UNIVERSITY OF TWENTE.

Faculty of Behavioural, Management and Social sciences (BMS)

Interventions aimed to reduce ageism: A Systematic Literature Review of

Qualitative Evidence

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Abstract

Background and Objectives: With the rapid aging of the population, ageism (e.g. stereotypical and discriminatory attitudes and behaviors targeted at older adults) has become more prevalent worldwide. Ageism towards older people is related to several health and social consequences, such as triggering mortality risk, poor functional health, slower recovery from illness and a decreased quality of life and received care. These consequences were an essential input for the development of interventions aimed to reduce ageism. The objectives that are mostly taken in the existing interventions vary between a) intergenerational approaches b) intergenerational service-learning or c) other types of interventions that focus on information provision. Although there is a considerable amount of literature on the effectiveness of such interventions, not much attention has been paid to the subjective experiences of participants. Therefore, the aim of this literature review is to take stock of studies on similarities and differences in perceptions, experiences and acceptability of participants taking part in different types of interventions aimed to reduce ageism. Methods: A systematic literature review was conducted with keywords following the PRISMA guidelines, using structured data collection within the databases between 1990 and 2020 on Scopus, PsycINFO and Google scholar. Studies that provided qualitative information of participants' perceptions, experiences and acceptability with regard to different types of interventions aimed to reduce ageism, written in English were selected for this review. Finally, 94 titles were reviewed which resulted in twenty articles for the final sample, that met the inclusion criteria. Results: The results showed that a main difference between the interventions was that the integration of an intergenerational contact resulted in an intensified awareness and reduced level in misperceptions and stereotypes about the older generation, whereas a non-intergenerational approach showed increased levels of understanding and empathy in participants. On top of that, intergenerational service learning was perceived as highly feasible and meaningful, plus it seemed to have a remarkable impact on the participants' predetermined beliefs about older people which they were able to reject. Conclusion: The findings of this review can be used as a base for future research and interventions that should set the focus on direct interaction between both generations. Due to the currently limited amount of qualitative studies, future research should focus more on gathering explicitly data about the subjective experiences and perceptions of participants who take part in an intervention that aimed to reduce ageism in order to tackle the issue of ageism.

Keywords: ageism, interventions, intergenerational contact, service learning, systematic review, qualitative data

A international matter of concern that started to become more prevalent through the global aging is ageism towards the older population (Beard et. al, 2016). A main factor that contributes to the prevalence of ageism is the increased number of people aged 60 years or more globally which is expected to reach nearly 2.1 billion by 2050 (United Nations, 2017). The term ageism can be understood as "stereotypes, prejudice, or discrimination against (but also in favor of) people because of their chronological age" (p.1) (Ayalon & Tesch-Römer, 2017). Based on research conducted in the past, there is evidence for the fact that people have several stereotyped attitudes towards older people (Cuddy, Norton, & Fiske, 2005) which clearly outweigh the negative attitudes directed to the younger population (Zhang et al., 2015). Even in healthcare settings, where doctors and nurses work with older people on a daily basis, negative attitudes and discriminatory behavioral patterns are observable (Eymard & Douglas, 2012).

Over time in society, people have become more ageist and have developed more and diverse stereotypes towards the older people. Research has determined one specific stereotype that counts across different cultures which is described as "doddering but dear" (p.1) (Cuddy & Fiske, 2002). This creates a rather ambivalent picture of an older individual, showing features of kindness and inability simultaneously (Bousfield & Hutchison, 2010). Such a contradictory view towards the older generation affects predominantly younger people's behavior towards that generation which involves according to the Healthcare Commission, Audit Commission and Commission for Social Care Inspection (2006) a lack of dignity, respect, and attention. On top of that, these negative beliefs and associations with regard to persons 65 years and older, lead to a significant apathy in youngsters towards working with that generation (Mason & Sanders, 2004). These kinds of negative behavioral patterns and the overall spread of ageism are expected to increase in their impact and extent worldwide (Wyman, Shiovitz-Ezra & Bengel, 2018).

Such stereotyped attitudes and behaviors as mentioned above create a tremendously counterintuitive effect on older peoples' welfare and the nature of the supervision they get in institutions (Burnes et al., 2019). Thus, such a mounting spread is related to severe negative consequences for the mental and physical health of the aging population, especially triggering mortality risk, poor functional health, and slower recovery from illness (Burnes et al., 2012). Next to the health-related consequences, ageism opens doors to discrimination in the form of getting socially excluded in contexts such as neighborhood or family interactions, which contributes to a high stress level (Allen, 2016), lower well-being and overall health (Dahlberg & McKee, 2018). Therefore, it becomes obvious that ageism creates a main barrier in reaching a good level of health, quality of life and care for the older population. Research shows that a

reduction of ageism through interventions focused on encouraging positive views on ageing (Wolff, Warner, Ziegelmann & Wurm, 2014) promotes positive health behaviors and healthy aging (WHO, 2015). In order to fulfil this, several interventions have been designed that aimed to reduce ageism and negative attitudes towards the older population.

Interventions Designed to Reduce Ageism

Due to the immense spread of ageism worldwide which is connected to several negative consequences for 65 years and older people, a lot of investment is made in developing interventions focused on counteracting such stereotypical and discriminatory thinking and behavioral patterns. A common goal of these interventions, besides counteracting stereotypes and discriminations directed towards the aging population, is to encourage social involvement into the community which showed to intensify successful aging in older individuals (Rowe & Kahn, 1997). Moreover, this is related to a decrease in becoming ill, increase in cognitive and physical competences and an overall higher level of dynamic social participation in life. The approaches that are widely and mostly taken in the existing interventions vary between a) intergenerational approaches, which focus on an active interaction between both generations, for example in nursing homes (Hughes et al., 2008), b) intergenerational service-learning, an approach that combines active interaction with theoretical conceptualizations (Brown & Bright, 2017) or c) other types of interventions that predominantly focus on information provision through the integration of materials about ageism and older people in educational settings in forms of presentations and lectures (Ragan & Bowen, 2001), or simulations (Schuldberg, 2005). In the following an overview of the three different approaches in terms of their effectiveness and features will be given.

Intergenerational programs. Among the many interventions developed, the most effective type of intervention to reach a certain level of knowledge and attitude change was achievable through an intergenerational program done in an educational or pedagogical context (Chonody, 2015). An intergenerational program opens doors to interchanging resources and gaining knowledge about both generations through an interpersonal contact and interaction, from which the participants benefit on a social and personal level (Vieira & Sousa, 2016). Such an interaction between younger and older adults on a reciprocal level seemed to encourage a change in the attitude towards the older people, social connection, service activities for youngsters and older adults, increasing the feeling of appreciation and having a purpose in life (Knight, Skouteris, Townsend & Hooley, 2014). In addition to that, a recent study found evidence for a significant reduction in age-related negative clichés and an increase in positive

ones through such intergenerational interventions independent of a specific type of program or age group involved (Ermer, York & Mauro, 2020).

Intergenerational service learning. Apart from the usual intergenerational programs, there are several interventions that combined the intergenerational approach with service learning (Knapp & Stubblefield, 2000; Blieszner & Artale, 2001; Vandsberger & Wakefield, 2004; Counts, 2019). Service-learning itself can be defined as a pedagogical teaching method that emphasizes learning by doing that takes part outside the school environment (Cohen, Hatchett & Eastridge, 2006). Hence, this teaching method can be ascribed to one type of experiential learning (Kalisch, Coughlin, Ballard & Lamson, 2013). A main feature of service learning is to combine teaching, research and service which are then applied in different communities and organizations of the public (Brown & Bright, 2017). The aim of this method is to foster networking between parties in order to resolve social controversies that decrease the quality of the overall community (Pereira & Arriage, 2019). In combination with the interaction of the two generations, intergenerational service-learning brings theory to practice, which means students apply theoretical conceptualizations to daily life situations with the older population (Cohen, Hatchett & Eastridge, 2006). Thus, the focus is set on solving real community necessities by emphasizing collaborations between the younger and older generation. Applying an intergenerational service-learning strategy in practice was of high benefit and value for the participants in terms of enhancing their knowledge about aging processes, changing the attitude of students towards older individuals and discovering areas for research in gerontology and future careers in that field (Cohen, Hatchett & Eastridge, 2006).

