

Review

Ageing: The Role of Ageism

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Abstract

Worldwide, people are living longer but not necessarily experiencing optimal health since healthy ageing stems from a combination of biological, psychological, and social factors. The growing interdisciplinary literature on ageism from fields such as education, medicine, psychology, and social work increasingly highlights the pivotal role that ageism plays in ageing. Ageism is generally an overlooked factor in understanding and fostering healthy ageing. Ageism creates a negative view of the ageing process as marked by inevitable deterioration and decline, and ageism sets in motion wide-reaching negative biopsychosocial consequences for people along the lifespan. To contribute to a fuller understanding of factors that influence healthy ageing, this article applies an interdisciplinary, biopsychosocial approach to ageing by integrating insights from the burgeoning literature on ageism. The role of ageism on ageing is reviewed as a double-edged sword in terms of how (1) being the target of ageism on the one side (e.g., someone being treated as incompetent, forgetful, sickly or as a burden) leads to negative physical, psychological, and social consequences and how (2) being the perpetrator of ageism on the other side (e.g., someone poking fun of, avoiding, or bullying older adults for their age or older appearance) also leads to negative physical, psychological, and social consequences. Across one's life and/or during particular periods of one's life, the same person may be both a target and perpetrator. This article



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reviews findings showing how combating ageism in turn can improve healthy ageing. This review reaches the conclusion that the study of ageism and its reduction is an important piece in the puzzle of understanding how to foster healthy ageing. In light of the serious nature of ageism and the growing older population worldwide, it is timely and necessary for research on ageing to increasingly consider the intervening role of ageism on healthy ageing.

Keywords

Ageism; anxiety; biopsychosocial; healthy ageing; intergenerational; psychological; successful ageing

1. Introduction

Around the world, people are living longer than ever before. “Today, for the first time in history, most people can expect to live into their sixties and beyond [...] There is, however, little evidence to suggest that older people today are experiencing their later years in better health than their parents” [1]. As examples, there is mixed evidence on whether instances of severe disabilities (e.g., chronic illnesses) in some high-income countries has declined, and the evidence supporting better health is less clear for individuals living in low-income and middle-income countries [1]. Older adults today may not be experiencing better overall health worldwide because of a combination of biological, psychological, and social forces that determine healthy ageing [2]. A generally overlooked yet important factor is ageism including negatively stereotyping of older adults as difficult, forgetful, helpless, inept, and sickly, as well as avoidant, disrespectful, discriminatory, and abusive behaviour toward older adults [3-5]. The literature on ageism is increasingly pinpointing how ageism has far-reaching negative effects on healthy ageing including physical, psychological, and social consequences on individuals across lifespan. Elder abuse, for example has become “an important public health problem” with a 2017 study of 28 countries revealing that 15.7% of respondents who were 60 years and older reported some kind of elder abuse, which likely reflects an underestimation of the problem [6]. Indeed, the World Health Organization noted that “ageism may now be more pervasive than sexism or racism [7],” and ageism is the most socially condoned form of prejudice [3, 8]. Studies show people indeed buy into these prevalent negative stereotypes, which set in motion a self-fulfilling cycle of more sedentary lifestyles, decreases in cognitive functioning, decline in overall health, and a shorter lifespan [4, 9]. Quantifying the serious health consequences of ageism for society, a recent study of adults 60 years and older across one year in one country, United States, calculated that ageism resulted in 17.04 cases of health conditions (e.g., cardiovascular disease, chronic respiratory disease, Diabetes Mellitus) and a 1 year cost of \$63 billion [10].

Yet even as the World Health Organization, the United Nations, and others raise awareness with compelling findings elucidating the impact of ageism on healthy ageing worldwide, research on ageism tends to be isolated from research on ageing. Relatively few studies within the large ageing literature consider the potentially powerful role of ageism or include measures of ageism [3-5]. This separation of the literatures on ageing and ageism is unfortunately longstanding. “Ageism and theories of aging tend to bypass each other [;] Furthermore, none of the major

theories of aging were designed to explain ageism, nor has much effort been made to discover possible links” ([11] p 318-319). Ageism research has tended to examine ageism among young adults and only more recently has focused on the effects of ageism throughout the lifespan and across ageing. Illustrating that the separation of two literatures persists, a literature search conducted on May 30, 2019 using the search terms “ageing [aging] and ageis*” produced only 1058 results for PsycINFO and 160 results for MEDLINE whereas a search of “ageing [aging]” produced significantly more results -- 124,093 results for PsycINFO and 53,063 results for MEDLINE.

