



---

MSU Graduate Theses

---

Spring 2020

## **Does Aging Identity Moderate the Impact of Experiences With Familial Ageism on Well-Being?**

Emily E. Kinkade

*Missouri State University*, [Kinkade036@live.missouristate.edu](mailto:Kinkade036@live.missouristate.edu)

As with any intellectual project, the content and views expressed in this thesis may be considered objectionable by some readers. However, this student-scholar's work has been judged to have academic value by the student's thesis committee members trained in the discipline. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

---

Follow this and additional works at: <https://bearworks.missouristate.edu/theses>



Part of the [Clinical Psychology Commons](#), [Developmental Psychology Commons](#), and the [Social Psychology Commons](#)

### **Recommended Citation**

Kinkade, Emily E., "Does Aging Identity Moderate the Impact of Experiences With Familial Ageism on Well-Being?" (2020). *MSU Graduate Theses*. 3516.

<https://bearworks.missouristate.edu/theses/3516>

This article or document was made available through BearWorks, the institutional repository of Missouri State University. The work contained in it may be protected by copyright and require permission of the copyright holder for reuse or redistribution.

For more information, please contact [BearWorks@library.missouristate.edu](mailto:BearWorks@library.missouristate.edu).

**DOES AGING IDENTITY MODERATE THE IMPACT OF EXPERIENCES WITH  
FAMILIAL AGEISM ON WELL-BEING?**

A Master's Thesis

Presented to

The Graduate College of  
Missouri State University

In Partial Fulfillment

Of the Requirements for the Degree  
Master of Science, Psychology

By

Emily E. Kinkade

May 2020

# **DOES AGING IDENTITY MODERATE THE IMPACT OF EXPERIENCES WITH FAMILIAL AGEISM ON WELL-BEING?**

Psychology

Missouri State University, May 2020

Master of Science

Emily E. Kinkade

## **ABSTRACT**

The purpose of this study was to begin investigating the effects of ageism in the family context. The current literature has documented the negative impacts that negative stereotypes and negative perceptions of aging has on older adults' health, mortality, and well-being (Levy, 1996; Levy, 2003). However, the majority of extant research on ageism focuses on age discrimination in the workplace and in healthcare despite the majority of peoples' time being spent in the family context. Therefore examining experiences of ageism sourced from family members merits study. Walker, Bisconti and Kinkade (*in preparation*) found evidence that the experience of ageism within the family context varies from the workplace context. Past research has demonstrated that older adults who identify as being older and adapt to the changes that arise with aging are associated with higher levels of self-esteem (Whitbourne, Sneed, & Skultety, 2002; Weinberger & Whitbourne, 2010). It is hypothesized that age identification will serve as a moderator for the relationship between familial ageism and well-being. Participants completed a set of questionnaires measuring experiences with familial ageism, depression, self-esteem, and ego strength. Experiences of familial ageism correlated with the well-being outcome variables in the predicted direction. Age identity moderated the relationship between familial ageism and depression and ego strength, such that participants who identified as being younger or identified as their age reported lower depression scores and higher ego strength scores. These findings suggest that age identity may serve as a buffer against the negative impacts that experiences of familial ageism has on well-being.

**KEYWORDS:** ageism, aging, older adults, identity, families, stereotyping, prejudice, discrimination

**DOES AGING IDENTITY MODERATE THE IMPACT OF EXPERIENCES WITH  
FAMILIAL AGEISM ON WELL-BEING?**

By

Emily E. Kinkade

A Master's Thesis  
Submitted to the Graduate College  
Of Missouri State University  
In Partial Fulfillment of the Requirements  
For the Degree of Master of Science, Psychology

May 2020

Approved:

Ruth Walker, Ph.D., Thesis Committee Chair

William Paul Deal, Ph.D., Committee Member

Steven Capps, Ph.D., Committee Member

Julie Masterson, Ph.D., Dean of the Graduate College

In the interest of academic freedom and the principle of free speech, approval of this thesis indicates the format is acceptable and meets the academic criteria for the discipline as determined by the faculty that constitute the thesis committee. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

## ACKNOWLEDGEMENTS

The completion of this project took a considerable amount of support and guidance from a number of people. First and foremost, I would like to acknowledge the members of my thesis committee: Dr. Ruth Walker, Dr. Paul Deal, and Dr. Steven Capps. Dr. Walker provided countless hours of advice and support at every step of this project, from brainstorming ideas for topics to preparing for defense. She offered her expertise not only in the field of gerontology, but in the process of research as a whole. Her guidance has truly been invaluable and has made me a better researcher and student along the way. Dr. Paul Deal's expertise in psychological measures was invaluable as we were presented with the unique challenge of having to develop a new scale in order to see this project to completion. Dr. Steven Capps was willing to take time out of his busy schedule to join this committee at short notice, and provided excellent feedback.

I would also like to acknowledge the members of the B.E.S.T.E.S.T Lab: Kennedy Cooper, Jaylaan Murphy, Jill Yancey, Logan Griffin, Erika Herting, and Tina Martin. These students gave their time to help with data collection and provide feedback, and their efforts were vital to the completion of this thesis.

Finally, I would like to acknowledge a friend and fellow graduate student, Kelsey Keady. Kelsey. Her support and friendship through the countless hours spent on this project was at times the only thing that kept me sane over the past few months.

## TABLE OF CONTENTS

Introduction	Page 1
Stereotypes, Prejudice, and Discrimination	Page 1
Age-Related Stereotypes	Page 2
Age-Related Prejudice	Page 3
Age-Related Discrimination	Page 5
Self-Stereotyping	Page 7
Purpose and Hypotheses	Page 10
Method	Page 12
Participants	Page 12
Procedure	Page 13
Measures	Page 13
Results	Page 16
Correlations	Page 16
Moderation Analyses	Page 16
Discussion	Page 19
Limitations	Page 22
Conclusion	Page 23
References	Page 24
Appendix: Institutional Review Board Approval	Page 43

## LIST OF TABLES

Table 1. Participant Demographics	Page 30
Table 2. Correlations Between Familial Ageism Scores (FAS) and Outcome Variables	Page 34
Table 3. Moderation Model: Conditional Effects of Familial Ageism and Aging Identity on Depression	Page 35
Table 4. Moderation Model: Conditional Effects of Familial Ageism and Aging Identity on Ego Strength	Page 36

## LIST OF FIGURES

Figure 1. Conditional Effect of Age Identity at Different Levels of Familial Ageism on Depression	Page 37
Figure 2. Conceptual Model for Aging Identity Moderating the Relationship Between Familial Ageism and Depression	Page 38
Figure 3. Conditional Effect of Aging Identity at Different Levels of Familial Ageism on Ego Strength	Page 39
Figure 4. Conditional Effect of Aging Identity at Different Levels of Familial Ageism on Ego Strength	Page 40
Figure 5. Conceptual Model for Aging Identity Moderating the Relationship Between Familial Ageism and Ego Strength	Page 41
Figure 6. Statistical Model for Familial Ageism, Aging Identity, and Their Interaction on Ego Strength	Page 42



## **INTRODUCTION**

Upon meeting another individual, people tend to immediately and unconsciously categorize them on these three qualities: gender, race, and age. This automatic categorization, or stereotyping, has given rise to different types of “isms.” A significant amount of research has been done on racist and sexist stereotypes, the impact of sexism and racism, and how to combat these forms of discrimination. Although this area of research is growing, comparatively little attention has been granted to ageism. Current research on ageism has focused predominantly on specific settings, specifically age discrimination in the workplace and in healthcare. Studying the effects of ageism stemming from other sources, such as the family, been largely unexplored. The purpose of the current study will be to fill the current gap in the literature by studying how ageism impacts mental health outcomes in the family context.

### **Stereotypes, Prejudice, and Discrimination**

Stereotypes, prejudice, and discrimination are three closely related concepts. The main distinction between the three are that stereotypes are cognitive, prejudice is affective, and discrimination is behavioral (Fiske, 1998). Because stereotypes are a part of our knowledge and thought processes, they can be either explicitly or implicitly activated and expressed (Fiske, 1998; Levy, 1996). Stereotypes involve the unconscious and automatic categorization of people based on stereotypic in-group and out-group characteristics. Previous research has stated that with this automatic categorization process, people tend to overexaggerate the similarities between individuals in the outgroup (Fiske, 1998). Stereotypes lay the groundwork for prejudice by developing categories and schemas to describe groups of people. Prejudice is associating

those categories with positive, negative, and neutral attitudes and feelings. Discrimination is acting upon those categorizations, attitudes, and feelings by treating groups of people differentially.

### **Age-Related Stereotypes**

Stereotyping based on age appears to start young. Researchers have found that children hold stereotypes about older adults from approximately 6 years of age; children as young as three are able to pick out the oldest adult from a group of drawings, suggesting the use of automatic categorization based on a schema of 'old' from a young age (Robinson & Howatson-Jones, 2014; Levy 2003). Researchers suggest that although children begin discriminating age and developing age-related stereotypes at a young age, they are not necessarily ageist. However, children begin expressing more and more negative stereotypes of aging the older they get (Robinson & Howatson-Jones, 2014). Preschool aged children begin expressing negative attitudes towards older adults, such as seeing them as being helpless or incapable (Levy, 2003).

Originally coined in 1968 by Robert Butler, the term ageism refers to the stereotyping and differential treatment of people due to their age (Achenbaum, 2013). Ageism includes both cognitive and behavioral components. Additionally, ageism also includes the wide number of negative beliefs and stereotypes about older adults that are prominent within western culture (Achenbaum, 2013; Levy & Banaji, 2002). These beliefs and stereotypes may be positive or negative, however, the majority of the extant stereotypes of aging are negative ones (Palmore, 1999; Posthuma & Campion, 2009). Positive stereotypes about older adults center around being wise, wealthy, family oriented, understanding, supportive, generous, and enjoying volunteer work (Hummert, 1993; Schmidt & Boland, 1986). The more common, negative stereotypes

about aging see older adults as frail, incompetent, lonely, unable to contribute to society, unable to adapt to changes in society, demanding, bad-tempered, stubborn and set in their ways, as well as confused, forgetful, and senile (McCann & Guiles, 2002; Hummert, 1990; Hummert, 1993; Schmidt & Boland, 1986; Levy, 1996; Levy & Banaji, 2002; Kite, Stockdale, Whitley Jr., & Johnson, 2005; Posthuma & Campion, 2009).

