Using the Relating to Older People Evaluation tool to measure ageism in higher education

Camille Cronin, Joanne Brooke

Abstract

Background The global population is ageing and this trend is expected to continue. Attitudes towards older people differ worldwide. Ageism is a complex, multifacet concept that includes attitudes and behaviours. In the UK, ageism and discriminatory practices exist in nursing, and educationalists and clinicians need to address ageist attitudes and promote the care of older people. In nursing there is a lack of synthesised evidence measuring ageism among nursing students.

Aim To explore the use of the Relating to Older People Evaluation (ROPE) questionnaire in different student populations in higher education, including nursing students.

Method A systematic search was conducted for articles written in English describing the use of ROPE, published between 2007 and 2017. Six quantitative studies were identified that met the inclusion criteria. Statistical analysis was not possible and a thematic analysis of these studies was completed.

Findings Two themes emerged: attitudes predict behaviour and socialisation to ageism in higher education. Ageist attitudes were correlated with negative ageist behaviours and the socialisation of nursing students in clinical practice increased ageist attitudes.

Conclusion Ageism and the ageist attitudes of nursing students must continue to be explored. ROPE is a suitable tool to measure nursing students' ageist attitudes and behaviours.

Keywords

ageism, discrimination, diversity, older people
practices related to a person’s age can have negative outcomes.

Nurses’ ageist attitudes negatively affect patient care, colleagues and mentored nursing students (Smith et al 2017). In the UK, ageism and discriminatory attitudes are evident in health and social care, for example, at policy level through to screening and accessing services (Ouchida and Lachs 2015).

Nursing students have been found to hold positive attitudes about the care of older people (Faroni et al 2017). However, ageist attitudes and behaviours have been found to increase during nursing education (Frost et al 2016). Nursing students’ perceptions during clinical placements are often influenced by registered nurses who can hold negative attitudes towards older people (Hovey et al 2017).

After placements, nursing students describe the care of older people as less desirable (Smith et al 2017), repetitive and unchallenging (Gould et al 2013), undemanding and depressing (Carlson and Idvall 2015), and, consequently, few nursing students see care of older people as a good career (Neville 2016). However, studies in Norway and Australia have shown that early placements in care of older people have improved nursing students’ experiences of working in the specialty (Robinson and Cubit 2007, Skaalvik et al 2010).

The development of the care of older people in higher education (HE) and in nursing practice can address ageism and promote person-centred care (Hovey et al 2017). Educational strategies to address ageism can transform attitudes and increase students’ intentions, knowledge and capacities to work with older people (Brown and Bright 2017). However, it is difficult to study nursing students’ attitudes because of the lack of a valid and reliable measure of ageism.

Kogan’s (1961) Attitudes Toward Older People Scale is a tool that measures attitudes towards older people. It has 17 positive and 17 negative items consisting of three domains: personal appearance, resemblance and the nature of interpersonal relations across generations. This tool has been translated into many languages and has been used around the world (Runkawatt et al 2016). However, we wanted to explore ageism in nursing using an alternative tool that measured only personal discrimination, negative or positive.

The Relating to Older People Evaluation (ROPE) tool is a self-report questionnaire designed to measure positive and negative attitudes towards older people, and the frequency and types of ageist behaviours in the sample population (Cherry and Palmore 2008).

The word ageism has deliberately not been included in the tool to encourage honesty from respondents about their behaviours and perceptions. ROPE identifies the prevalence, type and most reported ageist behaviours. It measures six positive and 14 negative ageist behaviours (Cherry and Palmore 2008) (Box 1). The questionnaire’s internal validity and reliability have been established, and the internal consistency reliability is adequate (0.70) (Cherry and Palmore 2008).

An understanding of UK nursing students’ prejudices and attitudes is essential to develop education programmes, socialise students in the workplace and develop a nursing workforce for the future. To achieve this, we need to identify a valid and reliable tool to measure nursing students’ attitudes towards older people.