To contribute to a fuller understanding of factors that influence healthy ageing, this article applies an interdisciplinary, biopsychosocial approach to ageing by integrating insights from the burgeoning literature on ageism. The first main section of this article briefly defines the nature of ageism. The second main section reviews the numerous ways - biopsychosocial ways - in which ageism impedes healthy ageing across the lifespan. As depicted in Figure 1, the role of ageism on ageing is reviewed as a double-edged sword in terms of how (1) being the target of ageism on the one side (e.g., someone being treated as incompetent, forgetful, sickly or as a burden) leads to negative physical, psychological, and social consequences and how (2) being the perpetrator of ageism on the other side (e.g., someone poking fun of, avoiding, or bullying older adults for their age or older appearance) also leads to negative physical, psychological, and social consequences. Across one’s life and/or during particular periods of one’s life, the same people may be both a target and perpetrator. After reviewing the far-reaching effects of ageism on ageing, the third main section of this article reviews the promising set of findings showing how combating ageism in turn can improve healthy and successful ageing (physical, psychological, social) for individuals along the lifespan. Together, the review concludes that to have a fuller understanding of healthy ageing, ageism needs to be considered in studies of ageing (and vice versa) and greater attention needs to be given to reducing ageism as one of the important pathways to fostering healthy ageing.

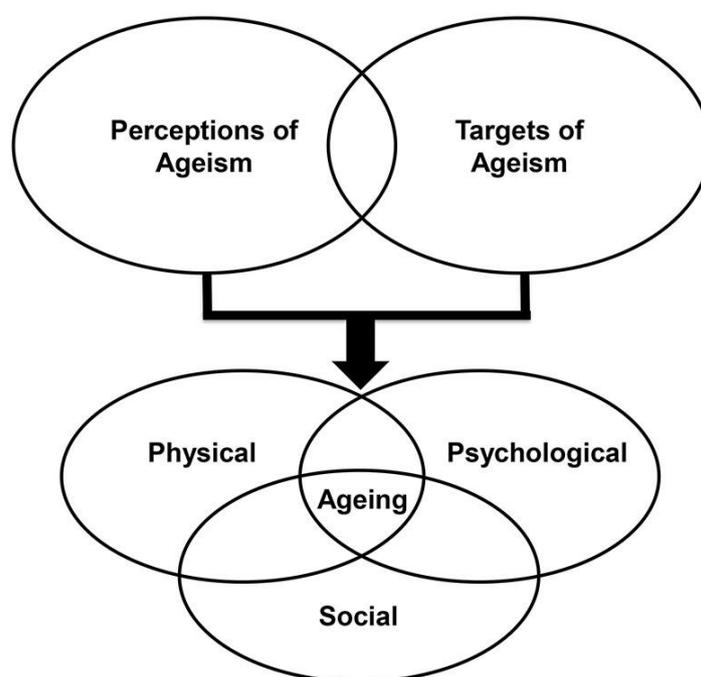


Figure 1 The role of ageism on ageing.

2. Ageism Casts a Wide Net

Today, ageism casts a wide net as it has become deeply woven into many societies as accumulating evidence point to individuals buying into ageism and being influenced by ageism as either or both perpetrators of and targets of ageism. Historically, older adults were mostly viewed as wise, respected, and revered contributors to families and communities, and many modern societies still include characterizations of some older adults as caring, cheerful, helpful, knowledgeable, reliable workers, and wise [3, 8]. Yet, the shift toward youth-oriented societies with increasing communication of negative characterizations of older adults and ageing, have taken hold in many societies [3, 5]. In 1969, the term “ageism” was introduced by Robert Butler as “a form of bigotry we now tend to overlook: age discrimination or age-ism” and as “personal revulsion to and distaste for growing old, disease, disability” [12]. In 1980, Butler further noted “three distinguishable yet interrelated aspects to the problem of ageism: 1) Prejudicial attitudes toward the aged, toward old age, and toward the aging process, including attitudes held by the elderly themselves; 2) discriminatory practices against the elderly, particularly in employment, but in other social roles as well; and 3) institutional practices and policies which, often without malice, perpetuate stereotypic beliefs about the elderly, reduce their opportunities for a satisfactory life and undermine their personal dignity” ([13] p. 8). Unfortunately, each of these three interrelated pieces of ageism has worsened over time such that ageism negatively influences healthy ageing across the lifespan. It should be noted that younger adults can also be the targets of ageism (discrimination based on age) such as negative bias in the workplace that can negatively affect their behaviour and outcomes; however, the focus of this article is on ageism toward older adulthood. To understand the role of ageism in ageing, we take a closer look at the problem of ageism toward older adulthood.

