
13. Babysat for somebody else's children.	
14. Participated in an athletic sport.	
15. Gave clothing or personal belongings to a not-for-profit organization (su	uch as the "Good
Will," "Salvation Army," etc.).	
16. Was elected or promoted to a leadership position.	

17. Made a decision that influenced many people.
18. Ate dinner at a restaurant.
19. Produced a piece of art or craft (such as pottery, quilt, woodwork, painting, etc).
20. Produced a plan for an organization or group outside my own family.
21. Visited a non-relative in a hospital or nursing home.
22. Read a novel.
23. Made something for somebody and then gave it to them.
24. Drew upon my past experiences to help a person adjust to a situation.
25. Picked up garbage or trash off the street or some other area that is not my property.
26. Gave a stranger directions on how to get somewhere.
27. Attended a community or neighborhood meeting.
28. Wrote a poem or story.
29. Took in a pet.
30. Did something that other people considered to be unique and important.
31. Attended a meeting or activity at a church (not including conventional worship service
such as Mass, Sunday morning service, etc.)
32. Offered physical help to a friend or acquaintance (e.g., helped them move, fix a car,
etc.).
33. Had an argument with a friend or family member.
34. Contributed time or money to a political or social cause.
35. Planted or tended a garden, tree, flower, or other plant.
36. Wrote a letter to a newspaper, magazine, Congressman, etc. about a social issue.
37. Cooked a meal for friends (non-family members).
38. Donated blood.
39. Took prescription medicine.
40. Sewed or mended a garment or other object.
41. Restored or rehabbed a house, part of a house, a piece of furniture, etc.
42. Assembled or repaired a child's toy.
43. Voted for a political candidate or some other elected position.
44. Invented something.
45. Provided first aid or other medical attention.

46. Attended a party.
47. Took an afternoon nap.
48. Participated in or attended a benefit or fund-raiser.
49. Learned a new skill (e.g., computer language, musical instrument, welding, etc.).
50. Became a parent (had a child, adopted a child, or became a foster parent).

Appendix D

Genealogical Activity and Interest

Questions below are used by the researcher to better understand the genealogical activities and interests of genealogists. There are no right or wrong answers.

1. In your words how would you	define a genealogist?
2. How long have you been invol next to answer)	ved in genealogy research and work? (please type of write X
seven months to one year	21 to 30 years 31 to 40 years 41 to 50 years
3. How did you first become inter	rested in genealogy?
What are your reasons for being a	active in genealogy? (For questions 4-15, please rate each item
on a 4-point scale:	nat irrelevant" 3= "somewhat important to me" 4= "very
4. to come to know my ancestors 5. to restore ancestors to the fami 6. to go back in time, in my imag 7. to learn about my roots, about 8. as my way of dealing with mor 9. because I enjoy being the fami 10.doing genealogy gives a feelin 11. so I can publish a book or an 12. to meet living relatives. 13. to occupy myself in my spare	ly memory ination who I am rtality and death ly historian ag of competence article

14. to occupy myself in retirement 15. for posterity (for children, grandchildren, nephews and nieces)
16. In you own words, what value does genealogy have for you?
17. What is the primary reason you are active in genealogy?
18. What is the second most important reason you are active in genealogy?
To: What is the second most important reason you are active in genealogy.
19. Have you passed onto or shared any of the below items with your children, grandchildren, nieces or nephews? (please check all that apply)
pedigree chartcreated a family history websitedescendant chartahnentafel report an article you wrote family tree a book you wrote
20. Has genealogy affected your well-being or any other aspects of your life? If so, How?
21) Please describe what has been the main benefit to you in your participation in genealogy?
22) What do your friends and family think of your genealogical work? How does this feel?

Table 1
Sample Characteristics (n=100)

Characteristics	n^{a}	%
Marital Status		
Single	30	30
Married	70	70
	, ,	, ,
Race/Ethnicity		
Other/Multi and Bi Racial	8	8
White/Non-Hispanic	92	92
Gender		
Female	72	72
Male	26	26
Length		
10 years or less	40	40
11-20 years	21	21
21-30 years	16	16
31-40 years	14	14
41 years or longer	9	9
Acc	M=67.6	52
Age	M=67.6 SD=10.6	
Number of Children	M = 2.39	
	SD=1.50)
,		
Loyola Generative Scale [#]	M = 38.0	
	SD=8.58	3
Generative Behavior Checklist##	M=25.88	
	SD=10.2	28
Generative Acts###	M=4.13	
	SD=2.86)

^{#=}Loyola Generative Scale scores range from 0 the lowest to 60 the highest. ##=Generative Behavior Checklist scores range from 0 the lowest to 80 the highest. ###=Generative Acts scores range from 0 the lowest to 12 the highest.