Box 1: The 20-item Relating to Older People Evaluation tool

1. Compliment old people on how well they look, despite their age
2. Send birthday cards to old people that joke about their age
3. Enjoy conversations with old people because of their age
4. Tell old people jokes about old age
5. Hold doors open for old people because of their age
6. Tell an old person ‘You’re too old for that’
7. Offer to help an old person across the street because of their age
8. When I find out an old person’s age, I may say, ‘You don’t look that old’
9. Ask an old person for advice because of their age
10. When an old person has an ailment, I may say, ‘That’s normal at your age’
11. When an old person can’t remember something, I may say, ‘That’s what they call a senior moment’
12. Talk louder or slower to old people because of their age
13. Use simple words when talking to old people
14. Ignore old people because of their age
15. Vote for an old person because of their age
16. Vote against an old person because of their age
17. Avoid old people because of their age
18. Avoid old people because they are cranky
19. When a slow driver is in front of me, I may think, ‘It must be an old person’
20. Call an old woman ‘young lady’, or call an old man ‘young man’

(Cherry and Palmore 2008)
Aim
The aim of this study was to explore the use of ROPE (Cherry and Palmore 2008) in different student populations in HE, including nursing students.

Method
We conducted a comprehensive search of published literature using systematic review guidelines (Bettany-Saltikov 2012). We searched the following electronic databases: EBSCOhost (which included CINAHL Plus, MEDLINE, PsycINFO, PsycARTICLES), Web of Science, ScienceDirect, Wiley Online and Google Scholar.

Search terms included the use of recognised medical subject headings and specific headings: ‘student nurse’ or ‘nursing student’ (including other healthcare worker terms: nurses, healthcare professional, healthcare providers, physician/doctor, healthcare assistant/support workers), AND ‘older people’ (including older adults, elder*, seniors, aged, geriatrics) AND ‘attitudes’ (including prejudice, ageist language/behaviour, attitude towards, discrimination, stigma, stereotyping, ageism, labelling). Hand searching of journals and reference lists of articles identified was also completed. The search strategy is presented in Figure 1.

Inclusion and exclusion criteria
We included primary data from studies using ROPE with HE students and university staff published in English between 1 June 2007 and 31 December 2017; and studies published after Cherry and Palmore’s (2008) work. We excluded studies involving participants who were not in HE, those involving clinicians such as social workers or clinical psychologists, etc.
articles published before 2007, and discussion and opinion articles.

Findings
The search identified 2,747 articles with 31 additional articles found through hand searches giving a total of 2,778. Duplicates were removed (n=1,442) and the remaining articles were screened (n=1,336).

Articles were screened by title (n=895) and abstract (n=434), but seven could not be retrieved. Thirty eight full-text articles were excluded as data from ROPE were not presented and two were excluded due to the type of trainee, leaving six quantitative articles (Table 1).

Data extraction, analysis and synthesis
Both authors reviewed each study to ensure that it met the inclusion criteria. We extracted data from all studies, including the components of each study (Table 1). Due to the nature of data in these six studies, further statistical analysis was not possible; however, we report the statistically significant differences detailed in each study. A narrative review of the results was completed (Ryan 2013).

Quality appraisal
We critically appraised all the studies using a survey checklist (Rees et al 2015). The checklist enabled us to consider the quality and appropriateness of each study for methodology, design, recruitment strategy, data collection, data analysis, findings and the value of the research (Rees et al 2015). While all six studies followed a clear structure, there was a lack of consistency in how elements of internal and external validity were reported, including methods of randomisation, loss at follow-up, and calculations of study power. Consequently, data extraction and analysis were limited and could only be carried out on three studies thereby limiting the scope of this article.

Overview of studies
The studies identified were completed in Australia (Frost et al 2016), Israel (Shiovitz-Ezra et al 2016), Spain (García and Troyano 2013) and the US (Cherry and Palmore 2008, Cherry et al 2015, 2016). The studies looked at different populations including adolescents attending high school; undergraduate and graduate students; first-year nursing students; young, middle-aged and older adults enrolled on university courses; university staff; the general population over 21 years of age showing a high level of education; and community-dwelling older adults (Table 1).

Ageism tools used in the studies
As well as ROPE, Cherry et al (2015) also used the Marlowe-Crowne Social Desirability Scale (M-C SDS) (Crowne and Marlowe 1960), a 33-item self-report instrument to assess whether or not respondents were concerned with social approval, and the Fraboni Scale of Ageism (FSA) (Fraboni et al 1990), a 24-item instrument using a 6-level Likert scale to examine different attitudes such as prejudice, avoidance and discrimination.