As the first part of the problem, prejudiced attitudes toward old age and the ageing process increasingly manifested as a set of negative views of older adults as boring, forgetful, grumpy, incompetent, sickly, and unattractive as cultures worldwide became more youth-centered [3, 14]. With population ageing -- the rapid growth of the older segment of the population worldwide -- the number of adults aged 60 and over has nearly doubled and will for the first time in recorded history outnumber the population of children under the age of 5 [7]. Global news reports convey heightened concerns about how caring for the growing older population “will” deplete resources and bankrupt communities and families [15]. The growing older population worldwide has been likened to a disaster such as a burden to society in China [16], “catastrophe” and “dangerous wave” in Poland ([17] p. 339) and “threat” to the economic future in the UK ([18] p. 812). An analysis of ageist stereotypes in printed media using the Corpus of Historical American English revealed that negative stereotypes such as the depiction of older adults as sickly and older adulthood as a time of deterioration increased significantly since 1810 [19]. At the same time, news reports overflow with inaccurate assertions that *all* individuals face the *same* health issues with age and further characterize ageing as a period of inevitable decay and decline in cognition, competence, and happiness. For example, there are frequent news stories about Alzheimer's disease, with titles like “Aging baby boomers are about to push Alzheimer's disease rates sky high” that exaggerate the onset as younger and incidence rate as significantly higher than they actually are [20]. Specifically, these news stories conflate early-onset and late-onset Alzheimer's, characterizing the age of onset and course of the disease as much more homogenous than the ageing literature suggests [21].

One news article claims one in three adults will develop the disease in their lifetime [20], but this statistic actually refers to the estimate that one in three people over the age of 65 dies showing some signs of dementia, not necessarily Alzheimer's disease [22]. More accurately, one in ten adults over the age of 65 has Alzheimer's Disease [22].

The second (discriminatory practices) and third (institutional practices) parts of the problem of ageism are likewise increasing. Ageism is the most socially condoned and institutionalized form of prejudice [8, 14] and thus manifests itself in the everyday interactions of older adults in their homes, workplaces, and other settings as well as in policies that allow for and/or do not punish discrimination. Belief in aging myths and misconceptions leads individuals to communicate with older adults in patronizing ways [23-25]. Rooted in misconceptions that older adults have diminished cognitive processing speeds and worse hearing, individuals are more likely to use simplification strategies in communicating with older adults such as using shorter sentences and clarification techniques including speaking loudly or slowly. Furthermore, when speaking with older adults individuals are more likely to use tones and pitch changes nearly indistinguishable from "baby talk," or how one would speak to small children or infants [25] again pointing to the underlying belief in the myth that older adults are cognitively impaired. Older adults are also more likely to be spoken to this way when they are in medical settings or when health information is being communicated [23]. Other examples of institutional ageism in health care settings include not providing services to older adults based on the argument that treatments are less cost effective for older patients and that older patients are taking an unfair, less beneficial piece of healthcare resources from other age groups [26]. Age discrimination against older adults in the workplace is pervasive as well. In the United States, for example, age discrimination claims in employment totalled 20,857 in 2016, constituting 22.8% of all discrimination claims that year [27]. Older workers face difficulties in getting hired; when they are hired they are more likely to be offered positions with low pay, few benefits, and less access to salary increases and promotions [28]. Older adults are also falsely accused of declining job performance [29], likely rooted in the myth that older adults are less comfortable with new technology, less flexible, and more cautious [30]. Older workers face lay-offs at a greater rate than younger workers and are often forced into early retirement [31]. A required retirement age "support[s] the social conviction that once past a certain age, the economic and social value of an individual suddenly drops, regardless of actual skills and qualifications" ([32] p 93).

