

EXAMINING ATTITUDES TOWARDS AGEING

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Abstract

The purpose of this study was to identify predictors of ageism. Ageism occurs when demeaning attitudes are directed toward individuals in a certain age group. Several theories have been postulated as to why ageism towards older adults occurs, such as contact theory (i.e., the quantity and quality of contact with older adults), terror management theory (i.e., anxiety and fear of mortality), and modernization theory (i.e., a belief that the skills of older adults are obsolete). Research in this area has selectively tested different theories of ageism; however, these studies have failed to examine multiple theories within one model. The current study examined contact theory, terror management theory, and modernization theory with respect to ageism. We examined survey data from 291 undergraduate students at a small university in Atlantic Canada. The survey was conducted online. Demographic characteristics, contact with grandparents and non-related older adults, and quality of interactions were measured using self-generated questionnaires. In addition, measures of personality, gratitude, ageing anxiety, and fear of death were administered. Also, older adults' knowledge, burden/contributions to family/society, and attitudes toward the elderly were measured. A hierarchical multiple linear regression analysis was conducted predicting ageist attitudes. The overall model was statistically significant and accounted for 63% of the variance. Both age and gender were found to be significant predictors; younger adults and men had higher scores on ageism. As well, participants who reported lower quality of contact with grandparents during childhood, and lower scores on their current quality of contact with older adults were more likely to endorse ageist attitudes. Of the five personality factors, lower scores on Agreeableness were a significant predictor. Finally, anxiety towards ageing (measuring terror management theory) and perceiving older adults as a burden (measuring modernization theory) predicted ageism. According to these findings, all ageism theories had an impact on ageist attitudes, but modernization theory contributed the most unique variance to the model. Overall, further research should continue to investigate the multidimensional construct of ageism.

Keywords: *Ageism, terror management, modernization theory, contact theory, personality.*

1. Introduction

Due to the rapidly ageing population in Canada, people aged 65 and older are projected to comprise nearly a quarter of the Canadian population by 2030 (Government of Canada, 2014). Older adults in Canada often report having experienced ageism (Palmore, 2004). Butler (1969) defined ageism as a prejudicial bias by one age group towards another age group. Several theories have been postulated as to why ageism occurs, such as contact theory (i.e., the quantity/quality of contact with older adults), terror management theory (i.e., anxiety and fear of mortality), and modernization theory (i.e., skills of older adults are seen as obsolete). According to the literature, contact theory suggests that contact with older adults is negatively associated with ageist attitudes and emphasizes the importance of intergenerational contact (Boswell, 2012; Chonody et al., 2014). Terror management theory suggests that ageist attitudes arise when individuals have greater anxiety towards ageing (Allan et al., 2014; Boswell, 2012) and fear of death (Chonody et al., 2014; Galton et al., 2020). Modernization theory suggests that individuals who view older adults as a burden are more likely to engage in ageist attitudes compared to individuals who do not (Huang, 2013; Yoon et al., 2017).

Other research on ageist attitudes has focused on demographic, personality, and individual characteristics. For example, gender differences are noted in ageism research; cisgender men score higher on ageist attitudes than cisgender women (Boswell, 2012; Chonody et al., 2014; Galton et al., 2020). In addition, researchers have shown that ageist attitudes are most negative and prevalent among younger adults, including college and undergraduate students (Gellis et al., 2003; Kimuna et al., 2005). In terms of personality, some researchers have found agreeableness and openness are significant predictors of less

ageist attitudes (Allan et al., 2014; Galton et al., 2020), whereas other researchers have found that extraversion (Galton et al., 2020) and conscientiousness (Allan et al., 2014) are significant predictors of less ageist attitudes. In addition, significant negative correlations have been found between dispositional gratitude and ageist attitudes, and between gratitude and ageing anxiety (Allan et al., 2014). Given the prevalence of ageism and the rapidly ageing population in Canada, it is important to identify predictors of age-related attitudes so that it may be possible to reduce ageism through intervention and education.

The current study aimed to examine ageist attitudes among undergraduate students towards older adults. Previous research in this area has selectively tested theories of ageism among undergraduate and college students (i.e., contact theory, terror management theory, and modernization theory). However, these studies have failed to examine the multiple different theories of ageism in one model. The current study investigated three proposed theories of ageism, along with the influence of personality factors and gratitude, to facilitate a comprehensive understanding of the predictors of ageism towards older adults among undergraduate university students.