Correlation analyses of ROPE and M-C SDS found a small but significant correlation between ROPE positive items and M-C SDS scores (r=0.16, P<0.1), indicating that positive ageism responses are associated with greater social desirability. The ageist attitudes and ageist behaviours of the FSA correlated with positive and negative scores from ROPE, which was significant with age (r=0.15, P=0.01). Shiovitz-Ezra et al (2016) also used the Facts on Aging Quiz (Palmore 1998), comprising 25 multiple-choice questions to evaluate knowledge about older people, with the M-C SDS and the FSA.

Correlation analyses of the three scales found a negative relationship between knowledge, negative and explicit attitudes of ageism. As knowledge increased, there was a tendency for less negative expressions and less ageist attitudes. Four studies reported the mean and standard deviation of positive and negative ageist behaviours (Cherry and Palmore 2008, Cherry et al 2015, 2016, Frost et al 2016).

Data have been extracted from selected studies and are presented in Table 2, which shows the positive and negative ROPE statements, and the percentage of respondents that agreed with these statements ‘never’, ‘sometimes’, ‘often’ and ‘usually’. Generally, positive statements attracted higher percentages of ‘sometimes’ and ‘often’ responses, and negative statements yielded higher percentages of ‘never’ responses. Three studies reported percentages of positive and negative behaviours for participants per question (Cherry and Palmore 2008, Frost et al 2016, Shiovitz-Ezra et al 2016). Shiovitz-Ezra et al (2016) excluded three ROPE questions, which is why only 11 negative statements are shown in Table 2, while García and Troyano (2013) presented percentages of overall positive and negative behaviours, which is why this study is not included in Table 2.
Knowledge of ageing was significantly correlated between ROPE positive items and ageism. Women endorsed more positive discriminative behaviour to older adults than men. Ageist attitudes correlated with negative ageist behaviours and attitudes. Greater endorsement of positive compared to negative ageist items and the social desirability of age was assessed along with ROPE conclusions.

### Methods

**Study 1:**
- **ROPE:** Relating to Older People Evaluation
- **FSA:** Fraboni Scale of Ageism
- **KMAQ:** Knowledge of Memory Aging Questionnaire
- **MC-SDS:** Marlowe-Crowne Social Desirability Scale

**Study 2:**
- **FAQ:** Facts on Aging Quiz
- **ROPE:** Self-reported ageism
- **M-C SDS:** Marlowe-Crowne Social Desirability Scale

### Setting

**University community**
- **Study 1:**
  - Undergraduate students (n=63)
  - Graduate students (n=65)

**Community adults:**
- **Study 2:**
  - Undergraduate students 1 (n=21)
  - Undergraduate students 2 (n=61)
  - Graduate students (n=69)
  - Middle-aged adults (n=55)
  - Older adults (n=49)

### Participants

**Study 1:**
- College students (n=147)
- Community-dwelling older adults (n=120)
- Various members of the university community (n=47)
  - Age range 18-98

**Study 2:**
- Adolescents (n=42)
- Young adults (n=84)
- Middle-aged adults (n=43)
- Older adults (n=33)
  - Age range 15-31

### Results

Ageist behaviour was 'high' in various scales of ageism. Frequencies, percentages, means, and standard deviations were used to test reliability. ANOVAs were conducted for age, ANCOVA for gender, Pearson's correlations of age discriminative behaviours, and frequencies, percentages, means, and standard deviations. The importance of providing educational information on ageing in an undergraduate curriculum and education was discussed.

### Strategies for reducing ageist attitudes

- Workshops for professionals who work with various members of the university community.
- Educational information on ageing in an undergraduate curriculum and education.
- Strategies for reducing ageist attitudes among ROPE dimensions.