Together, prevailing inaccurate, negative views of a growing older population have led to a serious international problem causing physical, psychological, and social consequences across the lifespan [3-5]. To help elucidate the role of ageism on ageing, the sections to follow trace the biopsychosocial consequences on targets of ageism and then on those who are perpetuating ageism. As noted earlier, the same people may be both targets and perpetrators of ageism at one point in their lives or over time.

3. Biopsychosocial Consequences of Being the Target of Ageism

Scholars have long lamented about the negative impact of ageism on individuals. For example, in his 1975 Pulitzer Prize winning book titled "*Why survive? Being old in America*" Robert Butler detailed the serious and far-reaching nature of ageism [33]. Since then, researchers have shown the effects of ageism on the physical, psychological, and social well-being of the targets of ageism.

The targets of ageism likely reflect a wide range of adults as ageism is socially constructed. In a youth-centered focus of many modern societies, advertisement campaigns for anti-aging products and treatments appear in magazines with readerships of young and middle age adults [3, 8, 14]. Research on targets of ageism as reviewed next, has generally examined the effects of ageism on adults ages 50 years and older.

3.1 Psychological Pathways

Mounting evidence shows that ageism negatively affects older adults through psychological pathways, including age-based stereotype threat, aging anxiety, discrimination, and psychological abuse. Age-based stereotype threat (ABST) occurs when a negative age stereotype is made salient to older adults in a situation where they may confirm the stereotype [9]. Fear of confirming the stereotype then impairs older adults from successfully completing their task. In their meta-analysis of 32 studies examining age-based stereotype threat, Lamont, Swift, and Abrams [9] found that older adults performed worse on cognitive processing and memory tasks when reminded of the misconception that cognitive abilities decline in older adulthood. Research examining individual differences in susceptibility to ABST has shown older adults' beliefs about aging and their feelings about their own aging play an important role [34]. Specifically, those who believe the aging process is the same for everyone and embodiment of negative stereotypes is inevitable may be more impacted by ABST than those who view aging as a heterogeneous and malleable process [35]. Research also suggests ABST is most likely to manifest when common and widespread stereotypes of older adults are at risk of being confirmed, for example with difficult but not simple memory tasks [36]. Negative effects of age-based stereotype threat have also been observed on physical strength [37], driving ability [38], and hearing [39].

Myths and misconceptions about ageing are also detrimental in how they influence the way older adults view themselves. As adults enter middle age, age stereotypes become more self-relevant and identifying with these stereotypes can increase adults' subjective age [40]. Reporting a subjective age higher than one's chronological age has been associated with more negative affect, and this relationship is partially mediated by ageing anxiety [41]. Women report more ageing anxiety, which refers to the "concern and anticipation of losses centered around the aging process," ([42] p. 247), than men, possibly because age stereotypes are harsher for women [43]. Changes in how older adults view themselves also impact how they appraise their current situation. Coudin and Alexopoulos [44] found older adult participants reminded of myths and misconceptions about ageing reported more loneliness and assessed their own health as poorer than participants who were not primed. In this study, participants primed with these myths also became more risk averse and made more frequent requests for help, suggesting anxiety about ageing may make older adults more fearful and dependent. Adoption of these attitudes about themselves puts older adults at a higher risk for elder abuse, for which dependency is a significant factor [45]. Similarly, Nemmers [46] points out that doctors often group well older adults with sick older adults in medical settings, which negatively impact the psychological well-being of the well older adults. Nemmers review suggests that the misconception by doctors that older adults are a homogenous group that all suffer deterioration, and illness acts as a barrier to healthy and active ageing.

The mental health of older adults is also negatively impacted by age discrimination. In a national study of a diverse group of older adults, experiencing a great number of discriminatory events (based on any identity, including age, gender, race, and sexuality) was associated with more depressive symptoms and worse mental health outcome in older adulthood [47]. Further, specifically experiencing more age discrimination is significantly correlated with more depressive symptoms, more anxiety, more stress, and less psychological well-being [48].