No age group is free from stereotypes, and each generational cohort appears to have their own stereotypes. Younger generations, such as Generation-X and Generation-Y have stereotypes that overlap with each other such as being technology savvy, valuing a work-life balance, and being lazy, entitled, or arrogant (Perry, Hanvongse, & Casoinic, 2013). Stereotypes surrounding Baby Boomers differ from the stereotypes of younger adults, and include being hardworking, not understanding technology, and being resistant to change. It is important to note that this research was conducted in the context of the workplace, as much of the research on age-related stereotypes and discrimination has been. Other researchers studying workplace age-related stereotypes found common stereotypes of older workers involve the belief that older workers are: less productive, have lower job performance, untrainable, unwilling to adapt to change, and physically and cognitively inferior (McCann & Guiles, 2002; Posthuma & Campion, 2009). In fact, many employers have admitted that they will take into consideration the physical and cognitive demands of the job, and how well an older individual may be able to meet those demands when evaluating older applicants (McCann & Guiles, 2002).

### **Age-Related Prejudice**

Although age-related prejudices are prevalent in society, the underlying causes of negative attitudes towards aging are unclear. Duncan and Schaller (2009) have suggested

prejudice against the older adults may be due to an evolutionary response to avoid infectious diseases. These authors postulate, as a way to keep themselves safe, humans have developed the implicit ability to identify unusual characteristics (e.g., coughing) in other people which may indicate the presence of an infectious disease. When people perceive these atypical characteristics, they tend to trigger feelings of disgust, which then encourages avoidance behaviors. Although this response was designed to keep people safe from disease, it may have generalized to include features that are not indicative of disease, specifically characteristics that indicate aging. Therefore, when people perceive older individuals, this disease-avoidance response is erroneously triggered, resulting in negative feelings of disgust and avoidance of older individuals. As support for this hypothesis, Duncan and Schaller (2009) conducted a study in which they found that individuals who believed themselves to be vulnerable to infectious disease were more likely to express implicit prejudice against older adults.

To offer an alternative underlying reason for prejudice against the aged, some studies suggest that prejudice may arise when the thought of aging threatens one's current sense of identity (Packer & Chasteen, 2006). A couple of studies investigating identity and aging have found that younger adults who identified more strongly with their young age group were more likely to express negative attitudes toward their future older selves. Conversely, if a young individual had no strong identification with their current age group, this effect was not seen (Packer & Chasteen, 2006). The authors of this study hypothesize that negative attitudes towards the aged self might have increased because considering an older version of oneself may be threatening to an individual's current young identity.

Contrary to popular belief, feelings of prejudice against the older adults is not just an experience seen within modern American culture. Recent reviews of the literature indicate that

age-based prejudice has become an international concern. In fact, contrary to conventional beliefs, it has been found that individuals living in east Asia have less favorable attitudes toward the older adults and aging compared to cultures in Southeast Asia and English-speaking nations in Europe (North & Fiske, 2015). Similar findings have been reported for non-English speaking countries in Eastern Europe. It has been suggested that nations in which the population increase of the aged has been the heaviest have seen the biggest decrease in age prejudice, possibly due to national resources being strained. Interestingly, nations that emphasized individualism tended to have more positive attitudes toward aging.

### **Age-Related Discrimination**

Age-related discrimination includes a number of actions that involve differential behavior towards older adults due to their age. Some of the documented examples of discriminatory age behaviors range from the use of derogatory language to describe older adults, denial of care for treatable health concerns, differential treatment in the workplace, and in its most severe forms, elder abuse (McCann & Guiles, 2002). Within the literature, ageism has been primarily studied within two contexts: the workplace and in healthcare. Age-related discrimination in the workplace is connected to negative stereotypes of older adults in the workplace. For example, older workers are less likely to be presented with opportunities for training and professional development and are less likely to be offered constructive feedback to help in their career development (Posthuma & Campion, 2009; Walker & Zelin, *in press*). Workplace stereotypes and discrimination have been linked to lower self-esteem and negative impacts on the mental health of older workers (McCann & Giles, 2002) as well as decreased feelings of self-efficacy (Chiesa, Stefano, Dordoni, Henkens, Fiabane, & Setti, 2016).

Researchers have found that doctors treat older adults with cancer less aggressively (Hutchins, Unger, Crowley, Coltman, & Albain, 1999; Hynes, 1994); administer shortened attempts at resuscitation during cardiopulmonary arrest (Fried, Miller, Stein, & Wachtel, 1996); and undertreat acute heart attacks (Krumholz, Murillo, Chen, Vaccarino, Radford, Ellerbeck, & Wang, 1997; McLaughlin, Gurwitz, Willison, Gao, & Soumerai, 1999; McLaughlin, Soumerai, Willison, Gurwitz, Borbas, Guadagnoli, McLaughlin, Morris, Cheng, Hauptman, Antman, Casey, Asinger, & Gobel, 1996; Whittle, Wickenheiser, & Vendetti, 1997), heart disease (Bouma, van den Brink, van der Meulen, Verheul, Cheriex, Hamer, Dekker, Lie, & Tijssen, 1999), and asthma (Enright, McClelland, Newman, Gottlieb, & Lebowitz, 1999). Experiences with ageism have also been linked to other negative physical and psychological outcomes, such as reduced memory performance in older adults, reduced will to live and self-efficacy, and a higher cardiovascular response (Levy, 1996; Levy, Hausdorff, Hencke, & Wei, 2000; Ory, Hoffman, Hawkins, Sanner, & Mockenhaupt, 2003).

Preliminary research by Walker, Bisconti, and Kinkade (*in preparation*) points to the need to expand experiences with ageism beyond the workplace and healthcare contexts into the family realm. After conducting an exploratory qualitative analysis of participant responses across the lifespan on their experiences with ageism, the researchers found evidence of ageism occurring within the family context. Specifically, they highlighted how experiences with ageism within the family can include: challenging the physical and mental competency of their family members, over-helping, restricting, or monitoring the behavior of family members due to a belief the physical and mental competency of their loved one is compromised, and negative reactions to behaviors that are deemed “too early” or “too late” for their social clock. This is a new avenue of

research in the field of ageism, thus, the current study will focus on the impact of familial ageism.

### **Self-Stereotyping**

Ageism is unique in that as individuals grow older, they shift from being members of the ingroup to members of the outgroup. This shift in turn causes aging stereotypes to become self-stereotypes over time. Aging self-stereotypes are developed over the course of one's life, with the entire process beginning in childhood (Levy, 2003). Due to the prevalence of aging stereotypes within society, children are regularly exposed to aging stereotypes. At the time they are introduced to these stereotypes, children do not identify as being old so these stereotypes are not meaningful to their sense of identity. Rather, rather are used to describe the outgroup- those who are identified as old. Therefore, they internalize negative stereotypes about aging are internalized for the majority of their lives. As people grow older, they begin to find that these stereotypes about aging they had internalized for years are now relevant to themselves, and they then become self-stereotypes.

Negative self-stereotypes are typically internalized when they are not relevant to an individual's identity, so no psychological protections are ever developed against them. This means that by the time those stereotypes become relevant, individuals may find it harder to cope with them (Levy, 2003). Negative impacts of self-stereotyping include decreased performance on memory tasks, and slower movements. These have both been observed after both young and older individuals were implicitly primed with negative aging stereotypes (Levy, 1996; Levy 2003). Relatedly, stereotype threat occurs when an individual fears being negatively judged based on the stereotypes of the group they belong to (Spencer, Steele, & Quinn, 1998).

Typically, stereotype threat is studied in situations in which an individual fears that their performance on a certain task will confirm stereotypes about their group (Spencer, Steele & Quinn, 1998; Levy, 2003). For example, an older adult, aware of the stereotypes that older adults are forgetful or senile, may become anxious when asked to complete a memory assessment because she does not want to have these stereotypes confirmed about her due to her performance.

At times, older adults may try to protect themselves from the impacts of self-stereotyping by dissociating themselves from the ‘old’ identity (Weiss & Lang, 2012). Older adults may validate their identification with younger age groups by comparing themselves to a reference group. For older adults, this reference group includes the negative stereotypes that surround older adulthood. As a person ages, they find that their experiences do not necessarily line up with those stereotypes. This discrepancy in experiences makes older adults much less likely to identify as “old” (Bultena & Powers, 1978). Feelings of being younger than one’s actual age have been found to be linked to a number of other positive outcomes as well, such as being at a lower risk of experiencing a major depressive episode, being more likely to have high mental health, and having lower markers of systemic inflammation- which is related to several negative health outcomes (Keyes & Westerhof, 2012; Stephan, Sutin, & Terracciano, 2015).

In contrast, Whitbourne, Sneed, and Skultety (2002), propose an Identity Processing Theory, which introduces the strategies of identity assimilation, identity accommodation, and identity balance, all of which are used as ways individuals process new age-related information about themselves and how this information relates to their identities (Whitbourne et al., 2002; Sneed & Whitbourne, 2005). Identity assimilation involves incorporating age-related information into one’s already existing self-concept. If new information does not fit one’s already defined schema of their self, they may choose to disregard that information as being irrelevant. Excessive



use of assimilation strategies may lead individuals to deny the reality that they are aging, choosing instead to cling to a younger identity (Whitbourne et al., 2002; Sneed & Whitbourne, 2005).