Table 2a Bivariate Analysis: Loyola Generative Scale (LGS) (Generative Concern) scores by Model Predictors

	Generative Concern Mean (SD)	Significant Differences
Marital Status		
Single	37.70 (11.05)	No Significant Difference
Married	38.19 (7.32)	
Race/Ethnicity		
Other/Multi and Bi Racial	39.38 (8.94)	No Significant Difference
White/Non-Hispanic	37.92 (8.59)	· ·
Gender		
Female	37.79 (8.98)	No Significant Difference
Male	38.96 (7.73)	-
Length		
10 years or less	34.95 (7.67)	Significant Difference,
11-20 years	38.10 (7.39)	41 years or longer >
21-30 years	41.69 (9.67)	10 years or less *
31-40 years	38.14 (7.95)	
41 years or longer	44.67 (9.06)	
	Generative Concern	Significant
	r	Relationship
Age	.066	No Significant Relationship
Number of Children	.155	No Significant Relationship

Using two-tailed tests * p < .05 ** p < .01 *** p < .001

	Generative Behavior Mean (SD)	Significant Differences
Marital Status		
Single	24.59 (10.51)	No Significant Difference
Married	26.43 (10.21)	C
Race/Ethnicity		
Other/Multi and Bi Racial	29.13 (8.01)	No Significant Difference
White/Non-Hispanic	25.58 (10.45)	· ·
Gender		
Female	26.37 (10.04)	No Significant Difference
Male	24.88 (11.20)	
Length		
10 years or less	23.63 (9.84)	No Significant Difference
11-20 years	26.10 (10.55)	
21-30 years	26.07 (12.71)	
31-40 years	29.08 (9.28)	
41 years or longer	29.88 (7.72)	
	Constitut Daharian	G'au'G'au
	Generative Behavior r	Significant Relationship
Age	174	No Significant Relationship
Number of Children	.267**	Significant Relationship

Table 2c

Bivariate Analysis: Generative Acts (Generative Behavior) scores by Model Predictors

	Generative Acts Mean (SD)	Significant Differences
Marital Status		
Single	4.60 (3.27)	No Significant Difference
Married	3.93 (2.67)	C
Race/Ethnicity		
Other/Multi and Bi Racial	3.29 (1.16)	No Significant Difference
White/Non-Hispanic	2.83 (.30)	-
Gender		
Female	3.97 (2.74)	No Significant Difference
Male	4.62 (3.26)	
Length		
10 years or less	2.93 (2.60)	Significant Difference,
11-20 years	3.76 (2.34)	41 years or longer and
21-30 years	5.50 (2.68)	21-30 years >
31-40 years	5.29 (2.43)	10 years or less *
41 years or longer	4.13 (2.86)	
	Generative Behavior	Significant
	r	Relationship
Age	.173	No Significant Relationship
Number of Children	.200*	Significant Relationship

Table 3a Multiple Linear Regression: Beta Weights of Generative Concern (measured via LGS) by Age, Gender, Length of Participation, Marital Status, Race/Ethnicity, and Number of Children.

Model		
Adjusted R-Squared	.092	
र	2.065	
lf	9,86	
)	.042*	
Predictors	Beta and Significance	
Age	004	
Gender Female Vs Male	-1.22	
Length of Genealogy Participation (each vs.		
11-20	3.10 7.67*	
21-30 31-40	2.28	
41 years or longer	9.73*	
Marital Status Single Vs Married	-1.28	
Race White/Non-Hispanic Vs Other	-2.99	
Number of Children	.615	

Table 3b

Multiple Linear Regression: Beta Weights of Generative Behavior (measured via GBC) by Age, Gender, Length of Participation, Marital Status, Race/Ethnicity, and Number of Children.

Model					
Adjusted R-Squared	.104				
F	2.198				
df	9, 84				
p	.030*				
Predictors	Beta and Significance				
Age	285*				
Gender Female Vs Male	.144				
Length of Genealogy Participation (Each					
11-20	2.73				
21-30 31-40	2.56 4.81				
41 years or longer	7.68				
Marital Status					
Single Vs Married	379				
Race					
White/Non-Hispanic Vs Other	2.37				
Number of Children	2.31*				

Table 3c Multiple Linear Regression: Beta Weights of Generative Acts (measured via GAI) by Age, Gender, Length of Participation, Marital Status, Race/Ethnicity, and Number of Children.

Model				
Adjusted R-Squared	.158			
F	3.029			
df	9,88			
p	.003**			
Predictors	Beta and Significance			
Age	.012			
Gender Female Vs Male	814			
Length of Genealogy Participation (Eac				
11-20	.826			
21-30 31-40	2.34 2.42			
41 years or longer	2.42			
Marital Status				
Single Vs Married	.780			
Race				
White/Non-Hispanic Vs Other	1.38			
	.295*			

Table 4

Frequencies of Reasons Why Active in Genealogy

Reasons	Irrelevant	Somewhat Irrelevant	Somewhat Important	Very Important
To come to know	1	4	19	76
To restore ancestors	5	9	30	56
To go back in time	21	16	32	31
To learn about	4	6	30	59
As my way of dealing	57	22	12	8
Because I enjoy	13	24	27	36
Doing genealogy gives	16	35	32	17
So I can publish	59	18	17	6
To meet living	25	29	29	17
To occupy myself	47	22	22	9
To occupy in retirement	52	21	18	9
For posterity	4	8	25	63



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To: Brady Umfleet

From: Pamela Stacks, Ph.D.

Associate Vice President

Panul Salu Graduate Studies and Research

Date: December 16, 2008

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

"Genealogy and Generativity in Older Adults"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to all data that may be collected from the subjects. The approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Dr. Pamela Stacks, Ph.D. immediately. Injury includes but is not limited to bodily harm, psychological trauma, and release of potentially damaging personal information. This approval for the human subject's portion of your project is in effect for one year, and data collection beyond December 16, 2009 requires an extension request.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services that the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at (408) 924-2427.

Protocol #S0804426

cc. Peter Lee, 0124