3.2 Physical Pathways

Myths and misconceptions about ageing and older adulthood negatively impact older adults' physical capabilities, their health, and their longevity. Through extensive research, including several longitudinal studies ranging from 23 to 38 years, Becca Levy has developed Stereotype Embodiment Theory (SET) [4], which posits that internalization of negative ageist stereotypes, including myths about ageing, accelerates the adaptation of an older self-image, leading to the embodiment of ageist stereotypes. For example, the myth that older adults are frail or that they are inactive might discourage middle-aged adults from exercising. If they then adopt a sedentary lifestyle, that will negatively impact their health and make them weaker. In this way, they become frail and inactive because of their internalization of this misconception about ageing. The impact of this kind of embodiment has been documented across a number of physical and health domains, predicting more Alzheimer's disease biomarkers [49], more cardiovascular events [50], decreased engagement in preventative health behaviours [51], increased risk of hospitalization [52], and faster declines in both hearing [53] and memory [54]. Negative attitudes toward ageing and stereotype embodiment also decrease overall longevity. Following middle-aged participants over a 23-year period, Levy, Slade, Kunkel, and Kasl [55] found that those who internalized negative perceptions of aging (including as you get older you have less "pep") lived on average 7.5 fewer years than their peers with positive perceptions of ageing. In this study, internalized perceptions of ageing were the second strongest predictor of longevity after chronological age. Analyses also showed that the relationship between internalized perceptions of ageing and longevity was mediated by older adults' will to live. Similarly, another longitudinal study found that internalization of the myth that ageing results in chronic illness predicted higher probability of mortality two years later [56].

Ageism perpetuated by individuals across the lifespan negatively impacts older adults indirectly vis-a-vis communication of ageist stereotypes and exaggerations of decline in older adulthood that are internalized and embodied. It also directly impacts the physical capabilities, health, and longevity of older adults. As discussed above, the misconception that ageing leads to illness and frailty leads doctors, nurses, and other medical professionals to attribute treatable illnesses and impairments of older adults to old age, resulting in less thorough examinations and diagnoses and reluctance to recommend aggressive treatments in older patients [57]. As older women are doubly stereotyped as frail, they are impacted more than older men [57]. The international systematic review of studies on elder abuse discussed earlier also identified perpetrators' negative views on ageing as a significant predictor of elder abuse [45]. This may occur because beliefs in ageist stereotypes may make it easier for the abuser to perceive older adults as less important and less human [58].

3.3 Social Pathways

As the population of adults over the age of 60 grows rapidly, projected to reach 2 billion by 2050 [7], intergenerational tensions are on the rise [59]. As noted earlier, worldwide news coverage refers to this growth of the older population as a social problem [60]. In China, older adults have been portrayed as a burden [16]. As a result of increasing communication of ageist stereotypes, older adults are often spoken to using simplification strategies and “baby talk” [25]. Ageism communicated in these subtle ways on a daily basis may lead to the adaptation of an older self-image and thus setting in motion the negative physical and psychological effects discussed above.

Age discrimination appears to be becoming pervasive. In 2016, for example, in the United States, about one fourth of discrimination claims in employment were for age discrimination, and that figure likely reflects under reporting [27]. Older workers are less likely to be hired than younger adults and have less access to high-paying jobs [28]. Older adults are also more likely to be falsely accused of declining job performance [31]. As such, older workers face lay-offs at a greater rate than younger workers. In the context of older age, losing one’s job may increase feelings of uselessness, negative perceptions of ageing, and the adaptation of an older self-image which has been shown to have negative effects on health as discussed above. In countries where healthcare is tied to one’s job, being laid-off may also mean losing access to healthcare, creating another barrier to healthy ageing. Aside from facing increased lay-off rates, older adults may be forced into early retirement [31], which may bring about the adaptation of an older self-image. Negative feelings about retirement have been shown to reduce longevity [61].

Ageism is also the most frequently reported type of discrimination in medical and healthcare settings [62]. As mentioned above, rooted in ageing myths related to physical deterioration, doctors and other medical professionals are less likely to diagnose treatable ailments in older adults as well as less likely to advocate the use of aggressive treatment [57]. As older adults are also more often characterized as “senile, untreatable, and rigid,” ([63] p. 831) along with the growing older population, there are not sufficient health professionals to meet physical and mental health needs of the growing older population [64]. This leaves older adults to seek treatment from general practitioners who lack the specialized knowledge needed to effectively help older patients [65]. Further, older adults who reported discrimination by medical professionals were more likely to have a new disability or worsened disability 4 years later compared to individuals who did not experience healthcare discrimination [63]. Elder abuse by healthcare workers continues to be a problem in hospitals, nursing homes, and in home environments [7]. An international systematic review of studies on elder abuse identified social and cultural norms as a factor in elder abuse, proposing that communities and societies where ageism is more socially-condoned may contribute to the perpetuation of violence against older adults [6].