Alternatively, accommodation involves an individual changing their self-concept due to new age-related information. Excessive use of accommodation may result in an individual adapting their identity to fit in with new information about their age- and may lead them to rely on aging stereotypes as a foundation for their identity (Whitbourne et al., 2002; Sneed & Whitbourne, 2005). Theoretically, Whitbourne (1986) proposes that a balance of identity accommodation and assimilation leads to the healthiest identity. Using a balance of both strategies, and individual is able to assimilate new age-related information into their self-concept without completely changing their entire self-concept. Individuals who positively identify with the fact that they are getting older and who adapt to the changes that arise with aging tend to experience higher levels of self-esteem compared to those who instead choose to maintain a younger identity or who change their whole identity to revolve around negative stereotypes of aging (Whitbourne et al., 2002; Weinberger & Whitbourne, 2010).

Erikson's theory psychosocial development proposes that as they age, people progress through a series of eight stages, each with its own crisis that must be resolved. Successful navigation of each crisis results in the development of a corresponding virtue, or ego strength (Markstrom, Sabino, Turner, & Berman, 1997). Healthy development is contingent on the resolution of each life stage and the development of each ego strength.

It is believed that each of Erikson's eight crises can be further broken down into eight "sub-crises" that can be used to further clarify how individuals in that stage develop. For example, middle adulthood is defined by the conflict of generativity vs. stagnation, and

researchers have begun to theorize what specific crises this stage is comprised of. One of the final sub-crisis in this stage is one of Honesty vs. Denial. Here, an adult must begin to evaluate themselves and their lives honestly in order to truly know themselves (Slater, 2003). Another point made by the author is that adults must also become honest with the fact that death is inevitable. This implies that healthy development involves an identification with the fact that one is getting older- coming to terms with what their life has been thus far and that end of life is beginning to draw nearer. By not being honest with themselves about their aging, adults risk going into denial (Slater, 2003).

### **Purpose and Hypotheses**

The purpose of this study is to begin exploring the influence that familial ageism has on well-being. Here, well-being will be measured using instruments designed to measure depression, and ego strength. Ego strength was chosen as a measure of well-being due to the fact that successful completion of each life crisis results in the development of an ego strength; therefore, individuals who have a healthier development should have higher levels of ego strength and thus well-being.

Specifically, the goal of this study is to test the following hypotheses:

- 1.) Experiences with familial ageism are related to depression and ego strength.
- 2.) Aging identity moderates the relationship between experiences of familial ageism and depression symptomology. and
- 3.) Aging identity moderates the relationship between experiences of familial ageism and ego integrity.

Previous research is mixed and suggests two potential outcomes: that experiences of familial ageism may have a lessened impact on well-being when individuals identify as being older as compared to those who try to maintain a younger identity or that experiences of familial

ageism may have a lessened impact on well-being when individuals identify as being younger as compared to those who maintain an “old” or “older” identity.

## METHOD

### Participants

This study was approved by the university Institutional Review Board (Study # IRB-FY2020-484) on January 17, 2020 before data was collected (see Appendix). The total sample consisted of 226 participants; however, 15 participants were removed for submitting blank or incomplete surveys. The remaining participants ( $n = 211$ ) were primarily heterosexual (85.5%), white (83.4%), and female (51.2%) who had completed a college degree (45%). The ages of participants ranged from 19 to 72, with most participants identifying as middle aged (48.3%) or young adults (39.3%). The majority of participants were married (47.9%), had children (55.9%), and were in good health (67%). Income was well distributed, and most participants were working full-time (76.8%). For complete demographic information, see Table 1.

The sample for this study was drawn from Missouri State University and from the community. Several different recruitment methods were used at Missouri State University. To obtain a diverse range of ages, nontraditional and adult students (defined as students aged 22 and older) were targeted. Undergraduate students enrolled in an introductory psychology course were invited to complete the survey for research credit ( $n = 32$ , 15.17%). Adult students and students participating in a program for students age 62 and older were sent an email inviting them to participate as well ( $n = 8$ , 3.79%). In some courses, students were offered extra credit if they had an adult (such as a parent) complete the study ( $n = 17$ , 8.06%). Unless participants were students who received research credit or extra credit in exchange for completing the study, participants were given the opportunity to enter a drawing for one of four \$25 gift cards as incentive for participation.

Community samples were obtained using Amazon Mechanical Turk ( $n = 154$ , 72.99%), in which participants were rewarded \$3 for submitting usable responses. Posts containing information about the study and the link to the online survey were also posted on Craigslist for several large cities throughout the United States. Individuals who found the study through Craigslist were also offered the chance to win a gift card as incentive.

## **Procedure**

Participants were asked to complete a survey that included a number of questionnaires and scales. The measures used in this survey included a demographic questionnaire, the newly developed Familial Ageism Scale (FAS), the Rosenberg Self-Esteem Scale (RSE), the Center of Epidemiological Studies' Depression Scale (CES-D), the Psychosocial Inventory of Ego Strengths (PIES). Two supplemental scales designed to measure ageism, the Ageism Survey (Palmore, 2001) and the Ambivalent Ageism Scale (Cary, Chasteen, & Remedios, 2017) were also included.

## **Measures**

**Familial Ageism.** The Experiences with Familial Ageism Scale is a 63-item scale developed to measure ageist behaviors (e.g., comments, jokes, unwanted or unnecessary help or worry, etc.). Items were created to measure differential treatment by family members both for being young (Members of my family have not listened to me because they feel like I am too young) and for being old (Members of my family make me feel like a burden due to my older age), as well as measured differential treatment for social clock deviations (Members of my family have made negative comments when they believed I completed life tasks too late in life

for their comfort). For each item, participants rated how often they experienced that particular event on a Likert scale from one (the event never occurred) to four (the event occurred almost all of the time). Higher scores indicate more experiences of ageism coming from family members. The Experiences with Familial Ageism scale is a newly developed scale. Validity and reliability are in the process of being established for this measure. In this sample, the FAS had an exceptionally high Cronbach's alpha (.99).

**Aging Identity.** Aging identity has been measured using a variety of different methods throughout the literature, though the most common method of measurement is by asking a single question about the age an individual perceives themselves to be. This may be done by asking participants to select a category that best describes them ("very young, young, middle age, elderly, or old"), or by asking participants for their "feel age", or the age they feel like they are (Barak, 1987).

**Depression.** The Center for Epidemiological Studies Depression Scale (CES-D) is a scale designed to measure the depressive symptoms currently being experienced among members of the general population (Radloff, 1977). Participants completed the 20-item scale by rating on a 4-point Likert scale how often they experienced a symptom over the past week. The scale ranged from "Rarely or none of the time (less than 1 day)" to "Most or all of the time (5-7 days)". Higher scores on the CES-D indicate more depressive symptoms. Sample items include: "I felt depressed" and "My sleep was restless". The CES-D demonstrated internal consistency in previous research with an alpha of .85 for the general public and .90 for clinical populations (Radloff, 1977). In the current study, the CES-D also had a high Cronbach's alpha (.93).

**Self-Esteem.** The Rosenberg Self-Esteem Scale is a 10 item scale designed to measure an individual's level of self-esteem. Participants will be asked how much they agree with each item

on a four-point Likert scale ranging from 1 (Strongly agree) to 4 (Strongly disagree). Higher scores indicate higher levels of self-esteem. Sample items include: “On the whole, I am satisfied with myself” and “At times, I think I am no good at all”. Previous research has demonstrated that the RSE shows concurrent, predictive, and construct validity (Donnellan, Ackerman, & Brecheen, 2016; Gray-Little, Williams, & Hancock, 1997).

**Ego Integrity.** The Psychosocial Inventory of Ego Strengths (PIES) is an inventory developed to measure the Eriksonian concept of ego strength. Erikson’s theory of psychosocial development proposes a series of eight life crises that people must navigate as they progress through life. Ego strengths are those virtues that arise from the successful resolution of each life conflict. There are eight ego strengths in total, one associated with each of Erikson’s life conflicts: hope, will, purpose, competence, fidelity, love, care, and wisdom (Markstrom et al., 1997).

The PIES was originally developed to have 64 items total but has also been condensed into a brief version with only 32 items. This study used the shortened version of the PIES to reduce the length of the survey. Participants rated how much they agreed with a series of statements on a Likert scale ranging from 1 (“does not describe me well”) to 5 (“describes me very well”; Markstrom et al., 1997). Sample items include “In many ways, I have control over my future” and “No matter how bad things get, I am confident they will get better”. The 32-item version of the PIES displayed high internal consistency with an alpha of .91 (Markstrom et al., 1997). This sample had a Cronbach’s alpha of .93.

## RESULTS

Missing data were filled in using the ipsative imputation method, or item analysis. Using this method missing data were estimated by taking the average of the participants' completed responses.

### Correlations

The first set of hypotheses, that experiences of familial ageism will negatively impact outcome variables measuring well-being, was supported. Correlations between the outcome variables and scores on the Familial Ageism Scale were significant in the predicted directions. Scores on the FAS were positively correlated with depression scores ( $r = .62$ ;  $p < .001$ ), and were negatively correlated with self-esteem ( $r = -.36$ ,  $p < .001$ ) and ego strength ( $r = -.44$ ,  $p < .001$ ; see Table 2).

### Moderation Analyses

Evidence was found in partial support of the second hypothesis that aging identity would moderate the relationship between experiences of familial ageism and depressive symptomology,  $R^2 = .42$ ,  $F(3, 194) = 46.41$ ,  $p < .001$ . To test this hypothesis, a moderation analysis was performed using Hayes PROCESS model (Model 1). The results of these analyses are presented in Table 3. There was a significant conditional effect of age identity on the relationship between experiences with familial ageism and depression, as there was a significant interaction between familial ageism and age identity when predicting depression ( $b = .01$ ,  $p < .05$ ,  $\Delta R^2 = .01$ , 95% CI [.0004, .0228]). Post hoc analyses were performed using Hayes' PROCESS. This analysis



described the conditional effect of age identity on the relationship between experiences with familial ageism and depression and ego strength at the average age difference, and one standard deviation above and below the mean age difference. For depression, there was a conditional effect when people felt younger than their age ( $b = .47, p < .001, 95\% \text{ CI } [.34, .59]$ ), felt their age ( $b = .50, p < .001, 95\% \text{ CI } [.40, .61]$ ), and felt older than their age ( $b = .64, p < .001, 95\% \text{ CI } [.50, .78]$ ) (see Figure 1). To understand where the conditional effect driving the significant interaction was occurring, the Johnson-Neyman technique was utilized to identify the point at which the effect of the predictor on the outcome transitioned from being statistically significant to nonsignificant. When the discrepancy between participant age and felt age was -19.51 years or more, this transition occurred, ( $b = .27, p = .05, 95\% \text{ CI } [.0000, .5491]$ ). For conceptual and statistical models, see Figure 2 and Figure 3.