Other interventions. Next to the types of interventions mentioned above, there are interventions that have not integrated an intergenerational contact in their program. First of all, there are several interventions taking part in university settings that set the focus on integrating content about ageism and aging processes into the usual curriculum either in form of lectures and courses of psychology and social work students (Jackson, Cherry, Smitherman & Hawley, 2008; Harris & Dollinger, 2001; Smith & McCaslin, 2011) or rarely in form of video-taped presentations (Ragan & Bowen, 2001). The study outcomes of these information provision interventions provided evidence for the effectiveness of such approaches on influencing the ageist attitudes of participants by enhancing their level of knowledge about ageism and older adults. Another non-intergenerational approach of information provision is simulation, where participants get an insight of how older people experience life (Schuldberg, 2005; Binns, Gray & Orsak, 2016). Outcomes of studies that made use of simulation showed an increased sense

of self-awareness in the participants and significant changes in the perspective of younger adults on older people.

Based on literature and study outcomes of these three different approaches mentioned above, the commonality that the different types of ageism interventions were effective in increasing the level of knowledge of participants about ageism and the older people themselves becomes apparent (Cohen, Hatchett & Eastridge, 2006; Ermer, York & Mauro, 2020; Binns, Gray & Orsak, 2016). A clear difference is that the integration of an intergenerational contact showed to be highly effective in positively influencing younger people's attitudes about older people and ageism (Ermer, York & Mauro, 2020; Cohen, Hatchett & Eastridge, 2006). Thus, keeping in touch with the older people in a usual intergenerational approach or in an intergenerational service-learning approach seemed to be of high value for both parties who were able to increase their understanding about each other. Non-intergenerational approaches, such as simulations showed to be effective in positively influencing the participants consciousness about themselves and older individuals.

Something that is not yet known about any of these kinds of interventions that are widely used and known in the area of ageism, is how the participants perceive, experience and accept such interventions. So, the focus in literature was predominantly set on quantitative data instead of qualitative. Hence, there is a gap in terms of the subjective experience of different participants, e.g older or younger people, professionals/caregivers with the different types and approaches of ageism interventions. So, it would be of high value to shed more light on the differences and similarities in perceptions and experiences of participants taking part in such interventions. This insight would help in getting more understanding and meaning about the preferences and perceived relevant factors of participants in such contexts so that a positive influence of their perspective and attitude in terms of ageism and older people can be improved or secured.

Objective of This Systematic Research

Empirical studies and systematic reviews focus more and more on identifying the effectiveness of such interventions in different settings and contexts in reducing ageism or counteracting discriminatory attitudes by predominantly using quantitative data (Burnes et. al, (2019); Marques et. al, (2019)). To date, no systematic literature review has been conducted that focused on the perceptions and experiences of people taking part in such interventions that aim to reduce ageism. This gap in the literature requires systematic reviews that focus on the inner world of the participants to understand how they perceive, experience and feel about

certain interventions and whether they experience or perceive certain approaches more meaningful than other approaches.

Due to the fact that more and more people have become ageist and developed rather negative attitudes and perceptions towards older individuals which affects their behavior towards these people (Mason & Sanders, 2004) it is important to get an insight into the individual perspectives and experiences in order to counteract the expected spread of ageism worldwide (Wyman, Shiovitz-Ezra & Bengel, 2018). Further, as summarized in the outcomes of the brand-new study of Ermer et. al. (2020), there is the need to shed light on the participants' perceptions and acceptability in terms of the ageism interventions which can be used in order to improve ageism interventions so that the achievable level of change in participants stereotypical attitude and perceptions can be enhanced. This means that it is important to focus on the experienced level of change in the participants perceptions about older people and aging to get a deeper insight into the feelings and perceptions of participants, taking part in different interventions and programs.

Besides that, gaining an insight into how participants perceive and experience such interventions would increase the level of knowledge about what people enjoy, perceive as useful and meaningful in these interventions. Based on that, further interventions can be developed or improved that are accepted, seem more feasible and easier to adapt for the participants, which would then increase the accomplishment of the aim and purpose of these interventions. Thus, the aim of this systematic literature review is to fill this gap and get an insight into the participants' feelings, perceptions, and acceptability of interventions aimed at reducing ageism by using only qualitative evidence. Based on the aim of this systematic literature review, the following research question is set:

"What are the differences and similarities in participants' perceptions, experiences and acceptability of intergenerational interventions when compared to intergenerational service-learning and other interventions?"

In order to enable an answer to the research question mentioned above, the following subquestions are answered in this literature review:

- 1. What are the characteristics of the sample?
- 2. What are the characteristics of the study designs and interventions?
- 3. What are the intended aims and outcomes of the interventions?

Method

Selection of Studies

This systematic review was conducted by following the PRISMA guidelines, using a structured data collection within the databases Scopus, PsycINFO and Google Scholar (Moher, Liberati, Tetzlaff & Altman, 2009) (see Figure 1).

Search Strategy

In order to answer the research questions mentioned above a systematic literature search was conducted. To fulfil this, the electronic databases mentioned above were scanned by using the following key terms: ("attitudes towards elderly" OR "changes in attitude" OR "ageism") AND ("interventions" OR "intergenerational program" OR "program") AND ("qualitative" OR "interview" OR "experience"). Next to this, the snowball-method was applied. This was done by scanning the reference lists of relevant articles. Further, previously done literature reviews focused on interventions to reduce ageism were scanned too. Based on the exclusion criteria that are presented in Figure 1, the final set of articles for this review were 20 articles.

Inclusion and Exclusion Criteria

A total of three criteria was used. First, journal articles, books, book chapters, and research reports written in English that provided information about different interventions conducted to reduce ageism were included in the systematic literature review. Second, in order to fill the gap in research and to bring some new insights in how people perceive and accept these interventions, qualitative articles and qualitative data from articles of quantitative researches were included, independent of a specific topographic limitation, ethnicity, age group or profession. Third, the search for articles was limited to publications that were written and published in English between 1990 and 2020. This criterion was chosen due to the fact that after an analysis of several psychology textbooks about ageism conducted by Whitbourne and Hulicka (1990), it became apparent how much students' attitudes about aging were shaped by the negative and rather problematic representation of older people in these books published in the 90s. Since then, more and more research was done and interventions were developed with the aim of counteracting the negative attitudes that were triggered and developed in youngsters (Grant, 1996). Based on the inclusion criteria mentioned above, articles that only used quantitative data or were systematic reviews or meta-analyses, published in another language apart from English were excluded from this systematic literature review.

Data Analysis

As presented below in Figure 1 an initial 94 articles were generated in the databases. After duplicate removal, 43 articles were left to be screened. After assessing the remaining 43 articles by full text revision for eligibility, further 14 articles that were a) irrelevant, b) literature reviews and c) did not include qualitative data, were excluded. So, by taking into account the inclusion criteria mentioned above, 29 articles remained from which another 9 articles after scanning the result sections were excluded because of a lack of competence for the review which means a lack of usable quotes of participants fitting the aim of the research. Hence, this left a total sample size of 20 articles.

The 20 articles were sorted alphabetically based on the first author name and clustered in 3 clusters of the type of intervention that was researched, as visible in Table 1 by including data about (1) the characteristics of the sample (e.g. sample size, gender, ethnicity, country and profession); (2) information about research characteristics such as the type of intervention and the design, e.g. with only qualitative data or mixed data; (3) the intended outcomes and aims of the specific interventions; (4) Finally, information about participant evaluations of the interventions.

In order to answer the first sub question 'What are the characteristics of the sample?' and the second sub question 'What are the characteristics of the study designs and interventions?' the method and result sections plus the tables included in the different articles were analyzed and summarized in Table 1. The third sub question 'What are the intended aims and outcomes of the interventions?' was summarized by partly concluding what the original authors of the articles found, again pictured in Table 1. In order to analyze aspect four, the information about the participant evaluations of the interventions, the 20 articles were analyzed by focusing on the participants' qualitative data involving the comments they gave and shared during interviews or interactions with the older adults. The content of the comments and answers given to open-ended questions were categorized into themes and topics by creating new codes by the author. The three concepts: perceptions, experiences and acceptability were put into the center and based on the subjective interpretation of the quotes of the participants by the author the different codes were developed and matched to each concept.