### Table 1. Results of systematic review

<table>
<thead>
<tr>
<th>Study, country</th>
<th>Aim</th>
<th>Methods</th>
<th>Setting</th>
<th>Participants</th>
</tr>
</thead>
</table>
| Cherry and Palmore (2008) US | To develop a measure of people's ageist behaviours as they relate to older adults in daily life | 20-item questionnaire: ROPE Self-reported ageism | University community | n=314
  - College students (n=147)
  - Community-dwelling older adults (n=120)
  - Various members of the university community (n=47)
  - Age range 18-98 |
| Cherry et al (2016) US | To examine the role of social desirability in self-reported ageist behaviours | Questionnaires used for both studies: Study 1: ROPE, M-C SDS Study 2: ROPE, M-C SDS, FSA | University community | Study 1: n=190
  - Graduate students (n=65)
  - Community adults (n=62)
  - Study 2: n=255
  - Undergraduate students 1 (n=21)
  - Undergraduate students 2 (n=61)
  - Graduate students (n=69)
  - Middle-aged adults (n=55)
  - Older adults (n=49) |
| Cherry et al (2016) US | To examine age-related differences in self-reported ageist behaviours and ageing knowledge | Questionnaires: ROPE 25 true or false item FAQ 28 true or false item KMAQ | High school, university, Alzheimer seminar, retirement community | n=202
  - Adolescents (n=42)
  - Young adults (n=84)
  - Middle-aged adults (n=43)
  - Older adults (n=33)
  - Age range 15-31 |
| Frost et al (2016) Australia | To describe prevalence of ageist behaviours among first-year undergraduate nursing students | Cross-sectional survey design ROPE | University, first semester of clinical unit | n=185
  - First-year undergraduate nursing students |
| Garcia and Troyano (2013) Spain | To determine the prevalence of age discriminatory behaviours in Andalusia, and which types of discriminative behaviours are more frequent | ROPE | University of Seville | n=108
  - Fourth and fifth-year psycho-pedagogy students, aged 21-53 (n=34)
  - Older student body, aged 54-82 (n=74) |
| Shiovitz-Ezra et al (2016) Israel | To create a national measurement tool for ageism | Pilot study ROPE FAQ FSA | University | n=92
  - Participants (aged 21 and above) from general population
  - Random sampling by geographical area
  - With telephone
  - Jewish and Hebrew speakers
  - 26% aged 60+ |
<table>
<thead>
<tr>
<th>Analysis</th>
<th>Results</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prevalence</strong>&lt;br&gt;Frequency&lt;br&gt;Age&lt;br&gt;Gender&lt;br&gt;Mean and SD to test reliability and validity&lt;br&gt;ANOVA, Pearson's r and Cronbach's alpha to examine internal consistency reliability</td>
<td>No RR&lt;br&gt;No RR&lt;br&gt;Greater endorsement of positive compared with negative ageist items&lt;br&gt;94% hold doors open for old people because of age&lt;br&gt;Gender differences showed women favoured positive items&lt;br&gt;Age: younger and older difference the same</td>
<td>Future research needed in which ageing is assessed along with ROPE conclusions on the role of ageing knowledge in relating to older adults&lt;br&gt;The importance of providing educational information on ageing in an undergraduate curriculum and education workshops for professionals who work with older people</td>
</tr>
<tr>
<td><strong>Mean</strong>&lt;br&gt;ANOVA&lt;br&gt;Pairwise comparison&lt;br&gt;Correlation analysis&lt;br&gt;Covariance analysis&lt;br&gt;ANCOVA</td>
<td>No RR&lt;br&gt;No RR&lt;br&gt;Significant relationship between scores on the positive ageist items and the social desirability scale in both studies&lt;br&gt;Ageist attitudes correlated with negative ageist behaviours in study 2&lt;br&gt;Correlation between ROPE positive items and MC-SDS scores: r=0.16, p&lt;0.1</td>
<td>Strategies for reducing ageist attitudes and behaviours</td>
</tr>
<tr>
<td><strong>Mean</strong>&lt;br&gt;Mixed ANOVA&lt;br&gt;Pairwise comparisons</td>
<td>No RR&lt;br&gt;No RR&lt;br&gt;Adolescents and young adults reported fewer ageist behaviours&lt;br&gt;Positive ageist behaviours more frequent&lt;br&gt;Women endorsed more positive behaviours than men but no difference in frequency of negative behaviours&lt;br&gt;Knowledge of ageing was significantly correlated with less negative ageist behaviours after controlling for age and gender</td>
<td>Negative and positive views of ageism discussed</td>
</tr>
<tr>
<td><strong>Descriptive statistics using</strong>&lt;br&gt;Predictive Analytics Software V8 (frequency, %, mean, SD)</td>
<td>85% RR&lt;br&gt;15% male&lt;br&gt;15% worked in aged care&lt;br&gt;63% indicated they would work in aged care&lt;br&gt;Ageist behaviour was 'high'&lt;br&gt;98% reported they would 'hold doors open for old people because of their age'</td>
<td>Further research to justify widespread ageism&lt;br&gt;Interventional and longitudinal studies needed&lt;br&gt;Mask-Ed™ simulation technique*</td>
</tr>
<tr>
<td><strong>Frequency analysis</strong></td>
<td>No RR&lt;br&gt;No RR&lt;br&gt;98% discriminative behaviour&lt;br&gt;91% and 86% for two positive behaviours&lt;br&gt;Age discrimination 90%&lt;br&gt;Culture and age discrimination behaviours: F (1, 108) = 92.05, P&lt;0.001&lt;br&gt;Gender differences similar, women showed more positive discriminative behaviour to older adults than men&lt;br&gt;84% reported intergenerational relationships with grandparents</td>
<td>Most positive behaviours&lt;br&gt;Young and older adults reinforce behaviour, gender frequency of positive behaviour higher&lt;br&gt;Social perception towards older people a social phenomenon&lt;br&gt;Strategies needed to reduce negative behaviours towards older people in daily life</td>
</tr>
<tr>
<td><strong>Frequencies, t-test for independent groups, that is, gender</strong>&lt;br&gt;ANOVA for age, correlations of various scales of ageism</td>
<td>52% RR&lt;br&gt;Knowledge, attitudes and behaviour were combined in the framework for a single national-based survey&lt;br&gt;No significant difference on age and gender for knowledge&lt;br&gt;Rejected ageist comments&lt;br&gt;With knowledge less negative expressions and less ageist attitudes</td>
<td>Represents the first steps in learning about ageism in Israel</td>
</tr>
</tbody>
</table>