3.4 Summary

As briefly discussed in this section, the various manifestations of ageism negatively impact older adults in psychological, physical, and social ways. These manifestations of ageism also likely interact with one another, creating multiplicative detrimental effects. Swift and colleagues’ Risk of

Ageism Model [37] outlines these effects and the mechanisms through which they impact healthy ageing. For example, RAM suggests that older adults who experience age discrimination in employment settings may come to expect this discrimination, and thus be less likely to apply for other jobs, seek out preventative healthcare, or apply for Medicare or social security. More research into these interactions is needed to fully understand the breadth and depth of detrimental effects of ageism on older adults and their healthy ageing.

4. Biopsychosocial Consequences of Being Perpetrators of Ageism

In youth-centered cultures around the world, individuals are bombarded with negative images and discourse about old age and ageing from a young age. There are psychological consequences that emerge beginning at least in young adulthood (including ageing anxiety) that negatively take a toll on both psychological and physical health as individuals age [66]. Further, as discussed above, acquisition of ageist stereotypes and negative messages about ageing earlier in life can have serious consequences on the physical health of longevity as people age and enter older adulthood [4]. There are also social consequences (avoiding older adults and careers involving older adults) that in turn influence health, well-being, and livelihood. These consequences, which are understudied, are discussed in turn.

4.1 Psychological Pathways

With widespread negative and inaccurate portrayal of older adulthood as a period of inevitable decline, individuals of all ages can develop anxiety about ageing; negative feelings and fears about ageing and old people; and concerns over changes to physical appearance [42]. Indeed, in many countries, there is a widespread socially accepted practice of fighting ageing by concealing signs of ageing with dyes to colour grey hair, anti-ageing creams that are available in grocery stores, pharmacies and other stores as well as, and anti-wrinkle treatments such as Botox. While such products and treatments may be directed toward older ages, all age groups are exposed to the billion dollar advertisements. Illustrating that ageing anxiety sets in at an early age, the more undergraduate and graduate students in Australia, England, and the United States reported fearing getting older, the more they reported dreaded looking old [66]. More ageing anxiety has also been associated with higher likelihood of seeking anti-ageing procedures in middle age [67]. One theory ties heightened ageing anxiety to increased negative attitudes toward older adults. Terror management theory suggests that older adults remind individuals of their own ageing and death and thus death anxiety, fears about their own mortality, and aversion to older adults fuel negative attitudes toward older adults [68]. A study of a general community sample of participants between 18 and 88 years old found the more anxious an individual is about their own ageing, the more they buy into negative age stereotypes [69]. Studies show that ageist beliefs and ageing anxiety go hand in hand [66, 68, 70], and thus even younger adults are likely to feel anxiety about ageing. Further, general anxiety is not only a mental health issue, it also has been shown to negatively influence physical health [71], thus with ageing anxiety present in college students, it may negatively affect health beginning at a young age.

4.2 Physical Pathways

The acquisition of negative perceptions of ageing and age stereotypes over the course of the lifetime has been shown to negatively impact health and longevity in older adulthood. As discussed above, longitudinal research into SET has shown that individuals who report having negative perceptions of ageing in middle adulthood live on average 7.5 fewer years than those with positive attitudes toward ageing [55]. As Becca Levy [4] points out, the acquisition of these stereotypes and negative perceptions occurs throughout the lifespan, and may be particularly high in youth and young adulthood when the stereotypes are less threatening because they are less self-relevant. Becca Levy [4] suggests this may lead to maximum acquisition of the negative stereotypes, leading to a large bank of negative images of ageing and older adulthood which are drawn from later on in the ageing process when they begin to resonate with lived experiences. Thus, perpetrators of ageism may experience negative health effects as they age, because of the negative images they have internalized.