The development of the coding scheme was done the following way: Firstly, the theme perception was covered by the code *overcoming misperceptions* which was developed through quotes of participants who took part in a service-learning program. Then the code *empathy and understanding* was developed by taking into account participants' statements about non-intergenerational interventions. Secondly, independent of the type of intervention, the codes for

perspective about aging and *respect*, covering the topic experience were developed. Next to this, the code *feelings of connectedness* based on the finding of six studies involving intergenerational and intergenerational service-learning approach was developed. Finally, based on the outcome of five studies, the code acceptability of intervention for the topic acceptability was developed (presented in Table 2). During the development of the codebook no difficulties were encountered due to the fact that there was a huge variety of quotes, which had common themes and similarities in terms of the topic and content. Hence, these commonalities were used in order to develop different codes covering particular concepts and themes.



Figure 1. PRISMA Flow diagram of selection of studies

Results

In the following the findings of each of the three sub-question are presented. Besides that, a summary of the studies that were included in this review can be found in Table 1.

Sub-question 1

What are the characteristics of the sample?

The majority of the samples was relatively small with 85% of the studies having less than 100 participants providing qualitative data. Regarding the sample characteristics, it can be concluded that eight of the 20 studies included in this review, provided information about the race of the participants which was predominantly White (68-100%). The other 12 studies did not provide information about the race of the participants. Across all studies, 17 studies (85%) took place in the United States, one study in South Africa, another in Canada and in one study the region was unknown. Data about the sex of the participants were given in 14 studies, where 60-100% of the sample was female. The age range of the sample was provided in six studies, varying between the ages of 10 to 90. In seven studies information was given about the mean age. The mean of all the mean ages including the younger and older individuals makes up a mean age of 39. The participants of the studies included in this review were all students. Therefore, the students involved in the interventions were either college-, middle- and high-school students, or students from different majors namely; nursing students, human service students, students of social work, audiology students, speech-language pathology students and occupational therapy students.

Sub-question 2

What are the characteristics of the study designs and interventions?

In most of the studies (14 studies; 70%) out of the 20 studies) included in this systematic literature review, an intergenerational approach was integrated in order to evaluate to what extent the interaction between both generations was useful in changing attitudes towards ageism. From all of the studies included in this review, 85% (n=17 studies) made use of an intergenerational approach in their intervention programs, thus set the focus on an active interaction between young and older adults during the intervention. In 12 studies (60%) the intergenerational approach was combined with the educational approach of service learning. Activities included in these studies mostly included conducting interviews with a person 65

years and older, journaling and answering of open-ended questions related to the overall experience with the older individuals and perceptions about the type of intervention they took part at.

Across all interventions that used an intergenerational approach, two studies included an additional creative feature. One study integrated a book discussion that took place between the different generations ([15]). The other study was about the creation of a documentary video where the students collected information about the different elderly's experiences in life and with aging ([14]).

In three studies (15%) other approaches apart from service learning and/or an intergenerational approach were used. Two studies with a non-intergenerational and -service learning approach, used an alternative strategy, namely the integration of simulation in the intervention. One study conducted a role-play exercise, where the students had to simulate a group experience. In this role play, some students were playing a client, thus an old adult with a significant memory impairment and one student, having the role of a practitioner, interacted with that person playing someone above 65 years. ([12]). Hence, this kind of intervention helped the students in acquiring skills and practice techniques for the work with older persons suffering from Alzheimer's disease. The other study was about the experiences of students with simulation kits that recreated visual impairments, which is a common issue the older people suffer from during the aging procedure ([18]). In both studies, the learning process was reinforced through the exchange with the other students about their experiences and changes in their perceptions regarding elderlies and aging.

Only one of the studies involved in this review, made use of an ethnodrama presentation. The content of this presentation was basically a story of how the life of older individuals in South-Africa looks like ([17]). Such a special intervention was used in order to detect possible differences in the perceptions of the younger adults after watching a presentation that provides information about the older population.

Sub-question 3

What are the intended aims and outcomes of the interventions?

In six of the 14 studies which integrated an intergenerational approach, the intended aim and outcome was to detect a shift in the attitude of the participants towards ageism. Hence, the aim of these interventions was to change the rather negative attitude of the younger people about ageism and older people. Next to this, the intended aim and outcomes of further five studies with an intergenerational contact was perception change and knowledge enhancement. The other five interventions aimed to achieve an improvement in the interaction between both generations, where the emphasis was set on an increased level of insight about older people and ageism ([20]).

When looking at the intended aims and outcomes of interventions that made use of nonintergenerational approaches, it becomes obvious that there are clear differences. The intended aim of an intervention that made use of role plays was to teach students skills to facilitate the interaction with older people who have Alzheimer's disease ([12]). Compared to this, interventions that made use of simulations intended to increase the self-awareness and knowledge of students about older individuals and how their life looks like throughout the aging process ([18], [17]).

Perceptions, Experiences and Acceptability

A summary of the findings by focusing on the three concepts mentioned above regarding the different types of interventions are described in the following. Participant evaluations in the form of direct quotes are included in each concept in order to give an overview and evidence for the different perceptions, experiences and acceptability of the participants. See Table 2 for an overview of the codes.

Overcoming Misperceptions

Perception in this context is defined as the extent to which certain type of intervention was successful in changing misperceptions and beliefs of the younger adults about ageism and older people. When having a look at the main findings of participants taking part in an intergenerational program independent of any additional approach included in the intervention, it becomes obvious that the majority of the participants perceived the interventions as helpful in adjusting their stereotypes and myths and enhancing their awareness of ageism and the older population. Thus, the majority experienced a rather positive and more conscious shift in their perceptions which becomes apparent by the following quote of a student "*My feelings toward old people and aging individuals has developed immensely* (...) *I admire their happiness; and their certainty of their own relevance to the world*" ([14]).

The outcomes of the interventions that combined the intergenerational approach with service learning showed to have an additional level of impact on the perception of the participants. A lot of the participants who took part in such an intervention stated that they perceive the older population now in an unprejudiced way. Thus, participants reported that they

were able to set their stereotypical attitude and perception completely aside. Based on outcomes of participants who took part in a service-learning program, the code "overcoming misperceptions" was determined. Quotes of students such as "Participating in this course has affected the way I think about my own aging in a positive way. Although I am still not looking forward to growing old, I am much more optimistic about it. This is due to the models we had in our class. The elder class members were all very happy and outgoing and all were eager to offer their knowledge to us" ([13]) and "broke all the stereotypes associated with aging" ([8]), demonstrate how affective this type of intervention was in changing the perceptions of the participants about ageism and older adults. In three studies, the participants perceived a personal growth based on their reflections after the interventions ([4], [9], [19]). Hence, it can be concluded that an intergenerational service-learning intervention was helpful and useful to overcome the misperceptions and stereotypes which additionally enriched the participants on a personal and interpersonal level.

When having a look at the three studies that did not integrate an intergenerational approach in their interventions, (ethnodrama presentation, simulation kits, and simulation of a group experience in form of a role-play exercise) a communality that became apparent was the extent of the interventions to which they impacted how the participants perceived their ability to take the perspective and understand the emotion of an older individual in a more comprehensible way. Thus, these interventions triggered the participants in thinking about their perceptions, level of understanding and ability to become active in helping the older adults. Therefore, the code "empathy and understanding" was determined. The following quote of a participant emphasizes the increased awareness about the situation of the older people after the intervention, namely "Everyone needs help and we can help them" ([17]). Interestingly, the study that integrated the presentation of an ethnodrama and the study that used simulation kits showed a clear similarity regarding the shift in the perception of participants. In both cases, the change in perception took part on an individual and societal level. On the one hand there is the quote "They are human beings, they need to be treated with love and care" ([17]) of a participant who took part in the ethnodrama and on the other hand, there is the quote "I did not know all of those things. I always thought my grandfather was just mean. I will be more patient" ([18]) of a student from the simulation kits intervention that demonstrate the similarity in how the perception of the participants was influenced through non-intergenerational interventions.