*Mask-Ed™ is a simulation technique in which a trained educator dons silicone props to portray a realistic character, which becomes the platform for learning.*
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliment old people on how well they look, despite their age</td>
<td>10</td>
<td>8</td>
<td>11</td>
<td>50</td>
<td>57</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Enjoy conversations with old people because of their age</td>
<td>7</td>
<td>3</td>
<td>9</td>
<td>38</td>
<td>41</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td>Hold doors open for old people because of their age</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>29</td>
<td>23</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>65</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Offer to help an old person across the street because of their age</td>
<td>41</td>
<td>24</td>
<td>25</td>
<td>44</td>
<td>54</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Ask an old person for advice because of their age</td>
<td>16</td>
<td>9</td>
<td>25</td>
<td>53</td>
<td>60</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>31</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Vote for an old person because of their age</td>
<td>81</td>
<td>74</td>
<td>71</td>
<td>16</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Negative statements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tell an old person, &quot;You're too old for that&quot;</td>
<td>83</td>
<td>86</td>
<td>85</td>
<td>14</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>When an old person has an ailment, I may say, &quot;That's normal at your age&quot;</td>
<td>63</td>
<td>58</td>
<td>73</td>
<td>32</td>
<td>40</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>When I find out an old person's age, I may say, &quot;You don't look that old&quot;</td>
<td>19</td>
<td>15</td>
<td>34</td>
<td>55</td>
<td>56</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Talk louder or slower to old people because of their age</td>
<td>31</td>
<td>13</td>
<td>34</td>
<td>54</td>
<td>61</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>Use simple words when talking to old people</td>
<td>64</td>
<td>40</td>
<td>54</td>
<td>29</td>
<td>38</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Ignore old people because of their age</td>
<td>87</td>
<td>96</td>
<td>99</td>
<td>12</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tell old people jokes about old age</td>
<td>56</td>
<td>60</td>
<td>77</td>
<td>33</td>
<td>35</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Vote against an old person because of their age</td>
<td>89</td>
<td>89</td>
<td>84</td>
<td>11</td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Avoid old people because of their age</td>
<td>78</td>
<td>89</td>
<td>88</td>
<td>21</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Avoid old people because they are cranky</td>
<td>62</td>
<td>75</td>
<td>76</td>
<td>37</td>
<td>25</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>When a slow driver is in front of me, I may think, &quot;It must be an old person&quot;</td>
<td>32</td>
<td>28</td>
<td>64</td>
<td>50</td>
<td>57</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

Cherry et al (2015, 2016) and García and Troyano (2013) are excluded from Table 2 because meaningful data could not be extracted and analysed; Shiovitz-Ezra et al (2016) excluded three ROPE questions, which is why only 11 negative statements are shown.
Themes
The two main themes that emerged from the narrative review were ‘attitudes predict behaviour’ and ‘socialisation to ageism in HE’.

