The Impact of Technological Challenges on Perceived Ageism: A Literature Study on the Antecedents of Intergenerational Cooperation in the Workplace

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Abstract

The rise in discrimination numbers due to ageing in the workplace has increased research on ageism and intergenerational cooperation. This rise is because ageism is considered one of the most common forms of discrimination experienced in the work environment. It is more damaging than racism and sexism because it is more institutionalized and harder to recognize. One way to prevent or reduce ageism in the workplace is to build intergenerational interactions or collaborations. This study aims to build a comprehensive model of the antecedents or factors that influence quality improvement in intergenerational cooperation. By conducting some literature reviews, this study found three critical factors that might affect intergenerational cooperation. Those three factors are technological challenges, an organizational culture that supports intergenerational cooperation, and leadership. Further discussions and research design models are also presented in this study.

Keywords: Intergenerational Cooperation, Intergenerational Workplace Climate, Ageism, Technology Challenges, Transactional Leadership.
Introduction

In the Western part of the world, the rapid ageing of the population and the recent recession have created intergenerational conflict in the workplace. Additionally, increasingly older workers are delaying retirement, making it more difficult for young people to find work matching their skills and qualifications (Palari et al., 2019). This fact creates the potential for conflict between older and younger workers. Such potential conflicts can be exacerbated by negative stereotypes and prejudice based on age or "ageism." These days, ageism is one of the most common forms of discrimination experienced in work settings. It is more damaging than racism and sexism because it is more institutionalized and harder to recognize (Marchiondo et al., 2019; Okun, 2022; Paleari et al., 2019). This significant impact of ageism in the workplace is why the study of ageism has proliferated in the last three decades and made a massive contribution to raising awareness of this type of discrimination (Lagacé et al., 2019).

In the Indonesian context, research from Bahtiar (2021) stated that negative behaviours related to ageism that were found in society include: speaking louder or slower to the elderly because of their age (95%), using simple words when talking to the elderly (99%), and when the elderly have a disease, they might say, 'That is normal at your age.' (96%). These words in Bahtiar's research might look like typical sentences, but they contain negative stereotypes about employees who are old. Other research from Subrianto & Apriani (2022) also stated how elderly workers still experience discrimination in their work environment even though they are protected by law. Therefore, this study also suggests an increase in legal protection. Looking at the reality of society further increases the importance of awareness of ageism in the work environment in Indonesia.

Butler was one of the pioneers in ageing research who defined ageism in 1969. He defined ageism as discrimination by middle-aged groups against younger and older groups in society because middle-aged groups are responsible for the welfare of older and younger age groups which they saw as 'too dependent on them' (in Tesch-Romer & Ayalon, 2020). Other studies have defined ageism as a generalized form of stereotyping of chronological age in various settings, for example, the workplace (Zhang & Gibney, 2020). The behavioural aspect of age bias or intergenerational differentiation is age discrimination, another name for ageism (Jelenko, 2020). Based on some definitions above, it can be concluded that ageism is a form of discrimination against other people because of their age. Ageism can occur in a variety of settings and places such as schools, the community, and most often the workplace.

According to research by Petery & Grosch (2022), the results provided little support for the proposition that age stereotypes substantially influence high-risk decisions made about individuals in organizations. A study from Paleari et al. (2019) also stated that ageism worsens the quality of intergroup contact, increasing counterproductive behaviour towards co-workers and decreasing identification with the organization. In addition, this study also states that ageism slightly influences the vitality or quality of employee performance in the workplace longitudinally through mediating the quality of contact between groups. Many previous studies have discussed how important it is to have an awareness of ageism in the work environment because it influences important factors such as the emotional health and well-being of employees, perceptions of the sustainability of their work, and job satisfaction (Jelenko, 2020; Lagacé et al., 2019; Zhang & Gibney, 2020).

