Association of Ageism and Empathy in Young Adults

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Abstract

The purpose of this study was to examine the association between empathy and ageism among undergraduate students. A cross-sectional survey of undergraduate students was conducted at a midsize university in the Southeastern region of the United States. The sample consisted of 253 non-randomly selected students (mean age 20.75 years; 38.2% males; 62.4% White, 27.2% Black, 9.7% Other). Fifteen percent of students had taken a course on ageing. Approximately half of the sample (48.1%) were Freshmen, 16.4% Sophomore, 13.4% Junior and 21.5% Senior. The Fraboni Scale of Ageism and the Toronto Empathy questionnaire were used to measure ageism and empathy. Chi-square tests, t-tests, and multiple linear regression were used for analyses. Our findings showed that males had higher levels of ageism (difference = 0.23, p<0.001) and lower levels of empathy (mean difference = - 4.85, p < 0.001) compared to females. After controlling for the effects of demographic variables, there were significant associations between empathy and the total ageism scores (β = -0.028, p < 0.001). Additionally, there were significant associations between ageism and the three subscales of Fraboni Scale of Ageism: Antilocution (β = -0.027, p < 0.001), Discrimination (β = -0.031, p < 0.001), and Avoidance (β = -0.028, p < 0.001). There were no significant associations between ageism and race, age, and taking a course on ageing. In young adults, gender and low levels of empathy were strong predictors of ageism and corresponding negative attitudes towards older adults. Further research should examine if there are other shared characteristics in the pathway between empathy and ageism in young adults.

Introduction

Stereotyping or discrimination of someone due to age is known as ageism. The extreme mistreatment of someone due to their age culminates in many different ways. This can follow the same feelings and outcomes as that of sexism, racism, or any type of discrimination. “Age-ism might parallel racism as the great issue” [1] in the coming decades. Ageism can affect people well into the later years of life and how those years are lived [2]. It has been established that we are having a rise in older adults, also a rise in the age of average death, which leads to an increase in older adults that will be needing care for longer periods. The quality of life for older adults has become an increasing concern for those that love and care for them and healthcare providers. People are staying fit and active, working, and even getting an education at an older age. 60% of those over the age of 65 years old have experienced ageism in the workplace [3]. In a study using the Social Closure Theory, it was observed that older students were exposed to ageism regularly. Also, neglect was shown in terms of their learning interests with most opportunities aimed at the younger student [4].

In 2020, the American Psychological Association discussed ageism and how it affects a person’s physical and mental health. In a survey by Duke University, 80% of participants had experienced ageism in some way or form [5]. The effects of ageism can follow a person into death and how they view their death. In an article by Gambiel [6], the correlation between ageism and elder suicide acceptance was mentioned. The results showed those that participated in ageism were more likely to understand and be accepting of the act of suicide (2016). The epidemic of ageism is ever-increasing. Empathy is attempting to feel what someone else is feeling on their level. Empathy is a critical skill in navigating daily life. Ageism is influenced because many people believe that empathy is effortful. Empathy promotes cooperation amongst different demographics. Studies have shown empathy toward the older population can combat ageism [7].

Literature Review

Ageist attitudes are more commonly seen among young and middle-aged adults. Bodner, Berman, and Cohen-Fridel [8] studied ageist attitudes from a broad group of participants between the ages of 18 to 98 years old. In this study, participants were separated into three groups based on their age: young adulthood, middle-aged, and old age. It was found that middle-aged adults are more ageist compared to younger and older adults. However, the younger groups tend to be more avoidant towards older adults compared to other groups. Yilmaz, Kisa, and Zeyneloglu [9] surveyed undergraduate students at a Turkish University on their views of ageist statements and ageist practices towards older adults. The undergraduate students did view ageist statements as a form of discrimination. Students in this study mentioned not spending time with older adults because it is boring, teasing older adults for wearing colorful clothes, and ignoring their life experiences. However, the majority of the students still practice these discriminatory behaviors in their daily lives. Yilmaz and his colleagues found that these behaviors were highly contradictory [9].
The capabilities displayed by an older adult can contribute to younger adult views on ageism. Bergman and Bodner [10] wanted to see how an undergraduate student's ageist attitudes were influenced by individual physical capabilities and their compassion towards them. The study showed that increasing an individual's ageist attitude puts more distance between the older adult and themselves. Furthermore, people with higher ageist attitudes show less concern toward older people and have less belief in their skills to help older adults. Bergman and Bodner [10] inferred that young adults' ageist views hinder them from experiencing positive emotions towards an older adult, who may show signs of incapacitated behaviors and need assistance.

