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The Development and Validation of the Age-Based Rejection Sensitivity Questionnaire

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Purpose: There is much evidence suggesting that older adults are often negatively affected by aging stereotypes; however, no method to identify individual differences in vulnerability to these effects has yet been developed. The purpose of this study was to develop a reliable and valid questionnaire to measure individual differences in the tendency to anxiously expect, readily perceive, and intensely react to age-based rejection among older adults: the Age-Based Rejection Sensitivity Questionnaire (RSQ-Age). ***Design and Methods:*** A pilot sample of older adults was asked to identify situations in which negative outcomes related to being an older adult might occur. From these responses, 58 scenarios representing 8 domains and themes were identified. Thirty initial items were created from this pool of scenarios, and this 30-item RSQ-Age underwent intensive testing and refinement to create the final 15-item RSQ-Age. The 15-item RSQ-Age was assessed for internal and test–retest reliability, as well as construct validity. ***Results:*** Results revealed that the RSQ-Age has good internal (α = .91) and test–retest, $r(72) = .74$, $p < .01$, reliability and is a valid measure of age-based rejection sensitivity (RS). Construct validity was supported by correlations with personal RS, age-based stigma consciousness, self-consciousness, awareness of ageism, and self-esteem. ***Implications:*** The RSQ-Age is a useful measure for researchers and health care workers interested in the relationships between expectancy, perceptions, and reactions to age-based stigma and subsequent cognitive, behavioral, and health-related consequences.

Key Words: Measurement, Psychometrics, Scale development, Ageism, Stigma

Unlike other types of stigmatization, age-based stigmatization has the potential to affect everyone at some point across the life span. In youth, we encounter problems associated with being "too young" and, in old age, we face barriers associated with being "too old" (Zebrowitz & Montepare, 2000). Despite the efforts launched against other forms of stigmatization, ageism continues to represent the most socially condoned and institutionalized form of prejudice in the world today (Nelson, 2002). In this article, we will focus on the stigma associated with being too old. The societal devaluation of the old-age identity is a ubiquitous phenomenon and can be seen readily upon analysis of our cultural attitude toward older adults. For example, if we look to our language, labels such as "old fogey," "hag", and "geezer" convey this devaluation (Nuessel, 1982). Similarly, an examination of various media forms evinces infrequent and relatively negative portrayals of older adults and the aging process (e.g., Cohen & Kruschwitz, 1990; Dillon & Jones, 1981; J. D. Robinson & Skill, 1995). When older adults are depicted, the roles that they fill are often minor with little significance to the plot and with no deviation from the roles suggested by positive and negative stereotypes that exist about the older adult group (e.g., Bishop & Krause, 1984; T. Robinson & Anderson, 2006; T. Robinson, Callister, Magoffin, & Moore, 2007). Finally, inspection of a variety of political and societal policies pertaining to older adults reveals a system laden with negative evaluations of the older adult group. Older adults are often judged as incompetent in domains such as driving, maintaining employment, or the ability to consent to medical procedures, simply based on their membership within the "elderly" group (Zebrowitz & Montepare, 2000). Coping with the existence of age-based stigma and the management of this particular "spoiled identity" (Goffman, 1963) is challenging,

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as older adults face the potential of experiencing a myriad of negative stigma-related consequences.

A growing body of literature has begun to examine the impact of negative age stereotypes on older adults. This research indicates that stereotypes about aging negatively influence both the self-concept and behavior of stereotyped individuals (Guo, Erber, & Szuchman, 1999; Wheeler & Petty, 2001). Older adults who hold negative age self-stereotypes experience such diverse negative consequences as decreases in cognitive performance, will to live, positive affect, and physical health (Levy, 2003). Simple exposure to negative stereotypes about aging can lead to behavioral changes including a decrease in walking speed (Hausdorff, Levy, & Wei, 1999) and a shaky, sloppy handwriting style (Levy, 2000), as well as bodily and cognitive changes including increased cardiovascular stress (Levy, Hausdorff, Hencke, & Wei, 2000) and memory impairment (Levy, 1996). Another consequence of age stigmatization is the experience of stereotype threat, a mechanism through which concerns about fulfilling a negative stereotype interfere with performance and, therefore, lead to stereotype fulfillment (Steele & Aronson, 1995). For older adults, the stereotype threat associated with negative memory-related stereotypes can lead to vast decrements in memory performance (e.g., Chasteen, Bhattacharyya, Horhota, Tam, & Hasher, 2005; Hess, Auman, Colcombe, & Rahhal, 2003). Although research has shown that older adults are often negatively affected by aging stereotypes (e.g., Chasteen et al., 2005; Levy, 1996, 2003; Hess et al., 2003), no method to identify which older adults may be most vulnerable to these effects has yet been developed.

In addition to the cognitive and physical consequences of age stigma observed in experimental settings, researchers have also gathered information on the experience of ageism from older adults themselves. This work contributes to the breadth and depth of knowledge on age-related stigmatization as it focuses on the actual experiences of stigmatized elders. Qualitative research on ageism largely supports experimental research in this area, confirming that older adults do experience negative outcomes associated with being seen and treated as "old" (Minichiello, Browne, & Kendig, 2000). Participants in these qualitative studies indicate that older adults as a group experience negative outcomes including those related to transportation and housing, low incomes and forced retirement, and inadequate nursing home care (Minichiello et al., 2000). This research also highlights the experience of ageism in health care settings, for example, among those living with HIV/AIDS (Emlet, 2006) or breast cancer (Hall, 2006). Unfortunately, these qualitative studies all but confirm that ageism is alive and well in modern society.

Given the strong evidence that stereotypes influence older adults frequently and in multiple ways, we aimed to identify older adults most susceptible to these consequences. In this article, we report the development of the first measure assessing individual differences among older adults in the tendency to anxiously expect, readily perceive, and intensely react (Downey & Feldman, 1996) to age-based rejection, the Age-Based Rejection Sensitivity Questionnaire (RSQ-Age). In what follows, we offer a brief introduction to the rejection sensitivity (RS) model (Ayduk, Downey, & Kim, 2001; Downey & Feldman, 1996; Downey, Freitas, Michaelis, & Khouri, 1998; Feldman & Downey, 1994), and then fully describe the development and validation of the RSQ-Age, a process that combined both qualitative and quantitative approaches.