Seeing the development of research on ageism, thus, it is necessary to have a study that discusses intergenerational work in the work environment. Lagace et al. (2019) stated in their research that one way to fight ageism is to build intergenerational cooperation. Jelenko (2020) also stated that increasing intergenerational cooperation could increase job satisfaction and employee engagement to create an ideal work environment. Lagac et al. (2022) also stated in their study on ageism that in the Canadian work environment, positive attitudes towards older workers result in higher levels of job involvement (which means the quality of intergenerational collaboration will increase). Later, these higher levels of job involvement also increase the likelihood of staying with the organization or employee retention. Therefore, building good intergenerational cooperation is the way to fight it during an increasing ageism situation.
Nurhas et al. (2019) research explore the challenges that can confront Intergenerational collaboration in CDP and non-CDP settings. CDP stands for Culturally Diverse People or a collection of people with diverse cultures. This study states that six obstacles allegedly hinder intergenerational cooperation in CDP and non-CDP. Four of the six challenges are related to technology: an environment that is not technologically supportive, no training in using technology, difficulties in managing virtual presence (zoom and so on), and the level of technological complexity. Beyond CDP and non-CDP settings, the three biggest challenges hindering intergenerational cooperation are all technology-related.

Technology does have a significant role in the development of the company. But it can also be a challenge given that the older generation is not usually 'tech-savvy.' Akcil et al. (2018) have proven through their research that incorporating technological factors into leadership can improve intergenerational cooperation. From this study, it can be concluded that technological skills affect intergenerational cooperation in the work environment. This statement is also supported by Reis et al. (2021), which state that technological developments increase intergenerational communication and social interaction. But on the other side, Nurhas et al. (2019) stated that technological challenges negatively affect the formation of intergenerational cooperation. Technological complexity is the second most significant challenge for older organizational members to build or develop good intergenerational cooperation. For younger employees, access to technology is the third most significant challenge for building intergenerational collaboration. From the research above, we can conclude that technology is essential for building intergenerational cooperation for both young and old employees.

Besides technology, leadership can also influence the establishment of intergenerational cooperation. It is common knowledge that leadership has a massive role in the company's sustainability. Much research has explored the influence of leadership in various areas of companies, such as firm performance, sustainability, organizational culture, etc. However, there is very little research that examines the influence of leadership on intergenerational cooperation. Akcil et al. (2018) stated that leadership integrated with technology (E-transformational leadership) could improve intergenerational work quality. Other research from Urick (2020) also supports statements about the influence of transformational leadership on intergenerational cooperation. In addition, authentic and adaptive leadership will also enhance the development of intergenerational cooperation (Laudert, 2018). Instructional leadership is also said to positively influence intergenerational cooperation in educational settings (Kazak & Polat, 2018).

Based on the background above, this study aims to create a conceptual model regarding the factors that influence the development of intergenerational cooperation in the work environment. The research uses the literature study method to build a model based on previous studies on intergenerational cooperation. The factors selected include Technology and Leadership Challenges. The last dependent variable in this study is Perceived Ageism to measure the extent to which employees' personal views and experiences regarding age discrimination. A comprehensive Intergenerational cooperation antecedent model can be built by combining these factors.

Literature Review

Based on the existing background and reality, the literature study in this study will be related to the Intergroup Contact Theory (ICT) and the four factors that will become the research design model. ICT is the leading theory in this research because it has essential roles in developing and building intergenerational cooperation. Meanwhile, theories regarding the other four factors, namely technological challenges, Transformational Leadership, Intergenerational Climate in the Work Environment, and Ageism, have also been discussed in this section.
**Intergroup Contact Theory (ICT)**

Intergroup Contact is a face-to-face interaction between members of different and clearly defined groups. The concept that is closely related to ICT is prejudice. Christ & Kauff (2019) defines prejudice as an attitude toward a group and its members that, like any other attitude, has a cognitive component (e.g., beliefs about the target group), an affective component (e.g., dislike), and a conative component (e.g., a behavioural tendency to behave negatively towards the target group). Gordon Allport introduced this theory in 1954 to explore how different groups interact. Here are some forms of interaction between groups (Christ & Kauff, 2019):