There are some factors related to the development of ageist views by young adults. For instance, Boswell [11] studied how potential factors affect undergraduate students' ageism. The undergraduate students were training to work in the allied health and mental health fields. The study investigated the impact of aging, anxiety, contact with older adults, and compassion toward older adults on ageism. It was found that when an individual has higher knowledge about aging, a higher level of compassion, and low anxiety about aging, ageist attitudes are reduced. Bodner, Berman, and Cohen-Fridel [8] found that men were significantly more ageist than women. It was also found that females have lower ageism attitudes and views. These studies have shown that gender can be a determining factor in a person's ageism attitudes.

Furthermore, it was found that college students with increased interactions with older adults showed less ageist attitudes. Also, the experience of living with an older adult can lower ageist attitudes. The researchers suggested promoting intergenerational living to reduce ageist attitudes and strengthen the relationship between the two age groups. A meta-analysis was performed to determine what types of interventions help reduce ageism among youth and adults. Three types of interventions were education, intergenerational contact, and combined education and intergenerational contact. All three types of interventions had a significant effect on ageist attitudes, knowledge, and comfort. When the interventions include intergenerational contact and educational factors, they substantially have an impact on negative attitudes towards aging [12].

Methods

Design and procedures

We conducted a cross-sectional survey of undergraduate students at a midsize Southern University ranging in age from 18 - 24 years of age. Data was collected with paper-and-pencil surveys administered by one of the researchers who were available to answer any questions from the participants. The University's Institutional Review Board approved the research activities. Participants signed an informed consent form. Participants did not receive incentives for their participation.

Measures

The survey consisted of: 1) demographic information; 2) a scale measuring empathy; and 3) a scale measuring ageism. Demographic characteristics included age, gender, race, classification in college (freshmen, junior, sophomore, senior) and taking a course on aging. Toronto Empathy Questionnaire (16 items) [13] was used to measure empathy. The Toronto Empathy Questionnaire (TEQ) is a brief 16 item instrument and has demonstrated high test-retest reliability, high internal consistency, and strong convergent validity for the assessment of empathy. Examples of questions were: “It upsets me to see someone being treated disrespectfully,” “I can tell when others are sad even when they do not say anything.” Response categories were measured using a Likert scale, ranging from “Never” to “Always”. The responses were coded: Never = 0; Rarely = 1; Sometimes = 2; Often = 3; Always = 4. Negatively worded items were reverse coded. The total scale score for the TEQ was calculated as a sum of all items with a possible range from 0 to 64. Higher scores indicate higher levels of empathy. Further, the internal consistency of the scale scores were high (Cronbach’s alpha = 0.81).

Fraboni Scale of Ageism (29 items) [14] was used to measure attitudes towards aging and the aged. The Fraboni Scale of Ageism (FSA) is a 29-item instrument with three subscales: Antilocution, Avoidance and Discrimination. According to Fraboni and colleagues [14], Antilocution represents antagonism and antipathy against older adults. Examples of Antilocution questions are: “Many old people are stingy and hoard their possessions,” and “Old people complains more than other people do”. Avoidance construct represents withdrawal from social contact with older adults. Examples of Avoidance questions are: “I don’t like it when old people try to make conversation with me,” and “Old people should find friends their own age”. Discrimination captures discriminatory attitudes related to the political rights, segregation and activities of older adults. Examples of Discrimination questions are: “Old people deserve the same rights and freedoms as do other members of our society,” and “It is best that old people live where they won’t bother anyone.” Response categories are measured with a Likert scale, ranging from “Strongly Disagree” to “Strongly Agree”. The responses were coded: Strongly Disagree = 1; Disagree = 2; Neutral = 3; Agree = 4; Strongly Agree = 5. Negatively worded items were reverse coded. The total scale score was calculated as the mean of all items. Additionally, scores were calculated as the mean of items for each of the subscales. Higher scores indicate higher levels of ageism. The internal consistency of the scale scores in this study measured by Cronbach’s alpha was 0.77 for Antilocution, 0.67 for Avoidance and 0.69 for Discrimination. The internal consistency for the total scale was 0.86.

Analyses

Frequency analyses and descriptive statistics (mean, median, standard error and range) were used to assess the distribution of the scale scores. Internal consistency of scale scores (reliability analysis) was assessed by using Cronbach’s alpha. Chi-square and t-tests were used to examine univariate associations. We used multiple linear regression to determine if empathy is a significant predictor of ageism, after controlling for the effects of possible confounders (age, gender, race, taking a course on aging, classification in college). Stepwise selection (entry p = 0.05 and removal p = 0.1) was used to eliminate the non-significant variables. There was little missing data on various measures. We did not impute missing data.