The RS Model and Application to Age-Based Stigma

Research with other types of groups has shown that group members can be differentially affected by negative stereotypes in general and stereotype threat specifically (Hess et al., 2003; Pronin, Steele, & Ross, 2004; Schmader, 2002). One theoretical framework that describes expectations and perceptions of and reactions to rejection is the RS model (Ayduk et al., 2001; Downey & Feldman, 1996; Downey et al., 1998; Feldman & Downey, 1994). This framework has also been extended to rejection based on race (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002).

Rejection sensitivity has been defined as a cognitive–affective processing dynamic (Mendoza-Denton et al., 2002; Mischel & Shoda, 1995) in which members of stigmatized groups anxiously expect, readily perceive, and intensely react to situations in which stigma-based rejection is possible. Individuals who are high in RS not only expect rejection to occur but are also highly concerned that the rejection will occur. As explained by Metcalfe and Mischel's (1999) hot–cool framework of self-regulation, anticipatory threat states lower the threshold for perception of threat and prepare the

self to react intensely if threat is perceived. As such, people high in RS more readily perceive and subsequently react more intensely to perceived rejection than those low in RS. Consequences of high RS among African American students, for example, include greater discomfort during the transition to college, less trust in the university, and relative declines in grades over a 2- to 3-year period (Mendoza-Denton et al., 2002). Research on a related construct, stigma consciousness, a measure of the extent to which an individual expects to be stigmatized by others (Pinel, 1999), has shown that the more that one expects to be stigmatized, the more negatively affected one is by stigma and, dangerously, the more one perceives stigma in relatively ambiguous situations (e.g., Brown & Lee, 2005; Brown & Pinel, 2003; Pinel, 1999, 2002; Pinel & Paulin, 2005). Both of these lines of research suggest that being high in age-based RS should have similar consequences for older adults. Indeed, research in our lab showed that memory decrements under stereotype threat were most severe for those older adults who reported greater perceived threat (Kang & Chasteen, in press).

Following from the work previously outlined, the goal of the current study was to develop a measure to identify older adults who are most susceptible to the negative effects of aging stereotypes. A reliable and valid instrument to measure RS among older adults would allow researchers to more rigorously examine the relationships between expectancy, perceptions, and reactions to age-based stigma and subsequent cognitive, behavioral, and health-related consequences. This scale would also allow researchers and health care workers working with limited resources to target interventions aimed at reducing stigma-related outcomes to those older adults who need these interventions most. Identifying older adults most susceptible to these effects marks the first step toward uncovering mechanisms underlying this vulnerability in hopes of one day preventing the development and progression of this sensitivity in the first place.

Methods

Participants

Older adults were recruited for this study from the University of Toronto Adult Volunteer Pool (AVP). The AVP is a pool of more than 2,300 adults (70% women) ranging in age from 29 to 102 years old (M_{age} = 71.37 years, *SD* = 9.89). The vast majority of participants (92%) are older than 60 years. Adult Volunteer Pool participants are recruited from across the Greater Toronto Area via advertisements in both major and senior's newspapers and are eligible to participate in up to four studies per year. Participants receive $12 per hr to cover transportation expenses associated with traveling to the University of Toronto. Members of the AVP are generally well educated and have completed an average of 14.85 years of education (range: 6–30 years, *SD* = 2.81). All AVP participants recruited for this study were community dwelling, fluent in English, and had lived in North America since they were at least 10 years old.

Comparison groups of young adults were recruited from the undergraduate psychology participant pool. The undergraduate psychology participant pool consists of students enrolled in an introductory psychology course at the University of Toronto St. George Campus. At the time that this study was conducted, of the approximately 1,000 students enrolled in the class, 857 students (63% women) completed a mass testing questionnaire. It is from this mass testing questionnaire that we can provide some demographic information about this participant pool. Participants in the pool range in age from 18 to 53 years (*M*age = 20.89 years, *SD* = 4.05). All undergraduate participants who participated in this study were fluent in English and had lived in North America since they were at least 10 years old.

More detailed demographics of each sample are presented independently where appropriate.

Questionnaire Development

Development of the RSQ-Age involved three phases: item development, initial testing and refinement, and, finally, validation. Each of these phases is described in turn.

Phase 1: Item Development.—Generating a pool of possible items constituted the first step in developing the RSQ-Age. We modeled the RSQ-Age after other RS questionnaires like the RSQ-Race (Mendoza-Denton et al., 2002) and the RSQ-Personal (Downey & Feldman, 1996). The RS questionnaires are constructed such that participants are presented with situations in which individuals might experience concerns about rejection. In the case of the RSQ-Personal, participants are presented with situations in which they may be personally rejected; in the RSQ-Race, members of racially stigmatized groups are presented with

Table 1. Reported Domains and Themes of Ageism

Theme	% of Responses	Example
Workplace and hiring decisions	40	Denied extra training, mandatory retirement, difficulties finding work despite qualifications
Social exclusion/isolation/invisibility	16	Not being included in conversation at family gatherings, being spoken about as if not present
Impatience	14	Driving, walking, in lineups at stores or the bank
Obtaining goods or services	10	Being taken advantage of, targeted by scams or unfair business practices, provided with poor service
Feeling like a burden	7	Made to feel like a burden by family/caregivers
Health	7	Concerns not taken seriously, poor health assumed to be normal
Athletics	3	Assumed to be weak/frail, not allowed to participate in exercise class or program
Interactions with young adults	3	Rudeness/disrespect, physical aggression

situations in which they may experience race-based rejection. Participants are then asked (a) how concerned/anxious they would feel about rejection and (b) how unlikely or likely they judge rejection to be in the specific situation. The first judgment reflects the "hot" emotional component of RS and the second judgment reflects the "cool" cognitive component. In scoring, these two components are combined to give an overall measure of RS.

To generate situations in which older adults might experience concerns about age-based stigma, we conducted a pilot test, which asked 100 older adults to report a situation in which they themselves, a friend, or a family member had had a negative experience related to being an older adult. This initial qualitative approach allowed us to gather information on the experience of being old and being labeled as old among actual older adults. This method ensures that only items relevant to the actual experience of ageism would be included in our measure. This pilot test yielded sample situations from 47 respondents (49% women, 87% White Canadians, age: M = 72.13 years, SD = 6.18, range = 61–84 years). These respondents had completed from 11 to 18 years of education (M = 14.73 years, SD = 2.47). Most were married (44.6%; widowed = 21.9%, divorced = 24.7%, never married = 8.8%) and rated their health as "good" (52.2%) or "excellent" (26.7%; fair = 19.8%, poor = 1.3%). Importantly, participants who did not return the questionnaire did not differ from those who did on any of these demographic variables (all ps >.34).