Experiences with Ageism Interventions

This part deals with how the participants experienced the contact with the older adults, the intervention itself in general and what they took home based on the experiences they made with a particular type of intervention that aimed to reduce ageism. Across all studies, the qualitative evidence of the participants showed that they mostly experienced the interventions positively. Independent of the type, the majority of the participant taking part in an intervention that aimed to reduce ageism experienced the intervention as helpful in fostering more realistic and optimistic views about the aging process and the older population. Based on the overall positive experiences about aging which influenced the perspective of the participants, the code *"perspective about aging"* was set. Students who took part in an intergenerational approach experienced a clear difference in how they expected the older people to be and in how they

actually were. Hence, based on the experiences with the older population through taking part in such an intervention, the participants started to attribute more positive properties in relation to aging and older people. A quote that illustrates these experiences is "*Listening to Genevieve*, *I have realized that these older individuals are human beings and need love and chances in life like everyone else*" ([7]).

When having a look at the findings of the intergenerational service learning, it can be concluded that there are clear similarities in terms of the experienced, rather positive view of aging. This becomes obvious through the following two statements of students, demonstrating how they experienced the interaction with the older people in such an intervention, namely "*I* enjoy working with the elderly because they can teach you things" ([1]) and "The more time I spend with elderly people, the more I am able to see them as people and not just 'old'" ([10]).

Based on the experiences of the participants, the code respect in this context was interpreted as the impact of the intervention on the level of respect towards the older people. Based on the findings and quotes of participants it can be concluded that this is a clear similarity between the different types of interventions. Hence, independent of any type, participants from the different intervention types experienced the importance of respect in relation to the older adults ([12], [15], [17]). In order to illustrate this, a quote of a participant taking part in a non-intergenerational service-learning approach and one of the students, who took part in an intergenerational one is provided. *"I feel that this process made me build a new respect for elders"* ([15]) is a quote of a participant taking part in an intergenerational program and *"Never laugh at old people"* ([17]) from someone taking part in a simulation program.

The code *"feelings of connectedness"* which emerged through the direct interaction between both generations is understood as the experience of a special bond between both parties

due to the interaction with one another during the intervention. The quotes "(..) *but at the same time I am sad to leave because I grew a special bond with these women* (..)" ([20]) *and "I had very good conversations with the residents before and after testing and we laughed together"* ([11]) underly how positively participants experienced the one-on-one interaction with the older persons who brought them new insights.

Acceptability of Ageism Interventions

This part refers to the extent to which the participants accepted the particular type of intervention they took part at, thus the extent to which it was feasible for them. When having a look at the findings, predominately participants who took part in an intergenerational servicelearning intervention gave feedback on the intervention itself and the method that was used. Based on the outcomes of five studies, the code "acceptability of interventions" was created. In these five studies, participants stated that the intergenerational service-learning approach helped them a lot in feeling more comfortable in interacting with the older individuals. Hence, it gave them personally a lot in terms of self-growth ([3], [4]). The following quotes of participants support this code, namely on the one hand "Service-learning helped me initiate conversations with my own grandmother; I know that (otherwise) these conversations would never have taken place"([4]) and on the other hand "Interviewing these seniors has taught me to be more open minded and tolerant. What contributed to this change was the realization of the many wonderful people being blocked out of my life due to my way of thinking" ([9]). These quotes additionally highlight the satisfaction of the participants with the method of interviewing used in intergenerational service-learning interventions that seem to be highly accepted by the majority of the participants.

Explicit feedback toward the acceptability of the interventions that used an intergenerational approach only, was provided in three studies ([1], ([15], [16]). A common theme that was determined based on the findings and quotes of participants was an enhanced personal reflection skill which resulted through the high level of acceptability the participants showed with regard to the interventions. This becomes obvious through this quote "*It has brought a lot of compassion to me. They tell you about their lives. Their strength and tenacity are unparalleled*" ([16]).

For two of the three studies that made use of a simulation approach it can be concluded that the participants showed a high level of acceptability too. This acceptability can be traced back to their enhanced consciousness about ageism and understanding for the conditions of the older population that developed through the intervention. The usefulness of this kind of approach without having a direct contact to a person 65 years and older, becomes visible when having a look at the following quote "(..) *But then I realized that even though they might not know the day of the week or who I am, they have feelings about everything .. just like anyone else*" ([12]). This illustrates the valuable impact of the simulation experience on the participants realization. The degree of acceptability of the intervention that used a presentation of an ethnodrama is widespread. This is due to the fact the participants were able to experience changes in their perspectives about ageism and older adults on three different levels in their life, namely on an intrapersonal, interpersonal and group level ([17]).

Table 1.Sample Composition, Type of Intervention, Measurement and Findings of Included Studies

Authors	Sample characteristics	Type of Intervention/ Design	Outcome measures/ Questions asked	Main findings
(1) Aday and Campbell (1995)	 N = 45 nursing students, 41 females and 4 males 42 white and 3 black students M age = 28 South-eastern United States 	Intergenerational service learning – educational program Quantitative + Qualitative (open- ended questions on survey)	Changes in nursing students' attitudes towards elderly and interest in working with them	The students were able to determine reasons for their unwillingness and willingness to work with elderlies. Moreover, the educational program was helpful in significantly changing predetermined beliefs about older people
(2) Aday, McDuffie and Rice Sims (1993)	Experimental sample N=19, 15 females and 4 males 11th and 12th grade students Elderly sample N=19, 10 females and 9 males 9 black and 10 white M age= 71	Intergenerational program Quantitative + Qualitative (open- ended statements)	Effect of intergenerational partners project on a group of Upward Bound students	Changes in attitude towards elderlies which is more positive after than before the intervention. Additionally, the students got aware of similarities between both generations, that they have not realized before
(3) Blieszner and Artale (2001)	Boynton Beach, Florida, United States N= 117 human services students 94% female, 88 % white Region unknown	Intergenerational service learning Quantitative + Qualitative (open- ended questions)	Individual social values, bourgeois attitudes, academical performance	Service learning contributed to students' perception of aging procedures and the perceived comfortability in interacting with elderlies
(4) Brown and Roodin (2001)	N = 104 undergraduate students, 94% female	Service-learning in gerontology: an out-	Increasing knowledge and understanding	Students realized the diversity related to aging and the older population.

	M age= unknown United states	of-classroom experience Qualitative (open- ended questions on course evaluation)	about gerontology in students	Some students experienced personal growth and an increased sense of understanding toward older adults. A few of the participants shared that the intervention helped them acquire skills for their future career.
(5) Counts (2019)	N= 18 female students M age= 23 Murfreesboro, Tennessee, United States	Intergenerational service-learning program Quantitative + Qualitative (open- ended questions on program evaluation)	Effects of such a program on the attitude of the students towards getting older + perception on interacting with elderlies	Students perceived a significant reduction in the negative perceptions they had towards the older generation. Joy and connectedness are feelings that were experienced through the intergenerational interaction
(6) Doll (2006)	N= 18 young adult students gender and mean age unknown Manhattan, Kansas, United States	Intergenerational human development and aging course Qualitative (focus groups + open- ended questions)	Scouting level of insight regarding topics related to aging	The majority of the students was able to adjust mistaken beliefs they had about elderlies. More and more people have the interest after this intervention to join further gerontology courses.
(7) Dorfman, Murty, Ingram, Evans and Power (2010)	N = 59 students of undergraduate introductory social work gerontology course, Iowa, United States	Intergenerational Service-Learning in an Introductory Gerontology Course Quantitative + Qualitative (open- ended questions on	Attitude change through intergenerational service learning	Students shared feelings of sympathy towards older adults and an increased positive attitude regarding nursing homes. Moreover, they experience greater appreciation for elderlies due to the rejection of several stereotypes and misunderstandings after the intervention

		survey, interviews and student journals)		
(8) Greene (1998)	N= 16 college students from nursing home residents M age= 24.8 mixed genders Fort Collins, Colorado, United States	Service learning 6 x 1-hour weekly visit Quantitative + Qualitative (open- ended questions on survey)	Impact of service learning on a reciprocal level in young and older adults	Students experienced greater awareness of diversity in the older population. Next to that, more than half of the students felt a level of companionship. Generally, an increased perception of educational value to spend time with elderlies
(9) Gutheil, Chernesky and Sherrat (2006)	N = 11 college students 100% female Age range: 20 to 55+ Halifax, Nova Scotia, Canada	Intergenerational Service-Learning Qualitative (interviews)	Conducting a needs assessment of older adults living in Bermuda through interviews	Participants have a greater interest in working with elderlies Positive shift in perceptions → sense of personal growth Students were able to confront their existing stereotypes
(10) Kalisch, Coughlin, Ballard and Lamson (2013)	N= 102 undergraduate students N= 89 female, n= 13 male M age= 21.5 68% White, 24 % African American, and 8% either Hispanic or Native American	intergenerational service-learning Qualitative (writing structured reflection journals)	Effect of intergenerational service-learning on students' attitudes and perceptions of older adults	Undergraduate students were able to overcome their misconceptions and stereotypes. They experienced increased feelings of altruism and were able to make valuable experiences The majority shows willingness to continue visiting elderlies