Results

Descriptive results

The study sample consisted of 372 non-randomly selected students (mean age 20.75 years, SD=4.1; 38.2% males, 61.8% females; 62.4% White, 27.2% Black, 5.1% Latino, 3.0% Asian and 1.6% other). Fifteen percent of students had taken a course on ageing. Approximately half of the sample (48.1%) were Freshmen, 16.4% Sophomore, 13.4% Junior and 21.5% Senior. The distribution of the ageism and empathy scores are summarized in table 1. The empathy scores...
ranged from 24 to 63, with the average of 46.69 and SD = 7.4. The total ageism scores ranged from 1.17 to 3.58, with the average of 2.27 and SD = 0.43.

### Univariate associations

There were significant correlations between empathy and ageism scores. Higher empathy scores were negatively correlated with total ageism scores ($r = -0.517, p < 0.001$), Antilocution scores ($r = -0.379, p < 0.001$), Discrimination scores ($r = -0.527, p < 0.001$), Avoidance scores ($r = -0.459, p < 0.001$). Additionally, participants' age was significantly and negatively correlated with Antilocution ($r = -0.120, p = 0.021$). Age was not correlated with Total ageism, Discrimination, Avoidance and empathy (likely due to low variation in age among the participants).

According to t-test results, there were significant gender differences in empathy and ageism scores between males and females. Males had significantly higher ageism scores in total ageism (mean difference = 0.23, $p < 0.001$), and Avoidance (mean difference = 0.20, $p < 0.001$). Additionally, there were significant gender differences in empathy between males and females. Men had significantly lower empathy levels compared to females (mean difference = -4.85, $t = -6.45$, d.f. = 367, $p < 0.001$). Men had significantly higher ageism scores in total ageism (mean difference = 0.26, $p < 0.001$), Discrimination (mean difference = 0.26, $p < 0.001$) and Avoidance (mean difference = 0.20, $p < 0.001$). Similarly, there were significant gender differences in empathy between males and females. Men had significantly lower empathy levels compared to females (mean difference = -4.85, $t = -6.45$, d.f. = 367, $p < 0.001$). Men had average empathy scores = 43.7 compared to women’s mean empathy scores of 48.55.

There were no significant differences in the total ageism and sub-scale scores between the students who took a course on ageing (n=55) compared to students who did not take a course on ageing (n=312). The reason for the lack of difference could have been that the number of students who had courses on ageing was considerably smaller than the number of students who did not take a course on ageing. According to one-way ANOVA results there were no significant associations between student classification, race and ageism total or any subscales of ageism.

### Multivariate associations

The multiple regression analyses results showed that gender and empathy were significant predictors of total ageism scores. Adjusted R-square for this model was 0.273. After controlling the effects of demographic variables (age, gender, course on ageing, classification, race), empathy was a significant predictor of total ageism scores. Students with higher empathy were less likely to have negative ageism attitudes ($β = -0.028, p < 0.001$) (Table 2).

Similarly, after controlling the effects of demographic variables, empathy was a significant predictor of Ageism Antilocution scores ($β = -0.027, p < 0.001$). Adjusted R-square for this model was 0.161. Additionally, age was a significant predictor for antilocution - with increasing age the Antilocution declined (Table 3).

After controlling the effects of demographic variables, empathy was a significant predictor of Ageism Discrimination scores ($β = -0.031, p < 0.001$). Adjusted R-square for this model was 0.278.

### Additional analysis

Additionally, gender was a significant predictor for discrimination: males had higher discrimination compared to females (Table 4). After controlling the effects of demographic variables, empathy was a significant predictor of Ageism Avoidance scores ($β = -0.028, p < 0.001$). Adjusted R-square for this model was 0.199 (Table 5).

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**Table 1**: Distribution of the Ageism and Empathy Scores.

|                  | N   | Mean | SD   | Range        |
|------------------|-----|------|------|--------------|
| Ageism Total Score | 367 | 2.2696 | 0.43 | 1.2 - 3.4   |
| Ageism Avoidance Score | 368 | 2.3210 | 0.47 | 1.0 - 3.6   |
| Ageism Discrimination Score | 365 | 2.0932 | 0.47 | 1.0 - 3.4   |
| Ageism Antilocution Score | 368 | 2.3803 | 0.57 | 1.0 - 3.9   |