Because some respondents provided more than one situation, the pilot test generated a pool of 58 scenarios. From these scenarios describing experiences of age-based stigmatization, we identified eight domains and themes: workplace and hiring decisions, social exclusion/isolation, obtaining goods or services, feeling like a burden, health, impatience, athletics, and interactions with young adults. Frequencies with which each of these themes was identified and examples are provided in Table 1.

Using the 58 scenarios obtained during pilot testing, we created 30 potential items for the RSQ-Age. Wherever possible, we attempted to adapt the items of the RSQ-Race to reflect the scenarios identified in pilot testing. The creation of the 30-item initial RSQ-Age marked the completion of Phase 1 and movement into Phase 2 where this initial measure was tested and refined.

Phase 2: Initial Testing and Refinement.—Participants and procedure. Among a packet of unrelated questionnaires, another 100 adult volunteer pool members received the 30-item RSQ-Age via mail. Participants were told that the questionnaire assessed feelings that might arise when imagining themselves in different situations and were asked to reply honestly and openly. We received completed questionnaires from 41 older adults (49% women, 85% White Canadians, age: M = 72.91 years, SD = 5.06, range = 61–80 years). The number of years of education completed by our participants ranged from 11 to 18 years (M = 15.22 years, SD = 2.30). The majority of respondents were married (41.5%; widowed = 24.4%, divorced = 24.4%, never married = 9.7%) and rated their health as "good" (48.8%) or "excellent" (26.8%; fair = 21.9%, poor = 2.4%). Again, participants who did not return the questionnaire packet did not differ from those who did on any of these demographic variables (all ps >.25).

Table 2. Factor loadings for the Age-Based Rejection Sensitivity Questionnaire (RSQ-Age) Items and Psychometric Properties of RSQ-Age for Older Adults

Item	Factor loading	*M*	*SD*	Minimum	Maximum
1. Imagine that you are updating your résumé, and that you go to a résumé consultant for advice. The consultant recommends that you remove some items from your résumé.	.54	12.31	9.70	1	36
2. Imagine that you are looking for an address and stop to ask someone directions. The person talks to you very slowly and in a high-pitched tone.	.56	9.26	9.23	1	36
3. Imagine that you are shopping with a family member. You have some questions about a particular item.	.60	10.29	9.84	1	36
4. Imagine that you are taking a course offered at a local college to learn a new computer program.	.68	11.66	10.11	1	36
5. Imagine that you are at work trying to accomplish a difficult task. One of your coworkers sees you and asks you if you are sure you can handle the task alone.	.61	8.52	8.44	1	36
6. Imagine that you are at an ATM machine, doing your banking. You notice that the woman in line behind you keeps glancing at you.	.72	6.35	7.73	1	36
7. Imagine that you are hired to greet people as they sign in for a conference. After an hour, your supervisor tells you that they would rather have someone else greet people.	.67	10.52	9.88	1	36
8. Imagine that you have just completed a job interview over the telephone. You are in good spirits because the interviewer seemed enthusiastic about your application. Several days later, you complete a second interview in person. Your interviewer informs you that they will let you know about their decision soon.	.77	15.30	10.29	1	36
9. Imagine that you are applying for a volunteer position at your local theater. The theater prides itself on its fun and vibrant atmosphere.	.65	12.00	9.37	1	36
10. Imagine that you are taking a few courses at your local college. You are sitting in your first class and your instructor encourages all the students to take some time to get to know one another.	.65	10.59	9.39	1	36
11. Imagine that you are involved in a minor accident while driving. It is unclear who is at fault.	.69	13.83	10.87	1	36
12. Imagine that you need some repairs done in your home. You hire someone to take care of the job.	.62	11.93	10.49	1	36
13. Imagine that you want to sign up for an exercise class at your local gym. The instructor informs you that this is a very popular class and not everyone will get a spot.	.58	10.87	9.22	1	36
14. Imagine that you have worked many years in a particular profession. Recently, an opportunity arose for a few employees to receive additional training.	.72	15.67	10.29	1	36
15. Imagine that you are applying for a part-time position close to your home. You are well qualified and have an excellent résumé prepared. When you hand in your résumé to the manager, you are told that the position was filled yesterday.	.77	13.62	11.48	1	36
M	11.47				
SD	6.37				
Minimum score	1.00				
Maximum score	32.47				
N	171				

Table 3. Correlations Among RSQ-Age and Other Individual Difference Measures

Scale	1	2	3	4	5	6
1. RSQ-Age	—					
2. RSQ-Personal	–.36[a]	—				
3. Age-Based Stigma Consciousness Scale	–.27[a]	–.19	—			
4. Modern Sexism Scale	–.06	–.10	–.30[b]	—		
5. Self-Consciousness Scale	–.31[a]	–.29[a]	–.19	–.10	—	
6. Rosenberg Self-Esteem Scale	–.49[a]	–.23[b]	–.27[a]	–.01	–.33[a]	—
7. Awareness of Ageism Scale	–.34[a]	–.14	–.38[a]	.47[a]	.06	–.12

Notes: RSQ-Age = Age-Based Rejection Sensitivity Questionnaire.
[a]Correlation is significant at the .01 level.
[b]Correlation is significant at the .05 level. Correlations based on Phase 3 Sample A, $N = 103$.

RSQ-Age measure. The 30-item RSQ-Age assessed concerns about and expectations of rejection based on age for each of the 30 situations. Participants are first presented with a situation (e.g., "Imagine that you are involved in a minor accident while driving. It is unclear who is at fault") and are then asked to respond to two items regarding that situation. First, participants are asked how concerned or anxious they are that a negative outcome might occur because of their age (e.g., "How concerned/anxious would you be that the blame for the accident might be placed on you because of your age?") on a scale from 1 (*very unconcerned*) to 6 (*very concerned*). Next, participants are asked to indicate the likelihood that the other person would engage in rejecting behavior toward them as a result of their age (e.g., "I would expect that the blame for the accident might be placed on me because of my age") on a scale from 1 (*very unlikely*) to 6 (*very likely*). The questionnaire is scored such that the concern/anxiety and expectancy scores are combined multiplicatively to form a unitary psychological construct. In this way, the Concern/Anxiety × Expectancy interaction term weighs the cognitive component by the affective component (for a more detailed account of this scoring method, see Mendoza-Denton et al., 2002). The mean RS score is obtained by taking an average of the product scores for each item. The possible range of values for this interaction term is thus 1 (indicating low RS) to 36 (indicating high RS).