Attitudes predict behaviour
Generalised discriminative behaviours occurred across all groups: most respondents admitted one or more ageist behaviour (Cherry and Palmore 2008), and ageist attitudes were correlated with negative ageist behaviours (Cherry et al 2015). Cherry et al (2016) and Shiovitz-Ezra et al (2016) reported more positive ageist behaviours.

In the study by Frost et al (2016), 98% of respondents reported that they would ‘hold doors open for old people because of their age’, and 98% reported that they would ‘ask an old person for advice because of their age’ in the study by García and Troyano (2013).

The reporting of ageist behaviours across age and gender was inconsistent across studies. Adolescents and younger adults reported fewer ageist behaviours than middle-aged and older adults, and women reported more positive ageist behaviours (Cherry et al 2016).

Women reported fewer negative ageist behaviours in the study by Shiovitz-Ezra et al (2016), whereas García and Troyano (2013) found some gender similarities but women showed more positive discriminative behaviour to older people than men. Nursing students were 83% women and ageist attitudes became stronger as their studies progressed (Frost et al 2016).

Cherry et al (2016) examined the prevalence of self-reported ageist behaviours in a lifespan sample and found positive ageist behaviours were more frequent than negative behaviours for all ages; women endorsed more positive ageist behaviours than men, although neither gender differed in frequency of negative ageist behaviours.

The Facts on Aging Quiz (Palmore 1998) and the Knowledge of Memory Aging Questionnaire (Cherry et al 2003), a 28-item true-false tool designed to measure laypersons’ knowledge of memory changes in later life, showed that knowledge of ageing was significantly positively correlated with less negative ageist behaviours, after controlling for age and gender (Cherry et al 2016).

Socialisation to ageism in higher education
All studies used ROPE with students and other members of the university community. García and Troyano (2013) used ROPE with two student groups, fourth- and fifth-year psycho-pedagogy students and older students, with 84% reporting intergenerational relationships with grandparents. Both groups of students displayed frequent age discrimination behaviours, with positive behaviours being reported more often than negative ones. There was no significant difference between the age of students and the positive or negative behaviours reported.

Cherry et al (2015, 2016) found ageist views of undergraduate and graduate students in other sample groups scored higher than positive ageist views. Students’ ageist attitudes were correlated with negative ageist behaviours and were found to be significantly lower than older adult groups. Cherry et al (2016) found adolescents and young adults reported fewer ageist behaviours and higher frequency of positive ageist behaviours (Table 1).

Nursing students reported engaging in ageist behaviours as they progressed through their studies, which can negatively affect future relationships with older patients (Frost et al 2016). Frost et al (2016) surveyed 185 first-year undergraduate nursing students; while 63% considered working in care of older people, 98% reported engaging in some ageist behaviour and 88% reported talking slower and/or louder to an older person because of their age. Understanding ageism in nursing can provide structure to students’ learning experiences and can help to recognise ageism in one’s own practice (Frost et al 2016).

Discussion
The themes identified in this review highlight that positive and negative ageist attitudes and behaviours continue to exist in HE.

Attitudes predict behaviour
Knowledge, attitudes and behaviour influence positive and negative ageist behaviours (Cherry et al 2015). This was not consistent across groups such as young, middle-aged and older people, nor consistent in people of the same gender, and also was not consistent according to group or gender and the behaviour towards older people.

Positive and negative ageist beliefs and behaviours change over time. Socialisation of nursing students in clinical practice increased ageist attitudes (Frost et al 2016). Ageism and discriminatory behaviour exist in healthcare professionals and can influence nursing students’ values and beliefs (Hovey et al 2017). Ageist perceptions towards older people in the healthcare environment must be addressed in

Implications for practice
- Ageism continues to exist but there is no synthesised evidence that measures ageism among nursing students
- The Relating to Older People Evaluation is a suitable tool to measure nursing students’ ageist attitudes and behaviours
- Educators and clinicians must continue to challenge ageism and support the development of positive attitudes in the future nursing workforce
- Undergraduate nursing curricula should include discussion of the ageing process and ageist attitudes to dispel prejudices
nursing curricula to support nursing students to recognise negative beliefs and behaviours (Band-Winterstein 2015).