Greenville, North Carolina, United States

(11) Kaf, Barboa, Fishe Snavely (2011)	er and	 N= 19 audiology students 13 females and 6 males N=24 speech-language pathology students 17 females and 1 male N=24 nursing home residents with dementia 	Intergenerational service learning Quantitative + Qualitative (journal entries)	Detect shifts in attitude of students toward older people with dementia	A significant positive shift in the attitudes of the majority was determined. Students increased their level of knowledge after experiences with elderlies. Moreover, almost 50% of the participants developed an intimate relationship between both generations
		23 female and 1 male, M age= 86 Springfield, Missouri, United States			(42%) Desire for future work with older patients
					-
(12) Kane	(2003)	N = 26 social work students	Role-play exercise; Simulation of a	Teaching future practitioners in ways of	Social workers showed an enhanced respect for variety in humanity and
		Further demographics unknow	group experience	interacting with older people with	illnesses. Moreover, an increased level of empathy regarding feelings and
		Boca Raton, Florida, United States	Qualitative (written and oral comments)	Alzheimer's disease	conditions of people with memory damages was detectable. Development of skills relevant for practical work with elderlies
	p and	Control group:	Intergenerational	Perception change in	Realistic and optimistic point of view
Stubblefield (2000)	(2000)	N= 22 students 12 males, 10 females	U 1	process of becoming older	and stand about aging and the elderlies themselves Awareness of the existence of happiness and desire to go out in elderlies
		M age= 25.57			
	Experimental group:				
	N=22 6 males, 16 females				
		M age= 43.59			
		Durant, Oklahoma, United States			

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(14) Lee (2012)	N = 15 students Age range: 21-23, 87% white Newport News, Virginia, United States	Intergenerational humanities course work with documentary video- making Qualitative	Impact of video clips in challenging thinking patterns related to aging and the lives of elders in an adult day care center	Students developed altruistic values and the willingness to challenge ageist stereotypes. Discovery of intimacy, kindness, and friendship in elderlies were main themes that emerged after the intervention
(15) Lohman, Griffiths, Coppard and Cota (2003)	N= 20 occupational therapy students between the age of 20 – 30 N= 7 older adults between the age of 60-90 years 5 males, 2 females Omaha, Nebraska, United States	Intergenerational book discussion Qualitative	Changes in knowledge and perception about human development throughout the lifespan	Students perceived feelings of socially connectedness with the older adults. They increased their skills relevant to develop rapport with elderlies. Increase in reciprocal understanding of generation specific values, beliefs and interest
(16) Mason and Sanders (2003)	N = 22 masters' level social work students, Age range: 20 – 60, 86% female, 17 white, 3 African American, 1 Latino, and 1 self-reported "other" New York, United States	Intergenerational program Qualitative (interviews, open- ended questionnaire)	Elicit attitudes and stimulate discussion about working with eldery clients	Enhanced personal reflection skills. Students became aware of the advantages of working with older people
(17) Nortje (2013)	N=50 young people Age range: 10 – 16, mixed genders South Africa	Ethnodrama presentation Qualitative	Young peoples' perceptions of older people before and after an ethnodrama presentation	Changes on three different levels: 1) <i>Intrapersonal</i> : increase in empath, understanding and introspectiveness 2) <i>Interpersonal</i> : importance of respect and tolerance towards elderlies

				3) <i>Group:</i> feelings of connectedness and similarities
(18) Schuldberg (2013)	 N = 99 social work students 86 female, 13 males, 81% EuroAmerican, 9% Asian American, 7% Latino, 2% African American, and 1% Native American California, United States 	Simulation kits Qualitative	Use of simulation kits to imitate optical damages resulting due to getting older	Social work students were able to reject pre-existing stereotypes and increase their self-awareness. Majority started to critically reflect ageism and discrimination Enhanced consciousness about impact in an individual, societal, and professional context
(19) Vandsberger and Wakefield (2004)	N = 21 undergraduate social work students, M age = 30.6, 90% female, 67% white South West Virginia	Service-learning intergenerational project Qualitative (semi- structured open-and closed-ended questionnaires)	Effect of service learning with rural older adults on social work students	Participants showed an enhanced willingness to develop knowledge in area of aging. Some students shared experiences about the impact of the intervention on their personal and professional growth Increased interest in Gerontology
(20) Vowels (2014)	N= 27 undergraduate exercise science classes 60% female, 40% male Age range: 20-24 100% Caucasian Bowling Green, Kentucky, United States	Intergenerational service-learning Quantitative + Qualitative	Significant improvement of exercise science students' level of insight about elderlies and ageism through the integration of ISL into a course	Generally no significant results. Qualitative data showed an overall positive influence of intergenerational service-learning in the students. A few undergraduates reported future career endeavors Some participants developed a special bond with the older adults

Table 2.Coding Scheme comprising Themes, Codes, Definitions and Example Quotes of the Participants

Themes	Codes	Definition	Example Quotes
(1) Perceptions	1.1 Overcoming misperceptions	A change in perception and stereotypes about the older population and ageism	"Participating in this course has affected the way I think about my own aging in a positive way. Although I am still not looking forward to growing old, I am much more optimistic about it. This is due to the models we had in our class. The elder class members were all very happy and outgoing and all were eager to offer their knowledge to us "the more time I spend with elderly people, the more I am able to see them as people and not just 'old'"
			<i>"I did not know all of those things. I always thought my grandfather was just mean. I will be more patient"</i>
	1.2 Empathy and understanding	The ability to take the perspective and emotions of the older individuals in a	"Not all elders are alike; not all are dependent"
		comprehensible way	"Everyone needs help and we can help them"
(2) Experiences	2.1 Perspective about aging	How the process of aging is perceived after the intervention	"Listening to Genevieve, I have realized that these older individuals are human beings and need love and chances in life like everyone else"
			<i>"It has brought a lot of compassion to me. They tell you about their lives. Their strength and tenacity are unparalleled".</i>
	2.2 Respect	The impact of the interventions on the level of	"I feel that this process made me build a new respect for elders"

		respect toward the older people	""Interviewing these seniors has taught me to be more open minded and tolerant. What contributed to this change was the realization of the many wonderful people being blocked out of my life due to my way of thinking"
	2.3 Feelings of Connectedness	The Experience of a special bond between both parties due to the interaction with one another during the intervention	" () but at the same time I am sad to leave because I grew a special bon with these women ()" "I had very good conversations with the residents before and after testing and we laughed together
(3) Acceptability	3.1 Acceptability of interventions	The extent to which the intervention was feasible and successful in reducing ageism	"Service-learning helped me initiate conversations with my own grandmother; I know that (otherwise) these conversations would never have taken place".
			"Interviewing these seniors has taught me to be more open minded and tolerant. What contributed to this change was the realization of the many wonderful people being blocked out of my life due to my way of thinking

Discussion

The main objective of this systematic literature review was to gain insight into the perceptions, experiences and acceptability of participants, taking part in interventions aimed to reduce ageism. Qualitative data from intergenerational, intergenerational service learning and other interventions (simulation and ethnodrama) were used, analyzed and compared in order to determine similarities and differences in how the participants perceived, experienced and accepted the different types of interventions.