Results

The overall mean RS-age scores ranged from 1.57 to 21.73 ($M = 9.24$, $SD = 5.18$). RS-age was not significantly related to gender, $r(41) = .13$, *ns*; age, $r(41) = .08$, *ns*; education level, $r(41) = –.12$, *ns*; ethnicity, $r(41) = –.04$, *ns*; marital status, $r(41) = –.05$, *ns*; or physical health, $r(41) = –.18$, *ns*. The initial 30-item RSQ-Age showed high internal reliability on the basis of the 30 product scores ($\alpha = .93$).

To choose which of the 30 initial items would be included in the final scale, we first examined items for redundancy and representation of the themes identified in our pilot test. Fifteen nonredundant items that generated high variance were selected for inclusion in the final RSQ-Age. These 15 items also constituted a good representation of the themes identified by our pilot test participants. These 15 items are listed in the first column of Table 2. Validation of the 15-item RSQ-Age was the goal of Phase 3 of the scale development process. A standard form for administering the RSQ-Age is included in the Appendix.

Phase 3: Validation of the RSQ-Age.—The third phase in the development of the RSQ-Age involved administration of the final 15-item scale to two different samples to assess psychometric properties including scale reliability, convergent and divergent validity, and, later, test–retest reliability. Data from the first sample, Sample A, were collected to test scale reliability, validity, and test–retest reliability. Data from additional participants, Sample B, were combined with Sample A to allow for a factor analysis of the RSQ-Age. Data from Sample B participants were also used separately to reassess psychometric properties of the scale.

For our analysis of construct validity, we expected age-based RS to be positively associated with constructs like personal RS, stigma consciousness, and self-consciousness, which are related measures in that they assess sensitivity about rejection or evaluation that is either group-based (e.g., stigma consciousness) or self-based (e.g., personal RS and self-consciousness). We also expected age-based RS to be positively associated to awareness

of ageism because those who are more aware of ageism around them would presumably recognize the potential for experiencing ageism more so than those who are less aware of ageism. We also expected scores on the RSQ-Age to be negatively related to scores on the Rosenberg Self-Esteem Scale (Rosenberg, 1979) but unrelated to scores on the Modern Sexism Scale (Swim, Aikin, Hall, & Hunter, 1995). We expected scores on the RSQ-Age to be negatively associated with self-esteem, although previous work with the RS-race indicated that that type of RS was positively associated with self-esteem (Mendoza-Denton et al., 2002). In the case of race-based stigma, self-esteem can be maintained in the face of discrimination by attributing the cause of negative outcomes toward the prejudice of others and away from the self (Crocker & Major, 1989). This discounting mechanism might not operate the same way for ageism as individuals are often reluctant to make claims of age discrimination; therefore, self-esteem would likely suffer. Research in our own lab is investigating this issue further. We expected scores on the RSQ-Age to be unrelated to scores on the Modern Sexism Scale because the Modern Sexism Scale measures individual levels of subtle as opposed to blatant or "old-fashioned" sexism, a construct that we view as unrelated to age-based RS. We expect that although both of these measures assess stigma-related attitudes, the RSQ-Age should be sensitive enough to distinguish between levels of rejection/prejudice toward the female group and one's feelings about rejection/prejudice toward the older adult group. These constructs and measures are described in detail subsequently.

Participants and procedure: Sample A. A sample of 184 older adults who participated in the AVP were mailed a packet of questionnaires including the RSQ-Age, the RSQ-Personal (Downey & Feldman, 1996), a modified version of the Stigma Consciousness Scale (Pinel, 1999), the Modern Sexism Scale (Swim et al., 1995), the Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975), the Rosenberg Self-Esteem Scale (Rosenberg, 1979), the Awareness of Ageism Scale (Braithwaite, Lynd-Stevenson, & Pigram, 1993), and a standard demographics questionnaire. Participants were also asked to provide feedback on the RSQ-Age; this response space was unstructured, and participants were free to respond in any way.

From this sample, we received 103 completed questionnaire packets. Thus, 103 participants (49% women, 87% White Canadians) took part in Phase 3 of this study. Participants ranged in age from 60 to 87 years (M = 71.32 years, SD = 6.38). The number of years of education completed by these participants ranged from 9 to 20 years (M = 16.34 years, SD = 2.45). The majority of the respondents were married (56.6%; widowed = 9.4%, divorced = 20.4%, never married = 13.6%) and rated their health as "good" (53.8%) or "excellent" (33.9%; fair = 10.4%, poor = 1.9%). Participants who did not return the questionnaire packets did not differ from those who did on any of these demographic variables (all ps >.243).

One year later, we sent the same questionnaire packet to these 103 participants to assess test–retest reliability. We received 72 completed questionnaire packets (70% of the original sample). Participants who did not return the questionnaire packets at Time 2 did not differ from those who did on any demographic (all ps >.177) or test (all ps >.242) variables.

Measures. RSQ-Age. The 15-item RSQ-Age assesses anxious expectations of rejection based on age. Participants imagine themselves in each situation and then rate both how concerned/anxious they would be that age-based rejection would occur in the situation and how likely it is they would be rejected because of their age (see Table 2 and Appendix). As mentioned earlier, a product score is calculated for each scenario and these product scores are then averaged to give an overall score of RS-age, with higher scores indicating more anxious expectation of age-based rejection. Relationships between scores on the RSQ-Age and demographic variables are discussed subsequently.

RSQ-Personal. The RSQ-Personal (Downey & Feldman, 1996) is an 18-item scale, which assesses anxious expectations of rejection based on individual characteristics. Because this scale was developed with a younger population in mind, some of the situations do not extend to the older adult population. For inclusion in this study, we chose the six scenarios from the scale that reflect situations that are likely to be experienced by older adults. (The following six scenarios from the RSQ-Personal were chosen: (a) Imagine that your spouse/partner has plans to go out with friends tonight, but you really want to spend the evening with him/her, and you tell him/her so. (b) Imagine approaching a close friend to talk after doing or saying something that seriously upset him/her. (c) Imagine calling your spouse/partner after a bitter argument and telling him/her that you want to see him/her. (d) Imagine

that you ask a friend if you can borrow something of his/hers. (e) Imagine that you ask some family members to come to an occasion important to you. (f) Imagine that you ask a friend to do you a big favor.) As with the RSQ-Age, participants imagine themselves in each scenario (e.g., "Imagine approaching a close friend to talk after doing or saying something that seriously upset him/her") and rate the extent to which they are concerned or anxious that rejection will occur (e.g., "How concerned/anxious would you be over whether or not your friend would want to talk to you?"), as well as the extent to which they expect rejection to occur (e.g., "I would expect that my friend would not want to talk to me"). Participants make both ratings on a scale from 1 (*very unconcerned/unlikely*) to 6 (*very concerned/likely*). A score for each situation is obtained by multiplying the concern/anxiety and expectancy scores together. An average score is obtained by taking an average of the product scores, with higher scores indicating higher levels of RSQ-Personal. Scores on this scale did not differ by gender or age (*p*s > .32).