This review identified the need for information on the ageing process to be disseminated to people of all ages, and for continuing education to be provided to healthcare professionals who work with older people (Cherry et al 2016). Cultural differences were identified in the study by Shiovitz-Ezra et al (2016), which is a significant factor influencing attitudes towards older people (Jones and Allen 2013).

Ageism can be overcome by understanding how different cultures treat older people, how care is provided and how ageing is perceived. With particular reference to the care of older people with dementia, the provision of culturally appropriate person-centred care is essential (Brooke et al 2018).

Developing educational interventions and promoting awareness of ageism through the media may highlight its realities; however, positive and negative behaviours must be disseminated to illustrate their effects on older people (Brown and Bright 2017).

Smith et al (2017) suggested integrating other programmes of study such as gerontology or social work to help students understand the ageing process. Multidisciplinary teaching in nursing curricula would highlight the complex nature of ageing and the importance of a collective approach to support healthy ageing of the population.

Socialisation to ageism in higher education

In HE and particularly in nursing, nursing students are socialised into their new profession with pre-existing ageist beliefs (Neville 2016). Clinical placements with older people may increase ageism in the future workforce (Wilson et al 2017). Consequently, healthcare curricula, including nursing, must address ageism and ageist views in clinical practice (Farobini et al 2017).

Positive cultural behaviours and attitudes towards ageing are instilled when adolescents and adults are socialised early with older people (Shiovitz-Ezra et al 2016).

An Australian study that explored the socialisation of nursing students in their new roles in the care of older people examined intentions and perceptions; it found that while students deemed working with older people to be challenging, interesting and stimulating, they also described working with older people as basic care (Neville 2016). This is consistent with the view that early socialisation of adolescents and adults with older people affirms positive cultural behaviours and attitudes towards ageing. While Neville (2016) recommends earlier exposure to care of older people, this approach needs to be supported in education and practice.

Nursing students’ HE and clinical practice are important elements of professional socialisation, and there is an urgent need to influence the understanding of ageing, the ageing process, dementia and healthcare provision (Farobini et al 2017).

Appropriate education for nursing students, registered nurses and other healthcare professionals is necessary for the provision of person-centred care for older people (Wilson et al 2017). In the only study with a nursing student sample, Frost et al (2016) suggested that students should self-administer ROPE so that they can learn to recognise their own ageist practices. Frost et al (2016) also recommended early implementation of ROPE in nursing programmes.

ROPE is a valid tool that is comparative to the Facts on Aging Quiz (Palmore 1998) and the Knowledge of Memory Aging Questionnaire (Cherry et al 2003). The successful introduction of ROPE in nursing education to assess ageism may help to raise awareness of everyday ageist practices and help to change ideas and values about the care of older people (Frost et al 2016). Measuring the ageist attitudes of nursing students entering the healthcare workforce might be necessary to ensure negative attitudes are addressed to support an ageism-free workforce (Wilson et al 2017).

Limitations

The review was limited to articles published in the English language and highlighted the limited use of ROPE in nursing students. Further limitations include small sample sizes and a reliance on convenience samples in HE.

Implications for practice and education

This review highlights the importance of providing appropriate educational information on the ageing process and ageing in different curricula in HE for nurses working with older people. Furthermore, this needs to be comprehensive and inclusive as people from other occupations, with varying educational backgrounds and occupational experiences in social services, readily admitted to positive ageist behaviours (Brown et al 2011).

Due to an ageing population, educational programmes should focus on improving...
knowledge of ageing, care of older people and how to measure the attitudes of healthcare professionals and those entering healthcare professions (Wilson et al 2017).

Conclusion
The aim of this study was to explore the use of ROPE to examine ageist attitudes in English-speaking student populations, including nursing students, and to provide a narrative review of the results. The study found that ROPE has had limited use as a means of assessing ageism in nursing students. The results of the narrative review present a number of issues for UK nursing practice. There are mixed views on ageism and the complexities of defining ageism are noted in the gerontological literature.

While the review included articles examining different student groups, it is difficult to draw any conclusions to translate their findings into nurse education. The themes of attitudes predict behaviour and socialisation to ageism in HE must be challenged in all universities so that older people remain integrated in society. Educators and clinicians must challenge and change ageist attitudes and promote an inclusive society and healthcare practice.

References