Looking at the samples included in this review, it can be concluded that the majority of the samples providing qualitative data was relatively small, with mostly less than 100 participants. Such a number of participants is common for qualitative research methods due to the fact that such research focuses on gaining an in-depth understanding and meaning about different situations or social contacts between people (Dworkin, 2012). The samples included younger participants who were all students from different study programs, e.g social work, audiology, human service etc. The mean age of the participants of the studies included in this review was 39. From those studies that included the race of the participants, it became apparent that the race of the participants was predominantly White. In addition to that, the majority of the studies took place in the United States. Regarding the sex of the participants, it can be concluded that there were significantly more female participants than male participants. Due to these outcomes, there is a limited variation of different ethnic groups, age groups and people of different professions that could have affected the opinion, perspective and experience of these people with ageism interventions. Hence, participants working on a daily basis in health care settings compared to students could have experienced such interventions differently due to their background and past experiences. Moreover, the fact that the majority of the studies took place in the United States means as well that these outcomes are limited to a specific region. The inclusion of other regions could lead to different outcomes due to the fact that there are clear differences in terms of norms, values and understanding of respect towards older people between western and eastern countries, especially due to the societal and economic innovation in the west (Cheung & Kwan, 2009).

Regarding the characteristics of the study designs and interventions, it became obvious that 17 studies out of the 20 studies included in this review integrated an intergenerational approach in their ageism intervention. Next to the this, the combination of this approach with service learning was visible in 12 studies which underlines the outcomes of a review that emphasized the increasing spread of service-learning due to its positive impact on society through combining individual needs with community issues (Roodin, Brown & Shedlock,

2013). As summarized by the participants, a direct intergenerational contact seemed to be very useful for the younger generations to gain more understanding about older people which finally helped them to counteract certain stereotypes and misperceptions ([1], [7], [10]). Notwithstanding, non-intergenerational types of interventions such as simulation exercises were useful too in enhancing participants awareness about how older individuals struggle in life due to decreasing health conditions throughout the aging process ([12], [18]).

Referring to the intended aims and outcomes of the different types of interventions, it can be concluded that a common aim of all types of ageism interventions was to reach a change, a rather positive shift in the attitude of the younger persons. The intended aim of interventions that integrated an intergenerational contact was to improve the contact between both generations, plus knowledge enhancement and perception change resulting from the gained knowledge. Based on the outcomes, it can be concluded that the intended aims were fulfilled by the participants who reported changes in their perception, especially when interacting with older individuals on such a close level ([1], [2], [3], [5], [11]).

Comparing the similarities and differences between the different types of ageism interventions based on the qualitative data of the participants, the results of this systematic review indicate a clear similarity between the interventions that integrated an intergenerational contact in terms of the participants perception. The majority perceived an adjustment of their misperceptions through the enhanced awareness about ageism and older people after taking part in such an intervention. Possible reasons for this can be traced back to existing literature that showed evidence for the usefulness of an active interaction between both generations in knowledge enhancement (Vieira & Sousa, 2016) and the encouragement of attitude change (Knight, Skouteris, Townsend & Hooley, 2014). Next to this, the inclusion of an intergenerational contact in an intervention showed to be the most effective feature to reach a change in people's attitude and perception (Chonody, 2015).

These explanations additionally emphasize the explored limited impact of interventions with a non-intergenerational contact, such as simulations and ethnodrama, on participants' misperceptions about ageism and older people, which became apparent through the review, as summarized in the results. This is in line with previous studies that found that neither information provision nor aging simulation lead to a change in the overall attitude (Binns, Gray & Orsak, 2016) and elimination of stereotypical perceptions ([17]). Further research is needed in order to determine possible reasons for the limited impact of simulation and information provision interventions aimed to reduce ageism. This would help to enhance the level of

Nevertheless, a clear difference is that interventions without a direct intergenerational contact compared to those with one, resulted in an enhanced level of empathy and understanding towards the older people. Moreover, the ethnodrama presentation and simulation kit intervention triggered the participants' perception on an individual and societal level. This contributed to them in ways of overthinking their own behavior towards an older individual and what these individuals need in life, such as love and care. Taken together, these outcomes strengthen the findings of instructors, focused on simulation in social work context, who found evidence for the usefulness of simulation in teaching practice and self-reflection skills (Lewis, Falk & Cipolla, 2020).

Notwithstanding, based on the qualitative data of participants, the best level of change in perceptions about ageism and older people was determined in those participants who took part in an intervention that combined service learning with an intergenerational approach. The majority of participants reported that they perceived a significant change in their perceptions and stereotypes they were holding about ageism and older people beforehand. Thus, these participants were able to overcome instead of adjusting their misperceptions and stereotypical attitude. Furthermore, the results of a few studies showed that some of the participants perceived a personal growth. Hence, it can be concluded that an intergenerational servicelearning approach compared to an intergenerational intervention seemed to have a stronger impact on the stereotypical attitude and awareness of participants about the older people and themselves. A possible explanation for that comes from Tam (2014) who summarized that the implementation of the younger generations' skills and theoretical knowledge into the practical interaction with the older generations enhances the overall level of understanding. This is then used to break down the prejudices about ageism and older people through becoming proactive.

Focusing on the findings of the experiences that were made by the participants across the different types of interventions, a similarity that can be summarized is that the majority of the participants experienced the aging process and older people with a more realistic and optimistic view than before. Apart from that, again independent of the type of ageism intervention, the necessity of showing and interacting with respect towards older individuals was experienced by the majority too. Hence, based on the results it can be summarized that a direct contact to an older individual is not necessary in order to experience and realize the importance of showing and treating older people with respect. These outcomes strengthen previous evidence that emphasized the effectiveness of education, independent of the inclusion of older people or intergenerational contact, on ageism (Boswell, 2012; McCleary, 2014; Ragan & Bowen, 2001).

A similarity that was experienced by the participants taking part in an intervention where an intergenerational approach was integrated, was on the one side the experienced positive shift in the general perspective about aging and on the other side the *feelings of connectedness* towards the older individuals they were in contact with. These findings support a similar observation by Tam (2014), who consistent with previous research summarized that one of the most positive experiences participants made through an intergenerational contact were relationship-based.

With regard to the acceptability of the interventions, a similarity was determined across the participants taking part in an intervention with an intergenerational contact, who stated that they had no difficulties in accepting and taking part in an intergenerational approach. This was emphasized by its impact on their personal growth and skills, which is in line with the findings of a previous study that determined feelings of comfortability in students taking part in an intergenerational service-learning intervention too (Tam, 2014). This absence of difficulties in showing an acceptability towards the intervention that aimed to reduce ageism, was present in the other interventions too (simulation, ethnodrama). A high level of acceptability in participants taking part in a simulation intervention was traced back to the enhanced consciousness about ageism and understanding towards the older people. This is supported by previous research that focused on simulation-based interventions, which emphasized the usefulness of simulations to help students understand the process of aging (Eymard & Douglas, 2012).

Strengths and Limitations

The current systematic literature review has several strengths and limitations. A main strength of this review is its contribution to the gap in the research, focused on qualitative data (i.et quotes), more specifically on how participants experience, perceive and accept interventions aimed to reduce ageism. Moreover, the importance of conducing a systematic literature review by analyzing qualitative studies was already mentioned by Marques, et al (2019) as a future plan. Conducting the literature search with different keywords in three different databases is an additional strength. The process of gaining information about the subjective perspective of participants, so their perceptions, experiences and acceptability with regard to different types of ageism interventions, could be transferred to other areas, such as residential care facilities, and used to improve further interventions. This would help in enhancing or in the best case securing a reduction of ageism.

The first limitation counts for literature reviews in general, which refers to the fact that the search strategies led to the exclusion of several papers. The general exclusion was extended due to the criteria of limiting the search for articles by including only publications that were written in English and contained qualitative data. Due to the English-language restriction a language bias, generalized and mistaken conclusions based on the limitation of qualitative data of participants from English-speaking countries could emerge. The inclusion of data from participants, origination form different regions with different cultural values and understanding of respect towards older people could have led to different results, providing an overview of possible differences and similarities in the perceptions and experiences of participants with different backgrounds. Moreover, the small final sample of articles (n=20) included in this review limits the generalizability of the findings. Nevertheless, the selected articles were the most suitable one's for targeting the research question. In addition to that, due to the fact that the focus was set on interpreting the qualitative data of the selected studies which were already once summarized by a different author beforehand, the issue of intersubjectivity pops up. This refers to the researcher's subjective interpretation of participants' quotes and experiences. Hence, it is neither possible to verify the results of qualitative research nor is it easy to investigate causality due to the lack of quantitative data which limits the significance of the results. Next to this, the majority of the ageism intervention studies included in this review were from the United States and were mostly conducted with female participants. These drawbacks contribute on the one hand to a location bias and on the other hand to a lack of determination of the effect of gender on the subjective perspective with regard to the interventions.