Stigma Consciousness Scale. The Stigma Consciousness Scale (Pinel, 1999) measures the degree to which individuals are chronically self-conscious about their stigmatized status. The scale was initially developed to assess gender-based stigma consciousness, so we modified the scale to assess concerns about age-based stigma consciousness (e.g., "Most young people have a problem viewing older adults as equals"). Participants indicate their agreement with each of the statements on a scale from 0 (*strongly disagree*) to 6 (*strongly agree*). An average of the 10 scores makes up an individual's stigma consciousness score, with higher scores indicating higher stigma consciousness. Scores on this scale did not differ by gender or age (*p*s > .65).

Modern Sexism Scale. The Modern Sexism Scale (Swim et al., 1995) measures subtle forms of sexism, in contrast to more blatant or old-fashioned sexism. The scale comprises eight items such as "Women often miss out on good jobs due to sexual discrimination." Participants rate their agreement with each of these items on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Responses to these eight items are averaged to give an overall modern sexism score, with higher scores indicating higher levels of modern sexism. Scores on the Modern Sexism Scale did not differ by gender, $p = .11$, but did differ by age, such that scores on the Modern Sexism Scale decreased as age increased, $\beta = -.26$, $p < .01$. This age effect may be due to the fact that older participants are more familiar with situations that would constitute old-fashioned sexism and thus do not recognize the items on the Modern Sexism Scale as problematic.

Self-Consciousness Scale. The Self-Consciousness Scale (Fenigstein et al., 1975) is a reliable and valid measure of individual tendencies to self-focus. The scale consists of 23 items such as "I'm concerned about what other people think of me." Responses to these items are made on a scale from 1 (*extremely uncharacteristic of me*) to 5 (*extremely characteristic of me*). An average of these 23 items constitutes the self-consciousness score, with higher scores indicating a higher level of self-consciousness. Self-consciousness scores did not differ by age or gender (*p*s > .37).

Rosenberg Self-Esteem Scale. The Rosenberg Self-Esteem Scale is a widely used, reliable, and valid measure of self-esteem (Rosenberg, 1979). The scale includes 10 items such as "I feel that I have a number of good qualities" and "On the whole, I am satisfied with myself." Respondents are asked to rate each of these items as reflective of their own self-attitudes on a scale from 1 (*strongly disagree*) to 4 (*strongly agree*). Responses are averaged across the 10 items, with higher scores indicating a higher level of self-esteem. Self-esteem scores did not differ by age or gender (*p*s >.46).

Awareness of Ageism Scale. The Awareness of Ageism Scale (Braithwaite et al., 1993) consists of 10 items that assess the degree to which individuals believe that ageism exists in our society (e.g., "There is discrimination and prejudice against old people in this society"). Participants rate the degree to which they agree with these statements on a scale from 1 (*strongly disagree*) to 6 (*strongly agree*). Responses are averaged across the 10 items, with higher scores indicating that the participant believes our society to be highly ageist. In line with previous research (Kite & Wagner, 2002), results suggest that women ($M = 4.59$) view society to be more ageist than men ($M = 4.08$), $p < .01$. No age differences emerged ($p > .39$).

RESULTS

Psychometric Properties: Sample A

The 15-item RSQ-Age showed high internal reliability on the basis of the 15 product scores ($\alpha = .91$) and each of the item–total correlations was greater than .44. The 1-year test–retest reliability of the scale was also high, $r(72) = .74$, $p < .01$, indicating stability of the RS-age construct and measure.

RS-age was not significantly related to gender, $r(103) = .03$, *ns*; age, $r(103) = .17$, *ns*; education level, $r(103) = -.11$, *ns*; ethnicity, $r(103) = -.01$, *ns*; or marital status, $r(103) = .05$. *ns*. RS-age was, however, significantly related to physical health, $r(103) = -.33$, $p < .01$, such that participants who judged themselves to be less healthy had higher levels of RS-age. This may be because much of the stigma associated with old age is associated with stereotypes related to poor and degenerating health (e.g., physical/mental slowing, less attractive appearance); those who are least healthy are most likely to fit these old age stereotypes. This result also supports previous research linking exposure to negative aging stereotypes and negative self-stereotypes to health-related outcomes including cardiovascular stress and hearing decline (Levy, Slade, & Gill, 2006; Levy et al., 2000). Although the causal relationship between poor health and age-related stigma is yet to be determined, it is becoming increasingly clear that negative old age stereotypes are associated with decreases in physical and cognitive health (Levy, 2003). Given this relationship, it is reasonable to assume that those who are most susceptible to negative age-related stereotypes will also be most susceptible to experiencing associated declines in cognitive and physical health.

Construct Validity: Sample A

As expected, older adults' scores on the RSQ-Age were significantly positively correlated with awareness of ageism, $r(103) = .34$, $p < .01$; self-consciousness, $r(103) = .31$, $p < .01$; RS-personal, $r(103) = .36$, $p < .01$; and age-based stigma consciousness, $r(103) = .27$, $p < .01$. RS-age was also significantly negatively related to self-esteem, $r(103) = -.49$, $p < .01$. Each of these correlations is significantly less than 1.00, indicating that the RSQ-Age does not completely overlap with any of these scales but correlates with these other measures in the expected direction. Also as expected, RS-age was not related to scores on the Modern Sexism Scale, $r(103) = .06$, *ns*. Correlations between scores on each of the seven scales are reported in Table 3.

When constructing the RSQ-Age, it was important to make sure that the measure could distinguish between RS-age and the more general RS-personal. Our results show that RS-age, as assessed by the RSQ-Age, is associated with both awareness of ageism and age-based stigma consciousness; in contrast, scores on the RSQ-Personal were not associated with either of these two constructs. These distinct results suggest the validity of the RSQ-Age in assessing age-based, as opposed to more general, RS.

Participants' written feedback about the scale was also promising, with close to 85% of respondents indicating that the items tapped realistic instances in which ageism might be a concern.

Differences Among Young and Older Adults

As a comparison group, 174 young adults (age: $M = 18.75$ years, $SD = 1.14$) completed the RSQ-Age. The mean RS-age score for young adults ($M = 7.71$, $SD = 3.57$) was significantly lower than the mean score for older adults ($M = 10.08$, $SD = 6.24$, $p < .01$), indicating that the RSQ-Age is specifically suited to assess age-based RS among older adults.