4.3 Social Pathways

As noted, ageism allows for avoidance, disrespect, and discriminatory behaviour toward older adults. In some countries, avoidance has resulted in an increase in age-segregation in a variety of settings including housing and work settings [59]. Reflecting on the situation in the United States, it has been noted that “this is the most age-segregated society that’s ever been,” with a third of adults 55 and over residing in communities of mostly or all people their age; “vast numbers of younger people are likely to live into their 90s without contact with older people. As a result, young people’s view of aging is highly unrealistic and absurd” ([72] p. 8). And age-segregation interferes with opportunities for positive contact across generational lines, which could challenge myths of older adults [73].

At the same time, a growing number of studies are showing that negative attitudes toward ageing and older adults deter workers along the age continuum from pursuing careers that involve working with older adults [74, 75]. For example, ageism reduces potential workers’ interest in pursuing careers working with older adults, including geropsychology and geriatric medicine [76], based on the misconception that older adults are more likely to suffer from chronic illnesses and less likely to change their behaviours [77]. Workers also appear to buy into stereotypes of working with older adults, specifically that these jobs are less prestigious and provide lower pay [78]. Further, those pursuing health careers may be exposed directly to general practitioners and trainers who explicitly convey negative attitudes toward older adults [75], potentially further discouraging students and early career professionals from exploring work with older adults such as nurses, pharmacists, physical therapists, physicians, physician assistants, psychologists, and social workers. The lack of pursuit of these stable and flourishing career paths involving older adults influences the short-term and long-term well-being and livelihood of these potential workers in addition to leaving a gap in the workforce to care for older adults. For example, in 2018, the American Geriatrics Society [79] reported data that illustrates workers lack of interest in careers in geriatrics, noting only 3,590 full-time practicing geriatricians to care for 49.2 million older adults; by 2025, there will likely be a need for 33,000 geriatricians to care for the growing older population. The demand for college students to enter the geriatrics workforce is so great that in

some countries such as the United States, some states are offering loan forgiveness incentives for students to enter the fields of geriatric health care.

4.4 Summary

As countries around the world become more youth-centered, negative stereotypes about older adults and ageing are increasing. A small group of studies have shown that exposure to these negative messages and images increases ageing anxiety, stereotypes embodiment later in life, and social avoidance of older adults, potentially negatively impacting physical health over the course of the lifespan and limiting the career prospects of younger adults (and thereby their livelihood). Yet, how these consequences impact individuals' health and livelihoods is understudied in both the ageing and ageism literatures.

5. Improving Ageing by Challenging Ageism

The far-reaching effects of ageism on the physical, psychological, and social well-being of individuals across the lifespan point to the dire need to reduce ageism. Combating ageism in turn could help to improve healthy ageing for individuals across the lifespan. Integrating findings and theories from the literatures in education, medicine, psychology, and social work, the PEACE (Positive Education about Aging and Contact Experiences) Model summarizes that ageism can be reduced via exposure to accurate education about ageing and positive contact experiences among younger and older individuals [73]. This section briefly reviews the research on both education about ageing and positive intergenerational contact.

Studies in the ageism literature have repeatedly shown that generally individuals lack knowledge about the ageing process and the effects of ageing on older adults [e.g., 80-82]. As noted earlier from the inaccurate news stories about Alzheimer's, it follows that people exaggerate the effects of ageing on memory and the likelihood and incidence of Alzheimer's disease (e.g., [80-83]). Other myths about older adults are widespread and detrimental. Headlines such as "Old People are an Increasing Burden" mischaracterize older adults as inactive, sickly, dependent, and a burden [84, 85], when more accurately, older adults fill significant economic needs of society including more volunteer hours than other age groups [86, 87] and with over 50% of grandparents providing free or low-cost childcare for their grandchildren [88]. Given widespread stereotypes that older adults are sickly and inactive, it follows that people tend to overestimate the amount of time older adults sleep or engage in relaxing activities and underestimate time spent working and being active [89, 90].