2. Method

2.1. Participants

A convenience sample from undergraduate psychology classes at a Canadian east coast university was recruited via in-class announcements. A total of 291 participants completed the online survey, which was administered using Qualtrics, an online survey platform. The sample consisted of 214 women (73.5%), 68 men (23.4%). The remaining 3.1% of participants identified as non-binary, transgender female, other, or chose not to disclose this information. Ages ranged from 18 to 48.58 years ($M = 21.90$; $SD = 6.09$). Within this sample, most participants reported having some university completed (51.5%). The majority of the sample reported being born in Canada (88.3%), whereas 11.7% of participants reported being born in another country. In addition, 70.8% of participants reported being born in a city, and the remaining participants reported being born in the countryside.

2.2. Measures

Demographic Questionnaire. Demographic variables (such as age, gender, religiosity) were measured using a self-developed questionnaire.

Contact. Frequency of contact with grandparents and non-related older adults (past and present), and quality of interactions were measured using self-generated questionnaires to assess contact theory.

Big-Five Inventory-2 (BFI-2; Soto & John, 2017). Personality factors were measured using the BFI-2. The BFI-2 includes 60 items in total and uses a 5-point Likert scale ranging from 1 (*disagree strongly*) to 5 (*strongly agree*). The BFI-2 demonstrated good reliability for the five personality factors, including Extraversion ($\alpha = .87$), Agreeableness ($\alpha = .75$), Open Mindedness ($\alpha = .81$), Conscientiousness ($\alpha = .85$) and Negative Emotionality ($\alpha = .89$).

Gratitude Questionnaire-6 (GQ-6; McCullough et al, 2002). Gratitude was measured using the GQ-6. This measure contains 6 items that are scored using a 7-point Likert scale ranging from 1 (*disagree strongly*) to 7 (*strongly agree*). The GQ-6 demonstrated good reliability ($\alpha = .80$).

Terror Management. The Collett-Lester Fear of Death Scale Version 3.0 (Lester & Abdel-Khalek, 2003) and the Anxiety About Aging Scale (AAS; Lasher & Faulkender, 1993) were used to measure terror management theory. The Collett-Lester Fear of Death Scale Version 3.0 contains 28 items and was modified to be scored using a 5-point Likert scale ranging from 1 (*Not at all*) to 5 (*Very*). This scale demonstrated excellent reliability overall ($\alpha = .95$) and for each of the 4 subscales including: Your Own Death ($\alpha = .91$), Your Own Dying ($\alpha = .89$), The Death of Others ($\alpha = .86$), and The Dying of Others ($\alpha = .89$).

In turn, the AAS contains 20 items which are scored using a 5-point Likert scale ranging from 1 (*disagree strongly*) to 5 (*agree strongly*) and contains 4 factors: Fear of Old People, Psychological Concerns, Physical Appearance and Fear of Losses. Several items (items 1, 3, 4, 7, 9, 10, 11, 12, 13, 15, 16, 18, 19, and 20) on the AAS were reverse coded to indicate that higher scores meant more anxiety. This coding was a modification from the AAS scale (Lasher & Faulkender, 1993) because higher scores indicated lower anxiety on the original measure. Also, we reverse coded item 20 because it appeared to us to be necessary for the direction of the scale and it improved the total reliability of the scale from .78 to .83 and improved the reliability of factor Physical Appearance from .31 to .59. Each of the three remaining factors demonstrated acceptable reliability including: Fear of Old People ($\alpha = .85$), Psychological Concerns ($\alpha = .77$), and Fear of Losses ($\alpha = .75$).

Modernization Theory. The Survey of Knowledge and Attitudes on Elderly Issues (NSO, 2011 as cited in Yoon et al., 2017) was used to measure modernization theory. Items on this measure were gathered in accordance with Yoon and colleagues' (2017) research. This measure consists of 18 items,

including 9 positively phrased statements and 9 negatively phrased statements about older adults. Positively phrased items were reverse coded to indicate that higher scores mean more modernization (i.e., the belief that the skills of older adults are outdated or obsolete). Item 5 was re-written from “Older people belong in temples” to “Older people belong in institutions” to accommodate for cultural relevance. The overall scale demonstrated good reliability ($\alpha = .80$).