**Table 2**: Predictors of total ageism scores among undergraduate students.

|                      | B    | Std. Error | Standardized Coefficients | t    | Sig.  |
|----------------------|------|------------|----------------------------|------|-------|
| (Constant)           | 3.746| 0.127      |                            | 29.55| 0.000 |
| Empathy              | -0.028| 0.003      | -0.483                     | -10.255| 0.000 |
| Gender               | -0.105| 0.060      | -0.089                     | -1.758| 0.080 |
| Age                  | -0.019| 0.007      | -0.135                     | -2.761| 0.006 |
| Course on Aging      | -0.094| 0.042      | -0.105                     | -2.235| 0.026 |

**Table 3**: Predictors of antilocution ageism scores among undergraduate students.

|                      | B    | Std. Error | Standardized Coefficients | t    | Sig.  |
|----------------------|------|------------|----------------------------|------|-------|
| (Constant)           | 4.266| 0.235      |                            | 18.131| 0.000 |
| Empathy              | -0.027| 0.004      | -0.345                     | -6.819| 0.000 |
| Gender               | -0.105| 0.060      | -0.089                     | -1.758| 0.080 |
| Age                  | -0.019| 0.007      | -0.135                     | -2.761| 0.006 |
| Course on Aging      | -0.041| 0.022      | -0.090                     | -1.848| 0.065 |

**Table 4**: Predictors of discrimination ageism scores among undergraduate students.

|                      | B    | Std. Error | Standardized Coefficients | t    | Sig.  |
|----------------------|------|------------|----------------------------|------|-------|
| (Constant)           | 3.765| 0.164      |                            | 20.445| 0.000 |
| Empathy              | -0.031| 0.003      | -0.489                     | -10.341| 0.000 |
| Gender               | -0.102| 0.046      | -0.106                     | -2.239| 0.026 |
| Classification       | -0.012| 0.020      | -0.030                     | -0.574| 0.566 |
| Age                  | -0.001| 0.006      | -0.009                     | -0.171| 0.864 |
| Race                 | 0.029| 0.023      | 0.057                      | 1.257| 0.210 |
| Course on Aging      | -0.022| 0.017      | -0.060                     | -1.318| 0.188 |
It is imperative that increased interactions between older adults and lead to a decrease in ageist attitudes among the younger population.

**Discussion**

Intergenerational contact, activation of positive stereotypes, and self-affirmation are all tools that can be used to overcome negative opinions of aging among people of all ages. Difficulties associated with ageism can be overcome, if research is furthered to effectively conceptualize, detect, measure, and understand the multidimensionality and complexity of ageism. It is important to note that results showed a higher empathy score associated with lower negative ageist attitudes.

The results of this study show that more empathetic students are less ageist. This study affirms that males are less empathetic than females because of the correlation between empathy and ageism [8]. Results suggest that because males were less empathetic then they could be more ageist. To halt ageism in our society, empathetic behaviors must be taught and encouraged during childhood and adolescence. Empathy is closely related to morality based on social context and empathy is greatly affected by parental concepts and kinships [15]. Empathy is an important antecedent and motivator for prosocial and anti-ageist behavior.

The use of modern technology has stunted the empathetic growth of many children, adolescents, and youth, leading to adults that lack empathy and commonly display ageist attitudes. Lack of empathy can lead to conflict [16]. Implementing empathy education to various educational curriculums can be useful in combating ageist attitudes [17]. With the advancement of technology, we suggest that alternative and innovative methods be used to encourage empathy. These methods can include video games, children’s books, and television shows, etc. The relationship between ageism and empathy can help us understand why ageism is so widespread. Using a more diverse sample of students can help us understand the relationship between empathy and ageism in other diverse populations. Ageism is a widespread, variant issue and that is dependent on many cultural factors. The sample for this study only included students from a mid-sized university in the Southern region of the United States, the sample population is a limitation in this study because it does not represent a diverse population.

**Conclusion**

Only few studies have addressed the consequences of ageism while none have addressed possible interventions [18]. This illustrates a definitive knowledge gap in the literature about this important issue. Increased interactions between the older and younger populous can lead to a decrease in ageist attitudes among the younger population. It is imperative that increased interactions between older adults and young children be encouraged. These increased interactions could be accomplished through children’s literature, fostering grandparents and even curriculum changes with this concept in mind.

Furthermore, exposure and interaction with older adults leads to a deeper understanding of gender roles. Empathy can be taught; implementing a curriculum that focuses on teaching people how to be more empathetic. Incorporating such a curriculum into the academic coursework of students could potentially help students become more empathetic and in turn less ageist. Future studies could assess the correlation between ageism and empathy in different populations across different cultures. Creating awareness and understanding about ageism, educating students and the general public about the negative effects of ageism can create a world in which ageism is eliminated.

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