The third hypothesis, aging identity moderates the relationship between experiences of familial ageism and ego integrity, was also supported,  $R^2 = .26, F(3, 192) = 22.13, p < .001$ . To test this hypothesis, a moderation analysis was performed using Hayes PROCESS model (Model 1). The results of these analyses are presented in Table 4. A significant interaction was also found when a moderation analysis was performed using familial ageism and age identity to predict ego strength ( $b = -.01, p < .05, \Delta R^2 = .02, 95\% \text{ CI } [-.0242, -.0026]$ ). Additional post hoc tests and the Johnson-Neyman technique were also employed for this analysis. Similar results were found for ego strength as well, where a conditional effect was also found when people felt younger than their age ( $b = -.23, p < .001, 95\% \text{ CI } [-.35, -.12]$ ), felt their age, ( $b = -.28, p < .001, 95\% \text{ CI } [-.38, -.18]$ ) and felt older than their age ( $b = -.44, p < .001, 95\% \text{ CI } [-.57, -.30]$ ) (see Figure 4). Once again, the Johnson-Neyman technique was used to identify the point at which the effect of ageing identity on ego strength was no longer significant. Here, it was when the

discrepancy between participant age and felt age was -8.52 years or more ( $b = .27$ ,  $p = .05$ , 95% CI [.0000, .5491]). For conceptual and statistical models, see Figure 5 and Figure 6.

## DISCUSSION

The purpose of this study was to expand the contexts in which the effects of ageism are being studied. Where previous researchers have predominantly focused on studying ageism within the context of the workplace and in healthcare, this study focused on the impact ageism can have within the family. Previous researchers have established that negative aging stereotypes can have negative impacts on older adults both physically and psychologically (Levy, 1996; Levy et al., 2000; Ory et al., 2003). The phenomenon of self-stereotyping also presents problems. Previous researchers suggest that people who are exposed to negative stereotypes about aging and older adults from a young age internalize these stereotypes. When people grow old, they suddenly find all these internalized negative stereotypes apply to them which in turn damages cognitive functioning and mental health (Levy, 1996; Levy, 2003). Therefore, when studying ageism, it is important to also consider how individuals identify with their age.

The literature on age identity was mixed. Classic theories such as Erikson's theory of psychosocial development suggests that identification with one's age group - by way of working through life stages that are developmentally appropriate - fosters healthy development (Slater, 2003). Whitbourne's Identity Processing Theory also suggests that taking a balanced approach to aging by adapting to changes while still maintaining one's sense of self, is the healthiest way of identifying with one's age (Whitbourne et al., 2002; Sneed & Whitbourne, 2005). However, other studies suggest that feeling younger than one's age serves as protection against negative aging stereotypes and may have physical and psychological benefits (Keyes & Westerhof, 2012; Stephan, et al., 2015; Levy, 1996; Levy, 2003). Due to this mixed results on the impact of maintaining a "younger" or "older" identity compared to actual chronological age, this study

explored which identity would facilitate healthier well-being when confronted with ageism in the family context.

Three hypotheses were presented in this study. First, it was predicted that familial ageism would be negatively correlated to well-being. In the context of this study, this would mean that experiences of familial ageism would be positively correlated with depression and negatively correlated with self-esteem and ego strength. The overall prediction was that experiences of familial ageism would decrease well-being. This was supported. As experiences with familial ageism increased, reported depressive symptomology increased and ego integrity decreased. When these variables are examined in isolation, these suggests a deleterious impact of experiences of ageism within the family context on individual well-being.

To determine if aging identity may positively impact this negative relationship between familial ageism and well-being, this study investigated two additional moderation hypotheses: that aging identity would moderate the relationship between experiences of familial ageism with both depression and ego integrity. Due to the mixed results in previous research, this study explored the impact of aging identity on these relationships. Aging identity was measured by finding the discrepancy between one's actual age and one's "feel" age (Barak, 1987). For both of the supported models, the data suggests that when participants experienced low to medium levels of familial ageism, aging identity did appear to make a difference in ego strength and depression scores. More specifically, when participants felt younger than their chronological age or felt their same age, they had lower levels of depressive symptomology and higher levels of ego strength compared to their counterparts who felt older than their chronological age.

In other words, aging identity appears to potentially serve as a protective factor against the negative impact that familial ageism has on depression and ego strength for participants who

had a young to same age perception of their aging identity. When participants felt a certain number of years older than their actual age, aging identity was no longer a buffer between familial ageism and well-being. For depression, this point was when participants felt about 19.5 years older than their chronological age; for ego strength this point was when participants felt approximately 8.5 years older than their chronological age. Further, participants who experienced high levels of familial ageism reported low levels of ego strength and high levels of depression, regardless of how they identified with their age. This indicates that if an individual is experiencing a lot of ageism from their family, their aging identity is no longer able to serve as a buffer even if they identify as younger than their age; their well-being will be damaged regardless of how old or young they feel.

The results of this study support research that suggests identifying as younger or feeling younger than one's actual age is more beneficial than embracing an identity as "old" (Weiss & Lang, 2012, Bultena & Powers, 1978, Keyes & Westerhof, 2012, Stephan et al., 2015, Levy, 2003). Previous researchers have documented the negative impacts that stereotypes about aging can have on an individual. Weiss and Lang (2012) suggest older adults may distance themselves from being "old" as a way to defend themselves against the negative impacts of these stereotypes. Older adults may also be inclined to adopt a younger identity due to the use of reference groups (Bultena & Powers, 1978). When comparing their own experiences with aging to aging stereotypes, older adults will likely find that their experiences do not align very well with aging stereotypes. Therefore, they feel or identify as younger because aging stereotypes are not true to the lived experience of older adults (Bultena & Powers, 1978). Other researchers support the finding that feeling younger than they actually are can have positive impacts on a person's mental and physical health (Keyes & Westerhof, 2012; Stephan et al., 2015). The

results of this study lend additional support for the positive implications of feeling younger than one's age: protection against the impacts of age-based prejudice and discrimination from family members.

This study also provides evidence that feeling one's own age may serve as a protective factor as well, and this may be due to positive associations or perceptions of one's age, as suggested by research conducted by Levy (2003). In her research, Levy (2003) found that older adults who were primed with positive stereotypes of aging experienced increased performance on memory tasks, increased walking speed (which suggests increased balance), and an increased will to live. This may suggest that if people identify with their age, as some participants in this study did, yet feel good about their age, then this may lessen the negative impact of familial ageism on well-being.

## **Limitations**

There are a few limitations to this study that must be noted. One limitation arises simply from the fact that, to the researchers' knowledge, familial ageism has never been measured before. Therefore, a new scale had to be developed to measure experiences with familial ageism. While this measure was developed based on previous data, the scale has yet to be validated. Since the quality of the scale has not been evaluated, it is at this point unknown whether the data collected using this tool is of high quality. As such, future research wishing to replicate this study using a validated version of this scale would be beneficial.

Another limitation is that the sample used for this study was not very diverse, as the vast majority of participants were white. In addition, most participants were sampled from a university population. Originally, recruitment plans for this study also included obtaining

samples from long-term care facilities and senior centers. However, due to the COVID-19 outbreak, state mandates prohibiting gatherings of more than ten people and the shutdown of long-term care facilities prevented sampling from these groups. Conducting this research with a broader, older, sample would provide additional reliability to claims regarding the conditional and protective nature of aging identity on the outcome variables.

## **Conclusion**

To the knowledge of the researchers, this study was one of the first to investigate the phenomenon of familial ageism, and its impact on the well-being of those who experience it. This study found that experiencing familial ageism does negatively impact an individual by increasing depression and decreasing ego strength and self-esteem. Additionally, aging identity seems to potentially serve as both a buffer in the relationship between familial ageism and depression and as a facilitator between experiences with ageism and ego integrity. However, there are two exceptions to this finding: when people feel much older than their actual age, and in environments where familial ageism is high, aging identity does not appear to serve as a protective factor. With the support for the harmful effects of familial ageism presented in this study future research may focus on investigating other potential protective factors in the relationship between familial ageism and well-being, as well as looking at various methods that may be used to reduce instances familial ageism.