Future Research Suggestions

The findings of the current review contribute to the knowledge of ageism, interventions to reduce ageism and subjective experiences of participants taking part in such interventions. Apart from that, this systematic literature review highlights additional gaps in the literature that could benefit from future research. First, this review found a limited amount of studies that examined qualitative information about the participants. Different research is needed that is especially focused on examining individual's perceptions and experiences with interventions administered to reduce ageism. Those qualitative data used in this review resulted from the analysis and interpretation of personal and individual opinions and statements given in general by the participants after taking part in an ageism intervention. Hence, future research should focus on asking more specific open questions and conducting interviews that are focused on how the participants feel and experience such interventions, plus what they perceived as

enjoyable and meaningful. Such information is useful to evaluate the quality of such interventions from the participants point of view which can then be used to improve ageism interventions.

Second, in line with previously conducted reviews (Burnes et al., 2019; Marques et., 2019), the majority of ageism interventions were from the United States, which limits the generalizability of an effect of a particular type of intervention due to possible deviations that are related to the cultural background and context. On top of that, as described in the introduction, ageism is a global issue which underlines the importance of developing and improving ageism interventions that are adaptable for people from different cultural and national backgrounds and surroundings. Therefore, research should aim to be more culturally specific to ascertain if for example intergenerational contact would be useful in changing negative attitudes and perceptions towards older people in young persons across different cultures.

Third, even though 85% of the interventions included in this review, integrated an intergenerational approach, the findings showed that the limited amount of interventions available in the literature without the inclusion of that approach, such as simulation interventions, were positively experienced by the participants too. Therefore, future research should focus on the one hand on combining intergenerational contact with other types of interventions, as it is the case in intergenerational service-learning, which was feasible and meaningful for participants. On the other hand, it might be important to focus on developing different types of interventions that involve active interactions between both generations, so that participants are able to make experiences and get to know the older people in a more close environment and context which would influence their attitude and perceptions towards older people.

Conclusion

This systematic literature review identified 20 articles which included qualitative data of participants who took part in different types of interventions that aimed to reduce ageism. Although there are several reviews that focused on the effectiveness of ageism interventions, this systematic review is the first one that focused on how participants perceive, experience and accept such interventions. The results of this review showed that the integration of an intergenerational contact is a necessary element in intensifying the awareness and reducing the misperceptions and stereotypes about the older generation, whereas a non-intergenerational approach showed increased levels of understanding and empathy in participants. On top of that, specifically intergenerational service learning was perceived as feasible and useful, plus it had

a remarkable impact on rejecting predetermined beliefs about older people and enhancing personal growth.

References

- Aday, R. H., & Campbell, M. J. (1995). Changes in nursing students' attitudes and work preferences after a gerontology curriculum. *Educational Gerontology*, 21, 247–260. doi:10.1080=0360127950210305
- Aday, R.H., McDuffie, W., & Sims C.R. (1993). Impact of an intergenerational program on Black adolescents' attitudes toward the elderly. *Educational Gerontology*, 19(7), 663–673. doi:10.1080/0360127930190707
- Allen, J.O (2016). Ageism as a risk factor for chronic disease. Gerontologist, 56(4), 610-614
- Ayalon, L. & Tesch-Römer, C. (2017). Taking a closer look at ageism: self- and otherdirected ageist attitudes and discrimination. *Eur J Ageing*, 14, 1- 4 doi:10.1007/s10433-016-0409-9
- Beard, J.R., Officer, A., de Carvalho, I.A., Sadana, R., Pot, A.M., Michel, J.P., Lloyd-Sherlock, P., Epping-Jordan, J.E., Peeters, G., Mahanani, W.R., Thiyagarajan, J.A., & Chatterji, S. (2016). The World Report on Ageing and Health: A Policy Framework for Healthy Aging. *Health Policy*, 387(10033), 2145-2154
- Binns, A., Gray, M., & Orsak, O. (2016). Reducing ageism through education, simulation, and service learning. *International Journal of Exercise Science: Conference Proceedings*, 11(4), Article 5.
- Blieszner, R., & Artale, L. M. (2001). Benefits of intergenerational service-learning to human services majors. *Educational Gerontology*, 27, 71–87. doi:10.1080=036012701750069058
- Boswell, S.S. (2012). 'Old people are cranky': Helping professional trainees' knowledge, attitudes, aging anxiety, and interest in working with older adults. *Educational Gerontology*, *38*, 465-472. Doi: 10.1080/03601277.2011.559864
- Bousfield, C. & Hutchison, P. (2010). Contact, Anxiety, and Young People's Attitudes and Behavioral Intentions Towards the Elderly. *Educational Gerontology*, *36*(6), 451-466
- Brown, K.M., & Bright, L.M. (2017). Teaching caring and competence: Student transformation during an older adult focused service-learning course. *Nurse Education in Practice*, 27, 29-35. Doi:10.1016/j.nepr.2017.08.013
- Brown, L. H., & Roodin, P. A. (2001). Service-learning in gerontology: An out-of-classroom experience. *Educational Gerontology*, 27, 89–103. doi:10.1080=036012701750069067
- Burnes, D., Sheppard, C., Henderson, C.R., Wassel, M., Cope, R., Barber, C., & Pillemer, K. (2019). Interventions to Reduce Ageism Against Older Adults: A Systematic Review and Meta-Analysis. *Am J Public Health*, 109(8), 1-9.
- Cheung, C.K. & Kwan, A.Y.H. (2009). The erosion of filial piety by modernization in Chinese cities. Aging & Society. 29. 179-198. Doi: 10.1017/So144686X08007836
- Chonody, J.M. (2015). Addressing ageism in students: A systematic review of the pedagogical intervention literature. *Educational Gerontology*, 41(12), 859-887
- Cohen, H.L, Hatchett, B., & Eastridge, D. (2006). Intergenerational service-learning: an innovative teaching strategy to infuse gerontology content into foundation courses. *Journal of Gerontological Social Work*, 48 (1-2), 161-178. Doi:10.1300/J083v48no1_11
- Counts, H. (2019). *Getting ahead: Examining the intergenerational benefits of participating in a college service-learning program.* (Master thesis, Middle Tennessee State University, Murfreesboro, Tennessee, USA). Retrieved from: <u>https://jewlscholar.mtsu.edu/bitstream/handle/mtsu/5883/Counts_mtsu_0170N_11126</u>. pdf?sequence=1&isAllowed=y