Participants and Procedure: Sample B

To replicate the psychometric properties of the RSQ-Age that were established with Sample A, we had an additional 68 AVP participants (53% women, 82% White Canadians) complete the 15-item RSQ-Age in the lab at the end of an unrelated study. These Sample B participants ranged in age from 60 to 80 years ($M = 71.35$ years, $SD = 6.12$). The number of years of education completed by these participants ranged from 9 to 20 years ($M = 15.88$ years, $SD = 2.71$). The majority of respondents were married (56.9%; widowed = 10.8%, divorced = 18.5%, never married = 13.8%) and rated their health as "good" (48.9%) or "excellent" (36.4%; fair = 12.0%, poor = 2.7%). Sample B did not differ from Sample A on any demographic variable (all *p*s >.31).

Psychometric Properties: Sample B

Replicating our findings with Sample A, the 15-item RSQ-Age once again showed high internal reliability on the basis of the 15 product scores ($\alpha = .88$) and each of the item–total correlations was greater than .41. As with Sample A, RS-age was not significantly related to gender, $r(68) = -.13$, *ns*; age, $r(68) = .16$, *ns*; education level, $r(68) = .04$, *ns*; ethnicity, $r(68) = -.07$, *ns*; or marital status, $r(68) = -.04$. *ns*. Also as with Sample A, RS-age was significantly related to physical health, $r(68) = -.25$, $p < .01$, such that participants who judged themselves to be less healthy had higher levels of RS-age.

Factor Analysis: Samples A and B Combined

We next combined both samples to conduct a factor analysis. Combining Samples A and B yielded a total of 171 participants (51.5% women, 85.1% White Canadians). Participants ranged in age from 60 to 87 years (M = 71.33 years, SD = 6.26). The number of years of education completed by these participants ranged from 9 to 20 years (M = 16.10 years, SD = 2.55). The majority of respondents were married (55.6%; widowed = 9.9%, divorced = 18.7%, never married = 13.5%) and rated their health as "good" (49.7%) or "excellent" (36.3%; fair = 11.1%, poor = 2.9%).

To determine whether a single component could be extracted from our RSQ-Age data, we conducted a principal components analysis on the 15 product scores obtained for each scenario. Although this analysis yielded two components with eigenvalues greater than 1.00, only one component was retained on the basis of the scree test. The component we retained had an eigenvalue of 6.45 and accounted for 43.00% of the total variance. The next component had an eigenvalue of 1.40 and accounted for 9.35% of the variance. An examination of the component matrix revealed that each of the RSQ-Age items loaded highest on the first component, at or higher than .54. The component loadings, means, standard deviations, and range of scores for each of the RSQ-Age items, as well as the overall scale, are reported in Table 2.

Discussion

Age stereotypes have a frequent and negative impact on older adults. The RSQ-Age is a new survey designed to measure individual levels of age-based RS or susceptibility to the negative consequences associated with age stereotypes. The RSQ-Age fills a gap in the existing literature by providing researchers and caregivers a tool with which to identify older adults most susceptible to the deleterious physical, cognitive, and behavioral effects of age stigmatization.

The RSQ-Age was designed using a sample of generally healthy community-dwelling older adults. However, given that the RSQ-Age is an individual difference measure showing good variation in responses, we believe that it is suitable for use with a wide spectrum of older adults. In addition to identifying and targeting interventions toward older adults most susceptible to the deleterious effects of age stigmatization, older adults identified as high in age-based RS can be inoculated against the effects of stigmatization through education about age-related stigma in general and about their own susceptibility to stigma in particular. Indeed, other researchers have shown that simply informing stigmatized group members (e.g., women) about the effects of stereotypes on their group can help improve their performance in threatening situations (Johns, Schmader, & Martens, 2005). In the same way, knowledge about the effects of age-based stigma and their sensitivity to these effects is the first step in empowering older adults to recognize and resist the effects of stigma in their daily lives.

The RSQ-Age demonstrated good internal and test–retest reliability. The full scale takes approximately 15 min to complete, thus presenting a convenient option for investigators looking to assess this important individual difference variable. We found a great deal of support for the validity of this scale as the results revealed evidence for both convergent and divergent validity. More specifically, positive correlations were found between RS-age and RS-personal, stigma consciousness, self-consciousness, and awareness of ageism, whereas a negative correlation was found between RS-age and self-esteem. This negative correlation between RS-age and self-esteem provides further evidence that, unlike other forms of stigma, ageism may not confer a protective attributional benefit to its targets (Kang & Chasteen, 2008; Kang, Chasteen, & Tse, 2008). When assessing divergent validity, we found that RS-age was not correlated with scores on the Modern Sexism Scale, indicating that the RSQ-Age did not overlap with this unrelated measure just because it also measures a construct in the realm of stigma. Further, scores on the RSQ-Age can be distinguished from scores on the RSQ-Personal because RS-age scores correlated with other age-related measures (awareness of ageism and age-based stigma consciousness), whereas RS-personal scores did not. It is therefore reasonable to assume that the RSQ-Age captures a unique construct related to but distinct from RS-personal. This finding suggests that this age-specific measure should be used in any situation where age-based stigma, rather than personal-based rejection, may be experienced.

Some limitations and suggestions for future use of the RSQ-Age should be noted. First, the majority of participants in each phase of the scale's development were highly educated White Canadians. As such, we encourage other researchers to assess the

generalizability and psychometric performance of our scale with more diverse samples. For instance, it would be particularly interesting to see whether double-minority status might produce greater age-based RS among ethnic minority seniors. As well, greater age-based RS might be observed among seniors with lower levels of education who might have had different work and retirement experiences than our highly educated sample. Nevertheless, even in our sample, we observed a great deal of variance in RS-age scores, suggesting that many are not immune to the stigma that accompanies aging.

A second limitation of our study is the relatively small sample size in Phase 2 of the development of the RSQ-Age. Including more participants in this phase may have resulted in a different set of items being chosen for the final measure. However, given that items were excluded based on redundancy and low variance, it is highly likely that any alternative measure would still have addressed the same themes and domains as our current RSQ-Age. Further, the excellent reliability and validity that the RSQ-Age showed with the larger samples in Phase 3 helps to reduce concerns about the sample size in Phase 2.

Finally, measures of socioeconomic status (e.g., income, occupational background) were not included in the present study. It would be interesting to see how social class moderates experiences of ageism, and we encourage future use of the RSQ-Age among older adults from varying social backgrounds.