## REFERENCES

- Achenbaum, W. A. (2013). A History of Ageism Since 1969. Retrieved from <https://www.asaging.org/blog/history-ageism-1969>
- Barak, B. (1987). Cognitive age: A new multidimensional approach to measuring age identity. *International Journal of Aging and Human Development*, 25(2) 109-128. <https://doi.org/10.2190/RR3M-VQT0-B9LL-GQDM>
- Bouma, B. J., van den Brink, R. B. A., van der Meulen, J. H. P., Verheul, H. A., Cheriex, E. C., Hamer, H. P. M., Dekker, E., Lie, K. I., & Tijssen, J. G. P. (1999). To operate or not on elderly patients with aortic stenosis: The decision and its consequences. *Heart*, 82, 143-148. <https://doi.org/10.1136/hrt.82.2.143>
- Bultena, G. L., & Powers, E. A. (1978). Denial of aging: Age identification and reference group orientations. *Journal of Gerontology*, 33(5), 748-754. <https://doi.org/10.1093/geronj/33.5.748>
- Cary, L. A., Chasteen, A. L., & Remedios, J. R. (2017) The ambivalent ageism scale: Developing and validating a scale to measure benevolent and hostile ageism. *The Gerontologist*, 57(2), e27-e36. <https://doi.org/10.1093/geront/gnw118>
- Chiesa, R., Stefano, T., Dordoni, P., Henkens, K., Fiabane, E. M., & Setti, I. (2016). Older workers: Stereotypes and occupational self-efficacy. *Journal of Managerial Psychology*, 31(7), 1152-1166. <https://doi.org/10.1108/JMP-11-2015-0390>
- Donnellan, M. B., Ackerman, R. A., & Brecheen, C. (2016). Extending Structural Analyses of the Rosenberg Self-Esteem Scale to Consider Criterion-Related Validity: Can Composite Self-Esteem Scores Be Good Enough? *Journal of Personality Assessment*, 98(2), 169–177. <https://doi.org/10.1080/00223891.2015.1058268>
- Duncan, L. A., & Schaller, M. (2009). Prejudicial attitudes toward older adults may be exaggerated when people feel vulnerable to infectious disease: Evidence and implications. *Analyses of Social Issues and Public Policy*, 9(1), 97-115. <https://doi.org/10.1111/j.1530-2415.2009.01188.x>



- Enright, P. L., McClelland, R. L., Newman, A. B., Gottlieb, D. J., & Lebowitz, M. D. (1999). Underdiagnosis and undertreatment of asthma in the elderly. *Chest*, *116*(3), 603-613. <https://doi.org/10.1378/chest.116.3.603>
- Fiske, S. T. (1998). Stereotyping, prejudice, and discrimination. In D. T. Gilbert (Ed.), *The Handbook of Social Psychology* (pp. 357-411). Boston, MA: McGraw Hill.
- Fried, T. R., Miller, M. A., Stein, M. D., & Wachtel, T. J. (1996). The association between age of hospitalized patients and the delivery of advanced cardiac life support. *Journal of General Internal Medicine*, *11*, 257-261. <https://doi.org/10.1007/BF02598264>
- Gray-Little, B., Williams, V.S.L., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, *23*, 443-451. <https://doi.org/10.1177/0146167297235001>
- Hummert, M. L. (1990). Multiple stereotypes of elderly and young adults: A comparison of structure and evaluations. *Psychology and Aging*, *5*(2), 182-193. <https://doi.org/10.1037/0882-7974.5.2.182>
- Hummert, M. L. (1993). Age and typicality judgements of stereotypes of the elderly: Perceptions of elderly vs. young adults. *International Journal of Aging and Human Development*, *37*(3), 217-226. <https://doi.org/10.2190/L01P-V960-8P17-PL56>
- Hutchins, L. F., Unger, J. M., Crowley, J. J., Coltman, C. A., & Albain, K. S. (1999). Underrepresentation of Patients 65 Years of Age or Older in Cancer-Treatment Trials. *New England Journal Of Medicine*, *341*(27), 2061-2067. <https://doi.org/10.1056/NEJM199912303412706>
- Hynes, D. M. (1994). The quality of breast cancer care in local communities: Implications for health care reform. *Medical Care*, *32*(4), 328-340. <https://doi.org/10.1097/00005650-199404000-00002>
- Keyes, C. L. M., & Westerhof, G. J. (2012). Chronological and subjective age differences in flourishing mental health and major depressive episode. *Aging & Mental Health*, *16*(1), 67-74. <https://doi.org/10.1080/13607863.2011.596811>

- Kite, M. E., Stockdale, G. D., Whitley Jr., B. E., & Johnson, B. T. (2005). Attitudes toward younger adults: An updated meta-analytic review. *Journal of Social Issues*, 61(2), 241-266. <https://doi.org/10.1111/j.1540-4560.2005.00404.x>
- Krumholz, H. M., Murillo, J. E., Chen, J., Vaccarino, V., Radford, M. J., Ellerbeck, E. F., & Wang, Y. (1997). Thrombolytic therapy for eligible elderly patients with acute myocardial infarction. *JAMA: Journal of The American Medical Association*, 277(21), 1683-1688. <https://doi.org/10.1001/jama.1997.03540450039032>
- Levy, B. (1996). Improving memory in old age through implicit self-stereotyping. *Journal of Personality and Social Psychology*, 71(6), 1092-1107. <https://doi.org/10.1037//0022-3514.71.6.1092>
- Levy, B. R., Hausdorff, J. M., Hencke, R., & Wei, J. Y. (2000). Reducing cardiovascular stress with positive self-stereotypes of aging. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 55(4), P205-P213. <https://doi.org/10.1093/geronb/55.4.P205>
- Levy, B., & Banaji, M. R. (2002). Implicit ageism. In T. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 49-75). Cambridge, MA: MIT Press.
- Levy, B. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. *Journal of Gerontology: Psychological Sciences*, 58B(4), P203-P211. <https://doi.org/10.1093/geronb/58.4.P203>
- Markstrom, C. A., Sabino, V. M., Turner, J. B., & Berman, R. C. (1997). The psychosocial inventory of ego strengths: Development and validation of a new Eriksonian measure. *Journal of Youth and Adolescence*, 26(6), 705-732. <https://doi.org/10.1023/A:1022348709532>
- McCann, R., & Giles, H. (2002). Ageism in the workplace: A communication perspective. In T. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 49-75). Cambridge, MA: MIT Press.
- McLaughlin, T. J., Gurwitz, J. H., Willison, D. J., Gao, X., & Soumerai, S. B. (1999). Delayed thrombolytic treatment of older patients with acute myocardial infarction. *Journal of the American Geriatrics Society*, 47(10), 1222-1228. <https://doi.org/10.1111/j.1532-5415.1999.tb05203.x>

- McLaughlin, T. J., Soumerai, S. B., Willison, D. J., Gurwitz, J. H., Borbas, C., Guadagnoli, E., McLaughlin, B., Morris, N., Cheng, S. C., Hauptman, P. J., Antman, E., Casey, L., Asinger, R., & Gobel, F. (1996). Adherence to national guidelines for drug treatment of suspected acute myocardial infarction: Evidence for undertreatment in women and the elderly. *Archives of Internal Medicine*, 156(7), 799-805.  
<https://doi.org/10.1001/archinte.1996.00440070131015>
- North, S. M., & Fiske, S. T. (2015). Modern attitudes toward older adults in the aging world: A cross-cultural meta-analysis. *Psychological Bulletin*, 141(5), 993-1021.  
<https://doi.org/10.1037/a0039469>
- Ory, M., Hoffman, M. K., Hawkins, M., Sanner, B., & Mockenhaupt, R. (2003). Challenging aging stereotypes: Strategies for creating a more active society. *American Journal of Preventive Medicine*, 25(3), 164-171. [https://doi.org/10.1016/s0749-3797\(03\)00181-8](https://doi.org/10.1016/s0749-3797(03)00181-8)
- Packer, D. J., & Chasteen, A. L. (2006). Looking to the future: How possible aged selves influence prejudice toward older adults. *Social Cognition*, 24(3), 218-247.  
<https://doi.org/10.1521/soco.2006.24.3.218>
- Palmore, E. B. (1999). *Ageism: Negative and positive*. New York: Springer.
- Palmore, E., (2001). The ageism survey: First findings. *The Gerontologist*, 41(5), 572-575.  
<https://doi.org/10.1093/geront/41.5.572>
- Perry, E. L., Hanvongse, A., & Casoinic, D. A. (2013). Making a case for the existence of generational stereotypes: A literature review and exploratory study. *Handbook on Aging, Work and Society*, 416-442. <https://doi.org/10.4135/9781446269916.n24>
- Posthuma, R. A., & Campion, M. A. (2009). Age stereotypes in the workplace: Common stereotypes, moderators, and future research directions. *Journal of management*, 35(1), 158-188. DOI: 10.1177/0149206308318617. <https://doi.org/10.1177/0149206308318617>
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385-401.  
<https://doi.org/10.1177/014662167700100306>

- Robinson, S., & Howatson-Jones, L. (2014). Children's view of older people. *Journal of Research in Childhood Education*, 28, 293-312.  
<https://doi.org/10.1080/02568543.2014.912995>
- Schmidt, D. F., & Boland, S. M. (1986). Structure of perceptions of older adults: Evidence for multiple stereotypes. *Psychology and Aging*, 1(3), 255-260.  
<https://doi.org/10.1037//0882-7974.1.3.255>
- Slater C. L. (2003). Generativity versus stagnation: An elaboration of Erikson's adult stage of human development. *Journal of Adult Development*, 10(1), 53-65.  
<https://doi.org/10.1023/A:1020790820868>
- Sneed, J. R., & Whitbourne, S. K. (2005). Models of the aging self. *Journal of Social Issues*, 61(2), 375-388. <https://doi.org/10.1111/j.1540-4560.2005.00411.x>
- Spencer S. J., Steele, C. M., & Quinn, D. M. (1998). Stereotype threat and women's math performance. *Journal of Experimental Social Psychology*, 35, 4-28.  
<https://doi.org/10.1006/jesp.1998.1373>
- Stephan, Y., Sutin, A. R., & Terracciano, A. (2015). Younger subjective age is associated with lower c-reactive protein among older adults. *Brain, Behavior, and Immunity*, 43, 33-36.  
<https://doi.org/10.1016/j.bbi.2014.07.019>
- Walker, R. V., Bisconti, A., & Kinkade, E. E. (in preparation).
- Walker, R. V., Zelin, A. I. (*in press*). The intersection of ageism and sexism in the workplace. In L. A. Hollis-Sawyer & E. Cole (Eds.), *Study in grey and grit: Older women who work*. Washington, DC: American Psychological Association.
- Weiss, D., & Lang, F. R. (2012). "They" are old but "I" feel younger: Age-group dissociation as a self-protective strategy in old age. *Psychology and Aging*, 27(1), 153-163.  
<https://doi.org/10.1037/a0024887>
- Weinberger, M. I., & Whitbourne, S. K. (2010). Depressive symptoms, self-reported physical functioning, and identity in community-dwelling older adults. *Ageing International*, 35(4), 276-285. <https://doi.org/10.1007/s12126-010-9053-4>

Whitbourne, S. K. (1986). *The me I know: A study of adult identity*. New York: Springer-Verlag.