The Fraboni Scale of Ageism (FSA; Fraboni et al., 1990) was used to measure ageist attitudes. The FSA contains 29 items divided into 3 factors and is scored using a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The FSA demonstrated excellent total reliability ($\alpha = .92$).

2.3. Procedure

Students were directed to the online survey platform if they wished to participate in the study. Before completing the survey, participants were given detailed information about the study (e.g., purpose and procedure), their rights (e.g., voluntary participation and confidentiality), their incentive (e.g., receive a half bonus mark in an eligible psychology class of their choosing), and were then asked to provide informed consent. Following informed consent, participants completed the demographic and contact measures, followed by the remaining measures in random order. The survey took about 20 minutes to complete and was anonymous.

3. Results

A hierarchical multiple linear regression analysis was conducted predicting ageist attitudes. On the first step age and gender (men and women only as there were too few members in other gender groups) were added to control for their effects. On the second step religiosity, quantity and quality of interactions with grandparents and with older adults in both the present and the past were added. On the third step, personality factors including Extraversion, Agreeableness, Open Mindedness, Conscientiousness, and Negative Emotionality were added. On the fourth step, gratitude, fear of death, ageing anxiety, and modernization scores were added. Tolerance and variance inflation factors were within acceptable limits. The overall model was statistically significant ($F_{(20,210)} = 17.94, p \leq .001$) and accounted for 63% of the variance.

The first step was statistically significant ($R^2 = .12; F_{(2, 228)} = 15.77, p \leq .001$) and accounted for 12% of the variance. Both age and gender were significant predictors of ageism. Older adults were found to have lower FSA scores compared to younger adults, indicating lower ageist attitudes ($\beta = -.20, sr^2 = 0.04$). In addition, men had higher FSA scores compared to women, indicating higher ageist attitudes ($\beta = .28, sr^2 = 0.08$).

The second step was statistically significant ($\Delta R^2 = .17, F_{change(9, 219)} = 5.69, p \leq .001$). The significant predictors at this step were quality of contact with grandparents during childhood ($\beta = -.25, sr^2 = 0.03$) and current quality of contact with older adults ($\beta = -.18, sr^2 = 0.02$). Therefore, participants who reported lower quality of contact with grandparents during childhood and participants who reported lower current quality of contact with older adults were more likely to score higher on ageist attitudes.

On the third step, personality factors were added and made a statistically significant contribution to the model ($\Delta R^2 = .10, F_{change(5, 214)} = 6.81, p \leq .001$). The significant predictor at this step was the personality factor Agreeableness ($\beta = -.280, sr^2 = 0.05$). Participants who scored lower on Agreeableness scored higher on ageist attitudes.

The final step of the model was statistically significant ($\Delta R^2 = .25, F_{change(4, 210)} = 34.87, p \leq .001$). Significant predictors at this step were anxiety about ageing ($\beta = .29, sr^2 = 0.04$) and modernization ($\beta = .48, sr^2 = 0.14$). Therefore, participants who scored higher on anxiety about ageing and participants who scored higher on modernization scored higher on ageist attitudes.

The adjusted R^2 of .596 suggests that approximately 60% of the variance in ageism is attributed to being younger, cisgender male, having lower quality of contact with grandparents during childhood, having lower current quality of contact with older adults, lower Agreeableness, higher anxiety about ageing, and higher degree of modernization.

4. Discussion

The current study investigated multiple predictors of ageism. The influence of demographic characteristics, personality factors, and gratitude were explored in relation to ageist attitudes. In addition, the current study examined multiple theories of ageism (i.e., contact theory, terror management theory, and modernization theory) in one model. In our study, age and gender were found to be important predictors of ageism. In addition, lower scores on agreeableness predicted higher scores on ageism. As

well, all ageism theories had an impact on ageist attitudes, but modernization theory (the belief that the skills of older adults are obsolete) contributed the most unique variance to the model.