The RSQ-Age is the first measure to assess expectations, perceptions, and reactions related to age-based stigma. The continued use and development of the RSQ-Age will allow researchers to more fully understand the application of the RS model to ageism, while simultaneously encouraging the development and refinement of targeted interventions aimed at reducing the negative effects of age stereotyping. A deeper understanding of this construct will also be useful in uncovering mechanisms underlying age-based RS, in order to slow or completely interrupt the development and progression of this sensitivity.

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References

Ayduk, O., Downey, G., & Kim, M. (2001). Rejection sensitivity and depressive symptoms in women. *Personality and Social Psychology Bulletin*, *27*, 868–877.

Bishop, J. M., & Krause, D. R. (1984). Depictions of aging and old age on Saturday morning television. *Gerontologist*, *24*, 91–94.

Braithwaite, V., Lynd-Stevenson, R., & Pigram, D. (1993). An empirical study of ageism: From polemics to scientific utility. *Australian Psychology*, *28*, 9–15.

Brown, R. P., & Lee, M. N. (2005). Stigma consciousness and the race gap in college academic achievement. *Self and Identity*, *4*, 149–157.

Brown, R. P., & Pinel, E. C. (2003). Stigma on my mind: Individual differences in the experience of stereotype threat. *Journal of Experimental Social Psychology*, *39*, 626–633.

Chasteen, A. L., Bhattacharyya, S., Horhota, M., Tam, R., & Hasher, L. (2005). How feelings of stereotype threat influence older adults' memory performance. *Experimental Aging Research*, *31*, 235–260.

Cohen, E. S., & Kruschwitz, A. (1990). Old age in America represented in nineteenth and twentieth century popular sheet music. *Gerontologist*, *30*, 345–354.

Crocker, J., & Major, B. (1989). Social stigma and self-esteem: The self-protective properties of stigma. *Psychological Review*, *96*, 608–630.

Dillon, K., & Jones, R. (1981). Attitudes toward aging portrayed by birthday cards. *International Journal of Aging and Human Development*, *13*, 79–84.

Downey, G., & Feldman, S. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, *70*, 1327–1343.

Downey, G., Freitas, A. L., Michaelis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Do rejection sensitive women get rejected by their partners? *Journal of Personality and Social Psychology*, *75*, 545–560.

Emlet, C. A. (2006). "You're awfully old to have this disease": Experiences of stigma and ageism in adults 50 years and older living with HIV/AIDS. *Gerontologist*, *46*, 781–790.

Feldman, S., & Downey, G. (1994). Rejection sensitivity as a mediator of the impact of childhood exposure to family violence on adult attachment behavior. *Development and Psychopathology*,, *6*, 231–247.

Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, *43*, 522–527.

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Englewood Cliffs, NJ: Prentice-Hall.

Guo, X., Erber, J. T., & Szuchman, L. T. (1999). Age and forgetfulness: Can stereotypes be modified? *Educational Gerontology*, *25*, 457–466.

Hall, L. C. (2006). The significance of age in breast cancer experience (Doctoral dissertation, The University of Kansas, 2006). *Dissertation Abstracts International*, *67*, 1550.

Hausdorff, J. M., Levy, B. R., & Wei, J. Y. (1999). The power of ageism of physical function of older persons: Reversibility of age-related gait changes. *Journal of the American Geriatrics Society*, *47*, 1346–1349.

Hess, T. M., Auman, C., Colcombe, S. J., & Rahhal, T. A. (2003). The impact of stereotype threat on age differences in memory performance. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *58*, 3–11.

Johns, M., Schmader, T., & Martens, A. (2005). Knowing is half the battle: Teaching stereotype threat as a means of improving women's math performance. *Psychological Science*, *16*, 175–179.

Kang, S. K., & Chasteen, A. L. (in press). The moderating role of age-group identification and perceived threat on stereotype threat among older adults. *The International Journal of Aging and Human Development*.

Kang, S. K., & Chasteen, A. L. (2008, February). *Do attributions to discrimination protect targets of ageism?* Poster presented at the 9th annual meeting of the Society for Personality and Social Psychology, Albuquerque, NM.

Kang, S. K., Chasteen, A. L., & Tse, C. (2008). *Differential reactions to claims of ethnic, age, and gender discrimination*. Unpublished manuscript, University of Toronto, Canada.

Kite, M. E., & Wagner, L. S. (2002). Attitudes toward older adults. In T. D. Nelson (Ed.), *Ageism: Stereotyping and prejudice against older persons* (pp. 129–161). Cambridge, MA: MIT Press.

Levy, B. R. (1996). Improving memory in old age through implicit self-stereotyping. *Journal of Personality & Social Psychology*, *71*, 1092–1107.

Levy, B. R. (2000). Handwriting as a reflection of aging self-stereotypes. *Journal of Geriatric Psychiatry*, *33*, 81–94.

Levy, B. R. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. *Journal of Gerontology: Psychological Sciences*, *58*, 203–211.
Levy, B. R., Hausdorff, J., Hencke, R., & Wei, J. (2000). Reducing cardiovascular stress with positive self-stereotypes of aging. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences*, *55*, 1–9.
Levy, B. R., Slade, M. D., & Gill, T. M. (2006). Hearing decline predicted by elders' stereotypes. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences,*, *61*, 82–87.
Mendoza-Denton, R., Downey, G., Purdie, V. J., Davis, A., & Pietrzak, J. (2002). Sensitivity to status-based rejection: Implications for African American students' college experience. *Journal of Experimental Social Psychology*, *83*, 896–918.
Metcalfe, J., & Mischel, W. (1999). A hot/cool system analysis of delay of gratification: Dynamics of willpower. *Psychological Review*, *106*, 3–19.
Minichiello, V., Browne, J., & Kendig, H. (2000). Perceptions and consequences of ageism: Views from older persons. *Ageing and Society*, *20*, 253–278.
Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, *102*, 246–268.
Nelson, T. D. (2002). *Ageism: Stereotyping and prejudice against older persons*. Cambridge, MA: MIT Press.
Nuessel, F. H. (1982). The language of ageism. *Gerontologist*, *22*, 273–276.
Pinel, E. C. (1999). Stigma consciousness: The psychological legacy of social stereotypes. *Journal of Personality and Social Psychology*, *76*, 114–128.
Pinel, E. C. (2002). Stigma consciousness in intergroup contexts: The power of conviction. *Journal of Experimental Social Psychology*, *38*, 178–185.
Pinel, E. C., & Paulin, N. (2005). Stigma consciousness at work. *Basic and Applied Social Psychology*, *27*, 345–352.
Pronin, E., Steele, C. M., & Ross, L. (2004). Identity bifurcation in response to stereotype threat: Women and mathematics. *Journal of Experimental Social Psychology*, *40*, 152–168.
Robinson, J. D., & Skill, T. (1995). The invisible generation: Portrayals of the elderly on prime-time television. *Communication Reports*, *8*, 111–119.
Robinson, T., & Anderson, C. (2006). Older characters in children's animated television programs: A content analysis of their portrayal. *Journal of Broadcasting and Electronic Media*, *50*, 287–304.
Robinson, T., Callister, M., Magoffin, D., & Moore, J. (2007). The portrayal of older characters in Disney animated films. *Journal of Aging Studies*, *21*, 203–213.
Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
Schmader, T. (2002). Gender identification moderates stereotype threat effects on women's math performance. *Journal of Experimental Social Psychology*, *38*, 194–201.
Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology*, *69*, 797–811.
Swim, J. K., Aikin, K. J., Hall, W. S., & Hunter, B. A. (1995). Sexism and racism: Old-fashioned and modern prejudice. *Journal of Personality and Social Psychology*, *68*, 199–214.
Wheeler, S. C., & Petty, R. E. (2001). The effects of stereotype activation on behavior: A review of possible mechanisms. *Psychological Bulletin*, *127*, 797–798.
Zebrowitz, L. A., & Montepare, J. M. (2000). "Too young, too old": Stigmatizing adolescents and elders. In T. F. Heatherton, R. B. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 334–373). New York: Guilford Press.