Whitbourne, S. K., Sneed, J. R., & Skultety, K. M. (2002). Identity processes in adulthood: Theoretical and methodological challenges. *Identity: An International Journal of Theory and Research* 2(1), 29-45. [https://doi.org/10.1207/S1532706XID0201\\_03](https://doi.org/10.1207/S1532706XID0201_03)

Whittle, J., Wickenheiser, L., & Venditti, L. N. (1997). Is warfarin underused in the treatment of elderly persons with atrial fibrillation? *Archives of Internal Medicine*, 157, 441-445. <https://doi.org/10.1001/archinte.1997.00440250097011>

Table 1

## Participant Demographics

Variable	Frequency <i>n</i> (%)
Gender	
Male	102 (48.3%)
Female	108 (51.2%)
Transgender	1 (.5%)
Race	
White	176 (83.4%)
Black and/or African American	16 (7.6%)
Native American or Aleutian	3 (1.4%)
Islander/Eskimo	
Asian or Pacific Islander	20 (9.5%)
Hispanic or Latino	11 (5.2%)
Other (Mixed race)	1 (.5%)
Sexual Orientation	
Straight	181 (85.5%)
Bisexual	21 (10.0%)
Gay or Lesbian	5 (2.4%)
Other	3 (1.4%)
Descriptive Age	
Teenager	9 (4.3%)
Young Adult	83 (39.3%)

Table 1 continued

Variable	Frequency <i>n</i> (%)
Middle Aged	102 (48.3%)
Old	17 (8.1%)
Relationship Status	
Single	60 (28.4%)
Married	101 (47.9%)
Separated	2 (.9%)
Divorced	22 (10.4%)
Unmarried Partners	26 (12.3%)
Income	
Less than \$10,000	15 (7.1%)
\$10,000 - \$19,999	25 (11.8%)
\$20,000 - \$29,999	24 (11.4%)
\$30,000 - \$39,999	19 (9.0%)
\$40,000 - \$49,999	24 (11.4%)
\$50,000 - \$59,999	22 (10.4%)
\$60,000 - \$69,999	12 (5.7%)
\$70,000 - \$79,999	14 (6.6%)
\$80,000 - \$89,999	13 (6.2%)
\$90,000 - \$99,999	12 (5.7%)
\$100,000 - \$149,999	18 (8.5%)
More than \$150,000	13 (6.2%)

Table 1 continued

Variable	Frequency <i>n</i> (%)
Education	
Grade School (Grades 1-6)	2 (.9%)
High School (Grades 10-12)	19 (9.0%)
Some College Classes	54 (25.6%)
College Degree	95 (45.0%)
Post College Professional Degree	21 (10.0%)
Vocational Education	2 (.9%)
Graduate, Medical, or Law Degree	18 (8.5%)
Career Status	
Student	36 (17.0%)
Part-Time	34 (17.1%)
Full-Time	162 (76.8%)
Homemaker	16 (7.6%)
Unemployed	12 (5.7%)
Retired	16 (7.6%)
Unable to Work	11 (5.2%)
Health	
Good	142 (67.3%)
Fair	61 (28.9%)
Poor	8 (3.8%)



Table 1 Continued

Variable	Frequency <i>n</i> (%)
Children	
Yes	118 (55.9%)
No	90 (42.7%)

Table 2

Correlations Between Familial Ageism Scores (FAS) and Outcome Variables

Variables	FAS Score	Depression	Ego Strength	Aging Identity
FAS Score	-			
Depression	.62***	-		
Ego Strength	-.44***	-.76***	-	
Aging Identity	-.07	-.23**	.25***	-

Note. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 3

Moderation Model: Conditional Effects of Familial Ageism and Aging Identity on Depression

Predictor	Criterion: Depression			
	<i>b</i>	<i>SE</i>	<i>p</i>	95% CI
Constant	.10	.10	.31	[-.10, .30]
Familial ageism	.50	.05	< .001	[.40, .61]
Age difference	-.03	.01	< .01	[-.05, -.01]
Familial ageism x age difference	.01	.01	.04	[.0004, .02]
Model statistics	$F(3, 194) = 46.41, p < .001, R^2 = .42$			
Model change statistics	$F(1, 194) = , p < .04, \Delta R^2 = .01$			

Table 4

Moderation Model: Conditional Effects of Familial Ageism and Aging Identity on Ego Strength

Predictor	Criterion: Ego strength			
	<i>b</i>	<i>SE</i>	<i>p</i>	95% CI
Constant	3.35	.10	< .001	[3.12, 3.55]
Familial ageism	-.27	.05	< .001	[-.38, -.17]
Age difference	.03	.01	< .001	[.02, .05]
Familial ageism x age difference	-.013	.01	.02	[-.02, -.002]
Model statistics	$F(3, 192) = 22.13, p < .001, R^2 = .26$			
Model change statistics	$F(1,192) = 6.00, p < .02, \Delta R^2 = .02$			

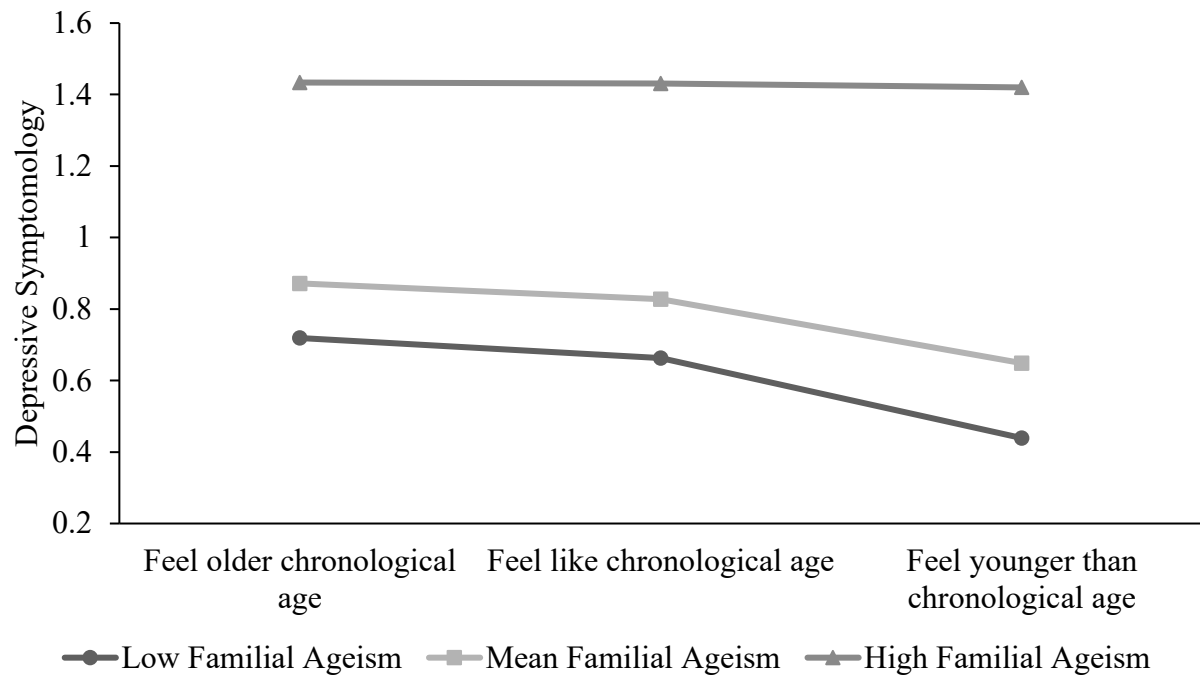


Figure 1. Conditional Effect of Age Identity at Different Levels of Familial Ageism on Depression

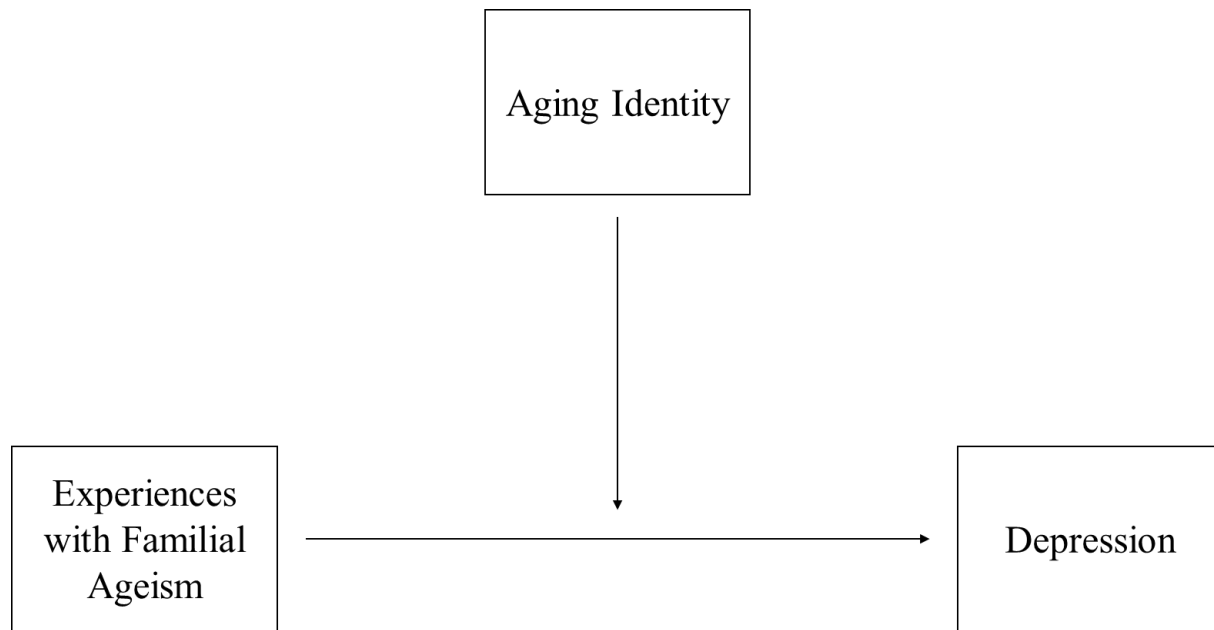


Figure 2. Conceptual Model for Aging Identity Moderating the Relationship Between Familial Ageism and Depression