A growing body of research shows that exposure to accurate information about ageing reduces ageism as well as improves healthy ageing [73]. Ageism can be addressed with findings from reliable scientific sources on the actual rates of Alzheimer's disease, depression, employment, and poverty of older adults. Indeed, past research indeed shows that negative attitudes toward older adults can be improved through education about ageing [76, 89, 90-93]. The mechanism of ageism reduction can be through positive stereotype embodiment [4]. In this way, education about aging can reduce negative stereotypes of others as well as negative stereotypes of oneself and one's own aging. The spread of accurate education about ageing could improve the mental and physical health of older adults by dispelling ageing myths and replacing them with examples of active and healthy ageing. Longitudinal studies have shown that internalization of positive perceptions of

ageing in middle age reduce the likelihood of experiencing a cardiovascular event [50], developing dementia [49], and developing a psychiatric condition [94]. These studies also find that positive perceptions of ageing predict reduced inflammation [95], faster recovery from injury [96], and better functional health [51] in older adulthood, as well as increased longevity [55, 95]. Further, experimental designs have found that even just priming older adults with positive information about ageing can improve memory [97] and physical function [98].

Exposure to accurate education about ageing is a key piece of addressing ageism, but may not be sufficient alone and may need to be paired with positive intergenerational experiences [73]. As noted, negative attitudes toward older adults can be manifested as patronizing, bullying, and abusive behaviour towards older adults as well as avoidance of older adults in numerous settings including housing and work settings. There is an increase in age-segregation that reduces contact opportunities [72]. A long-standing and extensive body of research deriving from intergroup contact theory suggests that negative attitudes derive in part from lack of personal and positive contact between groups [99, 100]. Likewise, negative characterizations of older adults may interfere with interest in positive contact [3, 101, 102]. Thus, fostering positive intergenerational interactions between older and younger individuals is needed. This can be accomplished in a variety of ways including intergenerational learning programs that involve students and older adults in educational settings [103, 104]. For example, older adults who shared memories of life experiences through a reminiscence program reported feeling less lonely and a higher quality of life while the children who were interacting with them reported improved views of older adults [103]. Intergenerational learning programs are already underway in many countries including Australia, Canada, China, Israel, Italy, Japan, Scotland, Singapore, Spain, United Kingdom, and United States [105, 106].

5.1 Summary

Despite some long-standing positive images of older adults as cheerful, kind, and wise, there are prevalent images of older persons as boring, cranky, depressed, helpless, incompetent, and unfriendly with wrinkles, gray hair, and slumped posture who are facing negative life outcomes. The literature on ageism has identified these myths and mischaracterizations of ageing as one of the primary catalysts for the development and maintenance of ageism, while the vast literature on ageing is uncovering the actual ageing process and thereby creating a database of information that directly counters the myths about ageing that produce and maintain ageism. Each country may adopt different strategies for communicating accurate education about aging. For example, some countries could add units to their educational system and provide as public service health initiatives to educate the public on ageing and older adulthood. Likewise, countries could adopt policies for fostering more positive intergenerational contact. As examples, age-segregation in housing could be minimized, and intergenerational learning programs could be introduced or expanded in countries that already have them underway.

6. Conclusions

Around the world, people are living longer lives but not necessarily experiencing optimal health [1]. A combination of biological, psychological, and social forces determines healthy ageing [2]. The growing interdisciplinary literature on ageism from fields such as education, medicine,

psychology, and social work increasingly highlights the pivotal role that ageism plays in ageing. While there are some differences in the manifestations of ageism by culture that necessitate close attention, unfortunately, the World Health Organization, the United Nations, and international research point to the wide reach of ageism across numerous cultures. Ageism creates a negative view of the ageing process as marked by inevitable deterioration and decline, and it creates ageing anxiety and promotes social avoidance of older adults. Ageism deters people from entering the rewarding and flourishing workforce needed to meet the health needs of the growing older population. Thus, ageism leads to negative psychological, physical, and social consequences in the short- and long-term for individuals along the lifespan. Mounting evidence illustrates the cognitive, social, psychological, and physical impact of ageism on older adults as older adults have been shown to receive worse health care and treatment as well as face financial, psychological, and physical abuse [45]. Ultimately, ageism even takes a toll on longevity by decreasing one's lifespan on average 7.5 years [55]. In light of the serious nature of ageism and the growing older population worldwide, it is timely and necessary for international research on ageing to increasingly consider the intervening role of ageism on healthy ageing. The study of ageism and its reduction, then, is an important piece in the puzzle of fostering healthy ageing within and across cultures.

Author Contributions

This paper was co-written by the authors.

Competing Interests

The authors have declared that no competing interests exist.

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