Researchers have found that demographic characteristics are significantly associated with ageist attitudes. For instance, individuals who are younger in age (Gellis et al., 2003; Kimuna et al., 2005) and who identify as cisgender men (Boswell, 2012; Chonody et al., 2014; Galton et al., 2020) are more likely to display ageist attitudes. In accordance with the literature, the current study found a significant negative correlation between age and ageist attitudes, and cisgender men scored higher on ageist attitudes compared to cisgender women. These results suggest that interventions targeting younger adults would be important to minimize ageist attitudes. In addition, interventions targeting ageist attitudes should consider the role of gender differences when addressing ageism.

Researchers have also found that personality factors and individual characteristics have been associated with ageist attitudes (Allan et al., 2014; Galton et al., 2014). The current study found that lower scores on agreeableness were a significant predictor of ageist attitudes, which is in accordance with the literature. In addition, previous researchers have found that lower scores on gratitude are a significant predictor of ageist attitudes (Allan et al., 2014). On the contrary, the results of the current study did not find significant correlations between gratitude and ageist attitudes. Future studies should continue to investigate the influence of interpersonal characteristics in relation to ageist attitudes as this may be an important area for intervention.

According to contact theory, intergenerational contact is negatively associated with ageist attitudes (Boswell, 2012; Chonody et al., 2014). The results of the current study support contact theory; however, our results emphasize the importance of the quality of intergenerational interactions as opposed to the frequency of contact. Some researchers have found that perceived quality of intergenerational contact, instead of frequency of intergenerational contact, is a stronger predictor of ageist attitudes (Drury et al., 2016). Although frequency of contact is highlighted as an important component of contact theory, the current study found no significant correlations between ageist attitudes and frequency of interactions with grandparents or older adults in childhood or currently in adulthood. What appears to be an important factor is the quality of interactions one has with grandparents and older adults. According to our results, lower quality of interactions with grandparents during childhood and with older adults during adulthood were significant predictors of ageist attitudes. These results highlight that having meaningful intergenerational interactions could be important factors to minimize ageist attitudes.

Terror management theory suggests that ageing anxiety (Allan et al., 2014; Boswell, 2012) and fear of death (Chonody et al., 2014; Galton et al., 2020) are positively associated with ageist attitudes. The results of the current study partially support terror management theory. Although no significant correlations were found between fear of death and ageist attitudes, ageing anxiety was found to be a significant predictor of ageist attitudes. These findings suggest that individuals who are more anxious towards the ageing process are more likely to display ageist attitudes. These findings are in accordance with current research on terror management theory and ageing anxiety; individuals tend to distance themselves from reminders of mortality that provoke anxiety, such as older adults (Allan et al., 2014). These findings suggest that strategies to minimize ageing anxiety would be important interventions to minimize ageist attitudes.

Modernization theory (i.e., perceiving older adults as outdated, irrelevant, and as a burden) contributed the most unique variance to ageist attitudes in the present study. However, current research surrounding modernization theory and ageist attitudes is relatively understudied using empirical approaches and appears to be complex. For instance, Yoon and colleagues (2017) found that living in a modernized area was associated with both positive and negative perceptions towards the elderly. In turn, Yoon and colleagues' postulate that living in a capitalistic environment may cause adults to become more opinionated towards the elderly in both directions. With the ageing population in Canada and the shift towards modern society, modernization theory should be further investigated in relation to ageist attitudes.

Overall, this research adds to the growing body of literature that accounts for why ageist attitudes may exist and suggests that ageism is a multidimensional construct that should be further investigated. Results of the current study may be useful for designing undergraduate curricula to better educate students and future employees to combat ageism. For instance, ageing courses may introduce intergenerational contact, such as through volunteer work or field placements for course credit; integrating extended contact theory into educational courses would be recommended (Lytle & Levy, 2019; Wright et al., 1997). Extended contact theory states that knowing an in-group member has a close relationship with an out-group member could lead to more positive intergroup attitudes without necessitating in-person contact with out-group members. Therefore, educational programs integrating extended contact theory could potentially serve to minimize ageist attitudes (Drury et al., 2016). In addition, intervention strategies surrounding ageing anxiety would also be beneficial to minimize ageist attitudes. Finally, future research should continue to investigate and test the effects of modernization theory, as well as contact theory and terror management theory, on ageist attitudes.

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