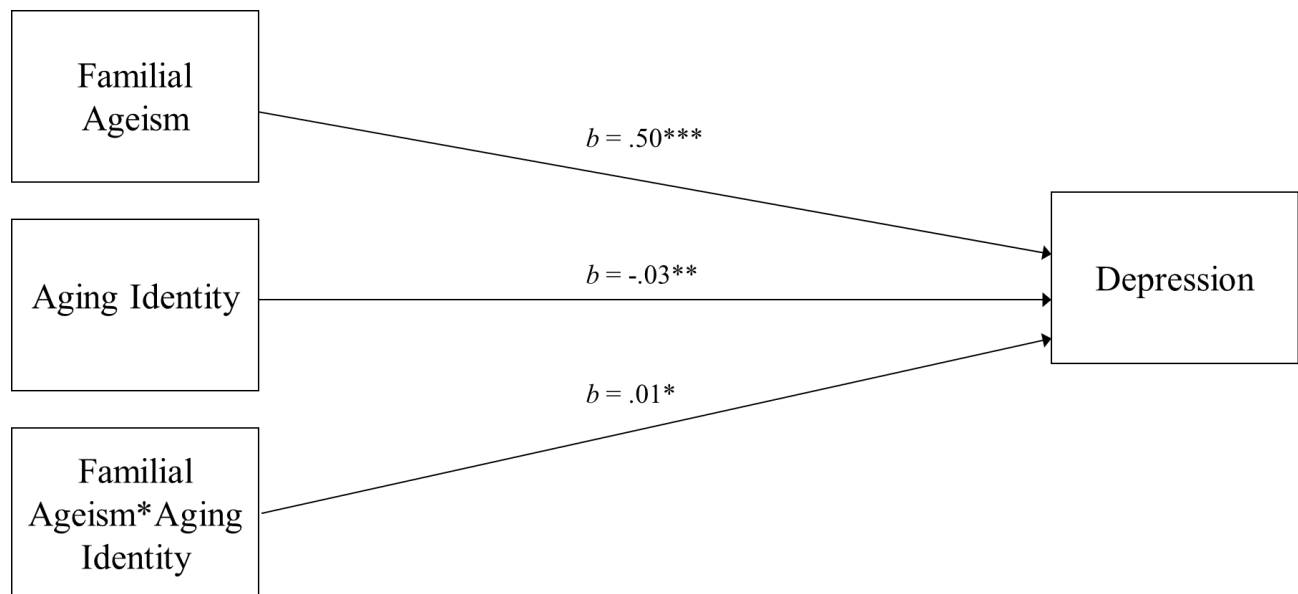


Figure 3. Statistical Model for Familial Ageism, Aging Identity, and Their Interaction on Depression.

Note. Conditional effect of familial ageism on depression =  $.50 + .01(\text{aging identity})$   $*p < .05$ .

$**p < .01$ .  $***p < .001$ .

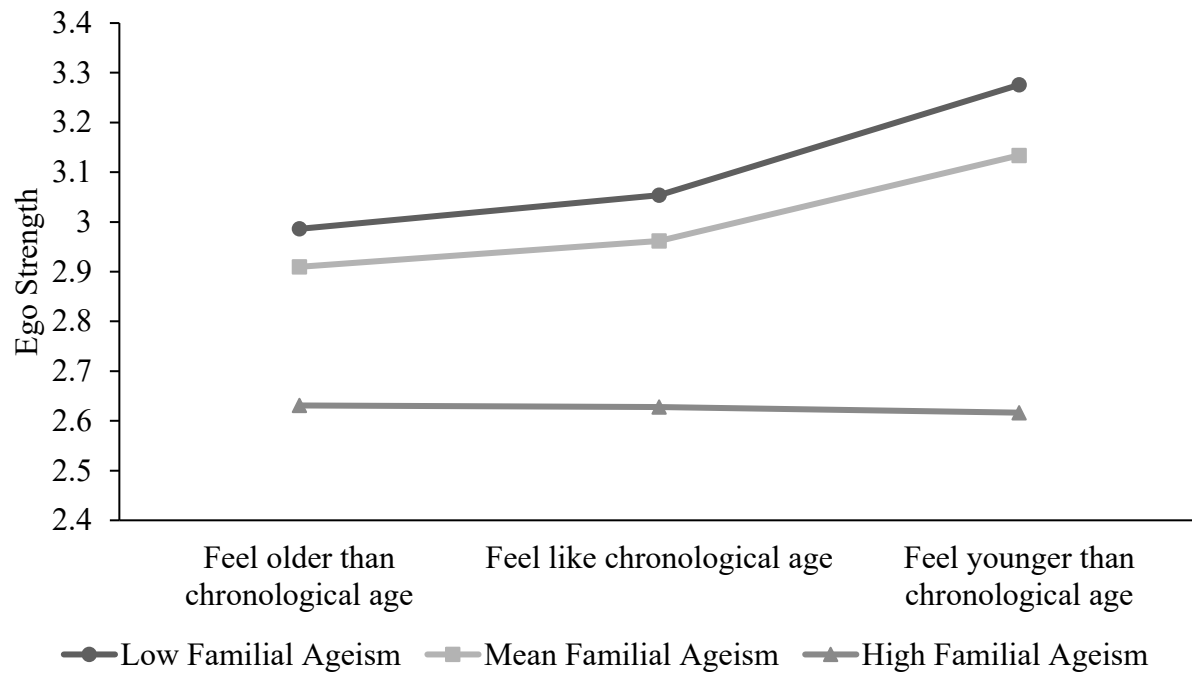


Figure 4. Conditional Effect of Aging Identity at Different Levels of Familial Ageism on Ego Strength



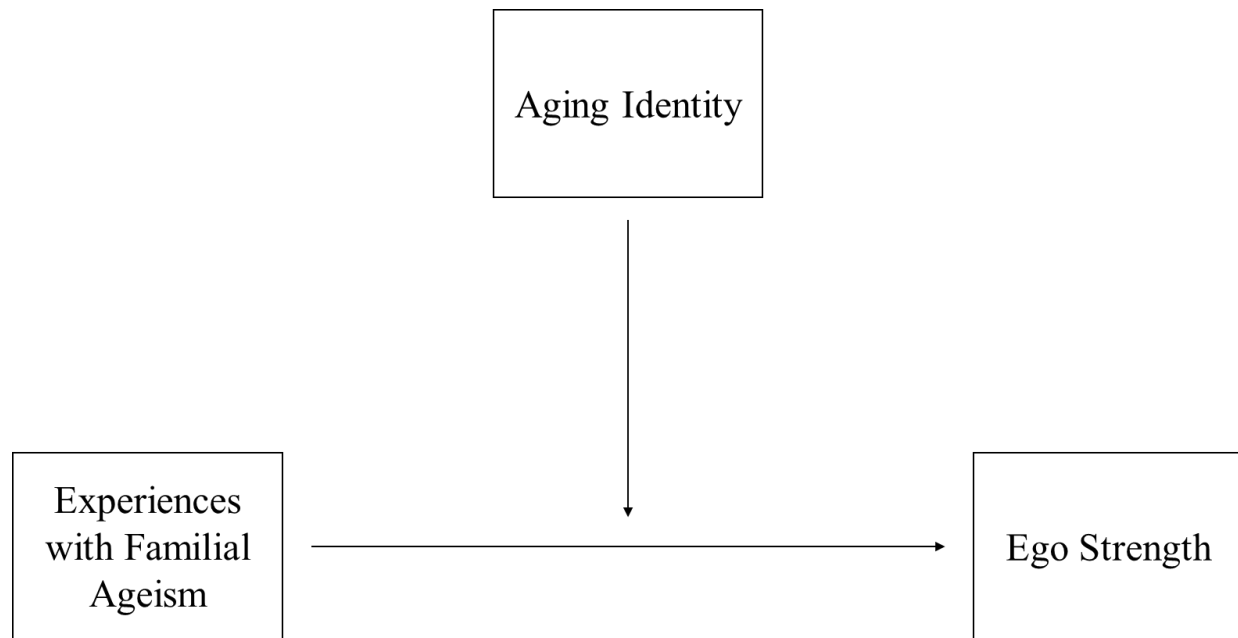


Figure 5. Conceptual Model for Aging Identity Moderating the Relationship Between Familial Ageism and Ego Strength

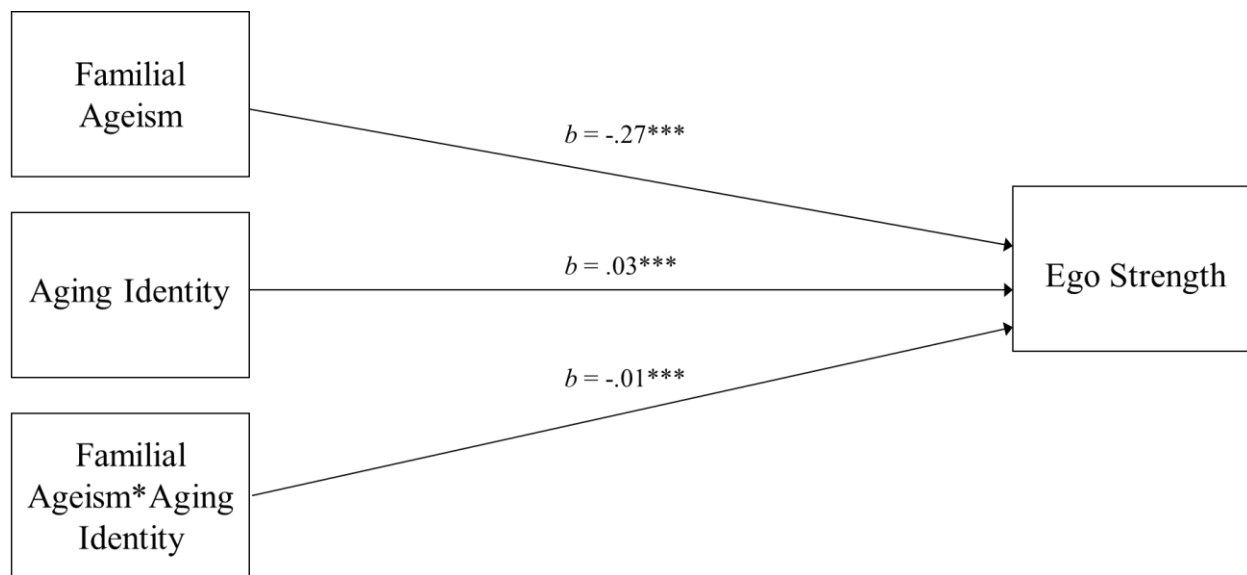


Figure 6. Statistical Model for Familial Ageism, Aging Identity, and Their Interaction on Ego Strength.