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Appendix
Age-Based Rejection Sensitivity Questionnaire

Instructions: Each of the items below describes new situations that people encounter. Some people are concerned about these new situations and others are not. Please imagine yourself in each situation and circle the number that best indicates how you would feel.

1. Imagine that you are updating your résumé and that you go to a résumé consultant for advice. The consultant recommends that you remove some items from your résumé.	
a) How **concerned/anxious** would you be that the consultant's recommendation to remove parts of your résumé is because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b) I would **expect** that the consultant's recommendation to remove parts of my résumé is because of my age.	1 2 3 4 5 6 very unlikely — very likely
2. Imagine that you are looking for an address and stop to ask someone directions. The person talks to you very slowly and in a high-pitched tone.	
a) How **concerned/anxious** would you be that the person is talking to you in this way because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b) I would **expect** that the person is talking to me in this way because of my age.	1 2 3 4 5 6 very unlikely — very likely
3. Imagine that you are shopping with a family member. You have some questions about a particular item.	
a) How **concerned/anxious** would you be that the sales clerk might direct his answers to your family member instead of you because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b) I would **expect** that the sales clerk might direct his answers to my family member instead of me because of my age.	1 2 3 4 5 6 very unlikely — very likely

Table continued

4. Imagine that you are taking a course offered at a local college to learn a new computer program.		
a)	How **concerned/anxious** would you be that you might be evaluated as less qualified than others in the class because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that I might be evaluated as less qualified as others in the class because of my age.	1 2 3 4 5 6 very unlikely — very likely
5. Imagine that you are at work trying to accomplish a difficult task. One of your coworkers sees you and asks you if you are sure you can handle the task alone.		
a)	How **concerned/anxious** would you be that your coworker is only asking you if you need help because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that my coworker would only ask me if I need help because of my age.	1 2 3 4 5 6 very unlikely — very likely
6. Imagine that you are at an ATM machine, doing your banking. You notice that the woman in line behind you keeps glancing at you.		
a)	How **concerned/anxious** would you be that the woman might be impatient with you because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that the woman might be impatient with me because of my age.	1 2 3 4 5 6 very unlikely — very likely
7. Imagine that you are hired to greet people as they sign in for a conference. After an hour, your supervisor tells you that they would rather have someone else greet people.		
a)	How **concerned/anxious** would you be that your supervisor replaced you because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that my supervisor replaced me because of my age.	1 2 3 4 5 6 very unlikely — very likely
8. Imagine that you have just completed a job interview over the telephone. You are in good spirits because the interviewer seemed enthusiastic about your application. Several days later, you complete a second interview in person. Your interviewer informs you that they will let you know about their decision soon.		
a)	How **concerned/anxious** would you be that you might not be hired because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that I might not be hired because of my age.	1 2 3 4 5 6 very unlikely — very likely
9. Imagine that you are applying for a volunteer position at your local theater. The theater prides itself on its fun and vibrant atmosphere.		
a)	How **concerned/anxious** would you be that you might not be chosen for the position because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that I might not be chosen for the position because of my age.	1 2 3 4 5 6 very unlikely — very likely

Table continued

Appendix ***(continued)***

10. Imagine that you are taking a few courses at your local college. You are sitting in your first class and your instructor encourages all the students to take some time to get to know one another.		
a)	How **concerned/anxious** would you be that you might be treated differently by the other students because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that the other students might treat me differently because of my age.	1 2 3 4 5 6 very unlikely — very likely
11. Imagine that you are involved in a minor accident while driving. It is unclear who is at fault.		
a)	How **concerned/anxious** would you be that the blame for the accident might be placed on you because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that the blame for the accident might be placed on me because of my age.	1 2 3 4 5 6 very unlikely — very likely
12. Imagine that you need some repairs done in your home. You hire someone to take care of the job.		
a)	How **concerned/anxious** would you be that you might be overcharged because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that I might be overcharged because of my age.	1 2 3 4 5 6 very unlikely — very likely
13. Imagine that you want to sign up for an exercise class at your local gym. The instructor informs you that this is a very popular class and not everyone will get a spot.		
a)	How **concerned/anxious** would you be that you might not get a spot in the class because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that I might not get a spot in the class because of my age.	1 2 3 4 5 6 very unlikely — very likely
14. Imagine that you have worked many years in a particular profession. Recently, an opportunity arose for a few employees to receive additional training.		
a)	How **concerned/anxious** would you be that you might not be selected for the training because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that I might not be selected for the training because of my age.	1 2 3 4 5 6 very unlikely — very likely
15. Imagine that you are applying for a part-time position close to your home. You are well qualified and have an excellent résumé prepared. When you hand in your résumé to the manager, you are told that the position was filled yesterday.		
a)	How **concerned/anxious** would you be that the manager told you that the position was filled because of your age?	1 2 3 4 5 6 very unconcerned — very concerned
b)	I would **expect** that the manager told me the position was filled because of my age.	1 2 3 4 5 6 very unlikely — very likely