- Cuddy, A.J.C. & Fiske, S.T. (2002). Doddering but Dear: Process, Content, and Function in Stereotyping of Older Persons. In T.D. Nelson (Ed.). *Ageism: stereotyping and prejudice against older persons* (pp. 3-365). Cambridge, Massachusetts: A Bradford Book
- Cuddy, A. J. C., Norton, M. I., & Fiske, S. T. (2005). This Old Stereotype: The Pervasiveness and Persistence of the Elderly Stereotype. *Journal of Social Issues*, *61*(2), 267–285.
- Dahlberg, L., & McKee, K.J. (2018). Social exclusion and well-being among older adults in rural and urban areas. *Archives of Gerontology and Geriatrics*, 79, 176-184 doi: 10.1016/j.archger.2018.08.007
- Doll, G. A. (2006). Enhancing gerontology education. *Journal of Intergenerational Relationships*, 4, 63–72. doi:10.1300=j194v04n03_05
- Dorfman, L. T., Murty, S. A., Ingram, J. G., Evans, R. J., & Power, J. R. (2004). Intergenerational service-learning in five cohorts of students: Is attitude change robust? *Educational Gerontology*, 30, 39–55. doi:10.1080=03601270490248446
- Dworkin, S.L. (2012). Sample Size Policy for Qualitative Studies Using In-Depth Interviews. Archives of Sexual Behavior, 41. 1319-1320. Doi: 10.1007/s10508-012-0016-6
- Ermer, A.E., York, K., & Mauro, K. (2020). Addressing ageism using intergenerational performing arts interventions. Gerontology & Geriatrics Education, 1-8. Doi: 10.1080/02701960.2020.1737046
- Eymard, A.S. & Douglas, D.H. (2012). Ageism among Health Care Providers and Interventions to improve their attitudes toward older adults: An integrative Review. *Journal of Gerontological Nursing*, 38(5), 26-35
- Fitzgerald, J.T., Wray, L.A., Halter, J.B., Williams, B.C., & Supiano, M.A. (2003). Relating medical students' knowledge, attitudes, and experience to an interest in geriatric medicine. *Gerontologist*, 43(6), 849-855.
- Grant, L.D. (1996). Effects of ageism on individual and health care providers' responses to healthy aging. *National Association of Social Workers*, 21(1), 9-15
- Greene, D. (1998). Reciprocity in two conditions of service-learning. *Educational Gerontology*, 24, 411–424.
- Gutheil, I. A., Chernesky, R. H., & Sherratt, M. L. (2006). Influencing student attitudes toward older adults: Results of a service-learning collaboration. *Educational Gerontology*, 32, 771–784. doi:10.1080=03601270600835470
- Harris, L. A., & Dollinger, S. (2001). Participation in a course on aging: Knowledge, attitudes, and anxiety about aging in oneself and others. *Educational Gerontology*, 27, 657–667. doi:10.1080=036012701317117893
- Healthcare Commission, Audit Commission and Commission for Social Care Inspection (2006) Living well in later life: a review of progress against the National Service Framework for Older People, London: Healthcare Commission
- Hughes, N.J., Soiza, R.L., Chua, M., Hoyle, G.E., McDonald, A., Primrose, W.R., & Seymour, D.G. (2008). Medical student attitudes toward older people and willingness to consider a career in geriatric medicine. *Journal of the American Geriatrics Society*, 56(2), 334-338.
- Jackson, E. M., Cherry, K. E., Smitherman, E. A., & Hawley, K. S. (2008). Knowledge of memory aging and Alzheimer's disease in college students and mental health professionals. Aging & Mental Health, 12, 258–266. doi:10.1080=13607860801951861
- Jansen, D.A. & Morse, W.A. (2004). Positively influencing student nurse attitudes toward caring for elders: Results of a curriculum assessment study. *Gerontol Geriatr Educ*, 25(2), 1-14.
- Kaf, W., Barboa, L.S., Fisher, B.J., & Snavely, L.A. (2011). Effect of Interdisciplinary Service Learning Experience for Audiology and Speech-Language Pathology Students

Working With Adults With Dementia. *American Journal of Audiology*, 20(2), 241-249. Doi: 10.1044/1059-0889(2011/10-0025)

- Kalisch, H. R., Coughlin, D. R., Ballard, S. M., & Lamson, A. (2013). Old age is a part of living: Student reflections on inter- generational service-learning. *Gerontology & Geriatrics Education*, 34, 99–113. doi:10.1080=02701960.2012.753440
- Kane, M. N. (2003). Teaching direct practice techniques for work with elders with Alzheimer's disease: A simulated group experience. *Educational Gerontology*, 29, 777–794. doi:10.1080=716100370
- Knapp, J. L., & Stubblefield, P. (2000). Changing students' perceptions of aging: The impact of an intergenerational service learning course. *Educational Gerontology*, 26, 611– 621. doi:10.1080=03601270050200617
- Knight, T., Skouteris, H., Townsend, M., & Hooley, M. (2014). The Act of Giving: A systematic review of nonfamilial intergenerational interaction. *Journal of Intergenerational Relationships*, 12(3), 257-278.
- Lee, T. (2012). Getting to know you: Using documentary video-making to challenge ageist stereotypes. *Gerontology & Geriatrics Education, 33*, 272–286. doi:10.1080=02701960.2012.661810
- Lewis, J.B., Falk, D., & Cipolla, C. (2020). The Use of Simulations to Teach Social Work Practice with Diverse Clients. *Journal of Teaching in Social Work, 40*(1), 2-17.
- Lohman, H., Griffiths, Y., Coppard, B. M., & Cota, L. (2003). The power of book discussion groups in intergenerational learning. *Educational Gerontology*, 29, 103–115.
- Marques, S., Mariano, J., Mendonca, J., Tavernier, W.D., Heß, M., Naegele, L., Peixeiro, F., & Martins, D. (2019). Determinants of Ageism against Older Adults: A Systematic Review. *International journal of environmental research and public health*, 17(7), 1-28.
- Mason, S. E., & Sanders, G. R. (2004). Social work student attitudes on working with older clients. *Journal of Gerontological Social Work*, 42, 61–75. doi:10.1300=j083v42n03_05
- McCleary, R. (2014). Using film and intergenerational colearning to enhance knowledge and attitudes toward older adults. *Educational Gerontology*, 40, 414-426. Doi: 10.1080/03601277.2013.844034
- Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. BMJ 2009;339:b2535, doi: 10.1136/bmj.b2535
- Nortje, D. (2013). Young people's perceptions of older people before and after an ethnodrama presentation. (Master thesis, North-West University, Potchefstroom, Mahikeng, South Africa) Retrieved from: https://repository.nwu.ac.za/bitstream/handle/10394/11922/Nortje_D.pdf?sequence=1 &isAllowed=y
- Pereira, O. & Arriaga, C. (2019). Service Learning: Benefits of Another Learning Pedagogy. Journal of Business Management and Economic Research, 3(9). 17-33. Doi: 10.29226/TR1001.2019.155
- Ragan, A. M., & Bowen, A. M. (2001). Improving attitudes regarding the elderly population: The effects of information and reinforcement for change. *The Gerontologist*, 41, 511– 515. doi:10.1093=geront=41.4.511
- Rowe, J.W. & Kahn, R.L (1997). Successful Aging. The Geronotologist, 37(4), 433-440
- Schuldberg, J. (2005). It is easy to make judgments if it's not familiar: The use of simulation kits to develop self-awareness and reduce ageism. *Journal of Social Work Education*, 41, 441–455. doi:10.5175=jswe.2005.200400408

- Smith, L. A., & McCaslin, R. (2011). Enhancing baccalaureate student learning in research and gerontology through partnership with an area agency on aging. *Journal of Teaching in Social Work, 31*, 79–88. doi:10.1080=08841233.2010.539149
- Tam, M. (2014). Intergenerational Service Learning Between the Old and Young: What, WhyandHow.EducationalGerontology,40(6).401-413.Doi:10.1080/03601277.2013.822201
- United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Ageing 2017 – Highlights (ST/ESA/SER.A/397)
- Vandsberger, E., & Wakefield, M. (2006). Service learning with rural older adults. *Journal of Intergenerational Relationships*, *3*, 83–97. doi:10.1300=j194v03n04_06
- Vieira, S., & Sousa, L. (2016). Intergenerational practice: Contributing to a conceptual framework. *International Journal of Lifelong education*, 35(4), 396–412. doi:10.1080/02601370.2016.1196248
- Vowels, M.R. (2014). Intergenerational Service-Learning with Exercise Science Students. Honors College Capstone Experience/Thesis Project. 513.
- Whitbourne, S.K., & Hulicka, J.M. (1990). Ageism in undergraduate psychology texts. *American Psychologist, 11*, 1127-1136.
- Wolff, J.K., Warner, L.M., Ziegelmann, J.P., & Wurm, S. (2014). What do targeting positive views on ageing add to physical activity intervention in older adults? Results from a randomized controlled trial. *Psychology and Health*, 29(8), 1-18.
- World Health Organization. (2015). *World report on ageing and health*. Retrieved from: https://apps.who.int/iris/bitstream/handle/10665/186463/9789240694811_eng.pdf;jses sionid=940A416A9E821E07A4127FC547793D24?sequence=1
- Wyman, F., Schiovitz-Ezra, S., & Bengel, J. (2018). Ageism in the Health Care System: Providers, Patients, and Systems. *Contemporary Perspectives on Ageis*, 19, 193-212. Doi:10.1007/978-3-319-73820-8_13
- Zhang, X., Xing, C., Guan, Y., Song, X., Melloy, R., Wang, F., & Jin, X. (2016). Attitudes toward older adults: A matter of cultural values or personal values? *Psychology and Aging*, 31(1), 89–100