Note. Conditional effect of familial ageism on ego strength =  $-.27 + -.01(\text{aging identity})$  \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## APPENDIX: INSTITUTIONAL REVIEW BOARD APPROVAL

Date: 5-1-2020

IRB #: IRB-FY2020-484

Title: Does aging identity moderate the impact of experiences with familial ageism on well-being?

Creation Date: 1-7-2020

End Date:

Status: **Approved**

Principal Investigator: Ruth Walker

Review Board: MSU

Sponsor:

### Study History

Submission Type	Initial	Review Type	Exempt	Decision	Exempt
-----------------	---------	-------------	--------	----------	--------

### Key Study Contacts

Member	Ruth Walker	Role	Principal Investigator	Contact	rwalker@missouristate.edu
Member	Emily Kinkade	Role	Primary Contact	Contact	kinkade036@live.missouristate.edu

## Initial Submission

---

### Investigative Team

Who is the Principal Investigator?

---

- 1 *This individual will be required to certify the protocol for submission and will be responsible for the overall project and **MUST be a faculty or staff** member.*

Name: Ruth Walker  
Organization: Psychology  
Address: 901 S National Ave , Springfield, MO 65897-0027  
Phone: 417-836-6477  
Email: rwalker@missouristate.edu

Who is the Primary Study Contact?

---

- 2 *This person, in addition to the Principal Investigator, will be included on all correspondence related to this project. This person may be the Principal Investigator or someone else (**faculty, staff, or student**).*

Name: Emily Kinkade  
Organization: Psychology  
Address: 901 S National Avenue , Springfield, MO 65897  
Phone:  
Email: kinkade036@live.missouristate.edu

Will there be any Co-Principal Investigators participating in this study?

---

3. *Co-Principal Investigators will also be required to certify the protocol for submission and share overall responsibility with the Principal Investigator for the study. Co-Principal Investigators **MUST** be faculty or staff members.*

Yes

✓ No

Will there be any other individuals participating with the investigation?

---

- 4 *These individuals will be participating as part of the research team, but will not need to certify the protocol submissions, or be included in any correspondence regarding the study. Typically these individuals will be students or individuals from other institutions. Investigators may be faculty, staff, students, or unaffiliated individuals.*

Yes

✓ No

1 What is the full title of the research protocol?

Does aging identity moderate the impact of experiences with familial ageism on well-being?

Abstract/Summary

*Please provide a brief description of the project.*

A large body of research exists documenting the negative impacts that negative stereotypes and negative perceptions of the ageing process has on older adults; researchers have found evidence of ageism's impact on health, mortality, and well-being (Hassell & Perrewé, 1993; Levy, 1996; Levy, 2003; Levy, 2009). It is important to note that the majority of extant research on ageism focuses on age discrimination in the workplace despite the majority of our lives being spent within the context of the family. Therefore examining experiences of ageism sourced from family members merits study. Walker and Kinkade (*in preparation*) found evidence that the experience of ageism within the family context varies from the workplace context. Specifically, participants described how the definitions of age in the family are relative; thus, many experienced ageism for being "old" from children, siblings, and other family members as early as their 20s simply because their age relative to the person making ageist comments was older. Additionally, the experience of ageism was different from the workplace. Participants were more likely to report being the recipient of comments on their aging appearance, knowledge of technology, knowledge of pop culture, and physical ability that were cloaked as either a joke or protective benevolent ageism. Although new evidence supports the idea that the experience of ageism within the family context is qualitatively different, to our knowledge, no research currently exists examining how experiencing ageism from family members impacts well-being, self-esteem, or levels of depression in older adults. Past research has demonstrated that older adults who positively identify with the fact that they are getting older and adapt to the changes that arise with aging are associated with higher levels of self-esteem as compared to individuals who choose instead to maintain a more youthful identity or those who accommodate their identity around negative stereotypes of aging (Whitbourne, Sneed, & Skutumpah, 2002; Weinberger & Whitbourne, 2010). Thus, we hypothesize that age identification will serve as a moderator for the relationship between familial ageism and well-being. Those individuals who more readily identify as being older will see a lessened impact on well-being as compared to those who do not. Participants 18 years and older will be recruited from Amazon Mechanical Turk as well as community sites throughout the Springfield area (e.g., community centers, senior centers, independent living facilities). Participants will be asked to complete a demographic questionnaire, the newly developed Experiences with Familial Ageism Scale, Self-esteem, the Center for Epidemiological Studies Depression Scale, Psychosocial Inventory of Ego Strengths, and additional questions on aging identity self-perception. Participants recruited from Amazon Mechanical Turk will be compensated \$3 each for their time. Participants recruited from the community will be entered into a raffle for one of four \$25 Amazon gift

cards. A conditional moderation analysis will be conducted using Hayes PROCESS (model 3) to determine if aging identity and self-esteem moderates the relationship between experiences with familial ageism and well-being.

Are you requesting Single IRB Review

3

Single IRB Review is applicable to a study that is being reviewed by another Institution's IRB, in which you wish to rely on the external IRB for review, approval, and oversight.

Yes

☒ No

Does the study require review and oversight of the IRB?

4

*Regardless of how these questions are answered, the determination of IRB review and oversight is made by the IRB and this study will still need to be submitted for preliminary review.*

Is this study a systematic investigation, following a predetermined plan, for looking at a particular issue, testing a hypothesis or research question, or developing a new theory that includes any of the following:

4A

- Collection or analysis of quantitative or qualitative data
- Collection of data using surveys, testing or evaluation procedures, interviews, or focus groups
- Collection of data using experimental designs such as clinical trials
- Observation of individual or group behavior

☒ Yes

No

Will this study contribute to generalizable knowledge, in that the purpose or intent of the project is to test or to develop scientific theories or hypotheses, or to draw conclusions that are intended to be applicable and/or shared beyond the populations or situations being studied? This may include one or more of the following:

- 4B
- Presentation of the data at meetings, conferences, seminars, poster presentations, etc,
  - The knowledge contributes to an already established body of knowledge
  - Other investigators, scholars, and practitioners may benefit from this knowledge
  - Publications including journals, papers, dissertations, and theses

---

☒ Yes

No

4C

Will this study require obtaining information or biospecimens, through intervention or interaction with an individual that will be used, studied, or analyzed by the investigative team?

---

☒ Yes

No

Will you be requesting an Exempt Review for this study?

---

5

*In order to qualify for review via exempt procedures, the research must not be greater than minimal risk and must fall into at least one of the exempt categories defined by federal regulations.*

☒ Yes

No



6 Is this study receiving internal or external funding?

---

☒ Yes

No

Does this study contain protected health information (PHI)?

---

7

*PHI is any information in a medical record or designated record set that can be used to identify an individual and that was created, used, or disclosed in the course of providing a health care service, such as a diagnosis or treatment.*

Yes

☒ No

8 Has all IRB Human Research training been taken through CITI under Missouri State University?

---

☒ Yes

No

1 What exemption category does your study fall under?

---

**Category 1** Research in established or commonly accepted educational settings, that specifically involves normal educational practices.

✓ **Category 2** Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior.

2A Does the research include any interventions?

---

Yes

✓ No

2B Will the research include children or prisoners as participants?

---

Yes

✓ No

2C Will recorded information readily identify the subject?

---

Yes

✓ No

2D Will disclosure of participant responses outside of the research place the subject at risk (criminal, civil liability, financial, employability, educational advancement, or reputation)?

---

Yes

✓ No

**Category 3** Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information

collection.

**Category 4** Secondary research for which consent is not required (data or biospecimen).

**Category 5** Research and demonstration projects that are conducted or supported by a Federal Agency/Department AND that are designed to study, evaluate, improve, or otherwise examine public benefit or service programs.

**Category 6** Taste and food quality evaluation and consumer acceptance studies.

Discuss how this study fits the chosen exemption category.

---

- 2 Participants were be asked to voluntarily complete demographic questions and surveys. Although we do not anticipate any negative psychological risks from participating in the study, participants may skip any questions that make them feel uncomfortable, and they may also end the survey at any time. Because our survey will be administered online via Qualtrics, and participants will be directed to a separate Qualtrics form to enter their information for the drawing, we will have no way to link an individual subject to the answers they provided.

3 Attach proposed tests, survey, questionnaire, or interview questions if applicable.

---

[Participant Questionnaires.docx](#)

- 4 Attach any informed consent, assent, or recruitment documents associated with the study,
- 

[Participant Questionnaires.docx](#)

## Funding

Is this study externally funded?

1

*For example, this research is funded by a source outside Missouri State; a federal agency, non-profit organization, etc.*

Yes

☒ No

Potentially (this study is being submitted for funding, but has not yet been awarded)

Is this study internally funded?

2

*For example, this research is funded by a source inside Missouri State; departmental funds, the Graduate College, etc.*

☒ Yes

Please list the internal funding source

The Graduate College

No