1. Direct Inter-Group Interaction: face-to-face contact with other groups directly.
2. Interaction Between Groups Indirectly.
   a. Extended Intergroup Contact: Knowing that ingroup members maintain relationships with outgroup members.
   b. Vicarious Intergroup Contact: Observes contact between ingroup members and outgroup members
   c. Imagined Intergroup Contact: Imagine contact with members of an outside group

ICT has become the basic theory for examining intergenerational relationships in various studies because different age groups are prejudiced against other groups. Here is a general chart of how ICT works:

![Figure 1. ICT Framework](image)

**Perceived Ageism**

As previously explained, ageism is a form of discrimination against others because of their age (Jelenko, 2020; Tesch-Romer & Ayalon, 2020). Butler was one of the pioneers in ageing research who defined ageism in 1969. He defined ageism as discrimination by middle-aged groups against younger and older groups in society because middle-aged groups are responsible for the welfare of older and younger age groups, which is seen as a dependency. Ageism can occur in various settings, such as schools, the community, and the workplace.

Ageism includes three dimensions: stereotypes, prejudice, and discrimination. Stereotypes are generalized and often 'simplified' ideas that people hold about certain groups of individuals (e.g., 'Older adults are slow to move and think') and reflect the way people think (cognitive dimension). Prejudice is an opinion about feelings and attitudes about a person or group of people that are formed regardless of evidence or experience (the affective dimension; for example, viewing older adults as boring conversation partners). Prejudice reactions are often based on stereotypes. Meanwhile, discrimination is the application of beliefs based on stereotypes and prejudice (Brinhof et al., 2022).
In the same study, Brinkhof et al. (2022) define perceived ageism as the degree to which each individual assesses their experience regarding age discrimination during their lifetime. Do they ever feel like they are being treated like a child or an old man? Do they ever feel judged based on their age? Have they ever felt they were not given the same opportunity just because of their age (whether old or young)? These questions will later measure the level of perceived ageism within the individual.

**Intergenerational Cooperation**

Modern lifestyles have increasingly separated generations – especially younger and older people. Life in a multigenerational community is becoming scarcer, and it is impossible to expect daily dialogue - especially between the older and younger generations. There are four theories concerning intergenerational practices, which are Contact Theory, Social Capital Theory, Situated and Contextualized Learning Theory, and Empowerment Theory:

1. According to Contact Theory, interpersonal contact can reduce prejudice and discrimination between different age groups. Intergenerational changes in attitudes can lead to positive improvements if appropriate conditions are provided. (Christ & Kauff, 2019).
2. According to Social Capital Theory which is formed by social relations between the older and younger generations, it will lead to better outcomes for both generations (Cloud et al., 2019).
3. Situated and Contextual Learning Theory assumes that learning or building relationships are not a mental process but a social one. Individual actions may have real consequences when older children and adults work together on a task in intergenerational encounters (Chung & Kim, 2021).
4. Empowerment Theory explains that more empowerment can be obtained through intergenerational relationships as a community strategy while increasing access to resources for both generations.

From the four theories above, it can be concluded that building good intergenerational communication will lead to a better society and community. A better society and community have a lot of learning, mental processes, and empowerment that is formed and a sign of good intergenerational communication.

**Intergenerational Work Climate (IWC)**

*Intergenerational Work Climate* (IWC) or Intergenerational Work Climate is a significant factor in reducing ageism in the work environment. Lagace et al. (2019) stated that in continuity with ICT theory, a positive intergenerational climate and the practice of intergenerational sharing (through the behaviour of sharing information both giving and collecting) significantly reduces the experience of ageism in employees who have old age. In time, reduced ageism leads to positive psychological outcomes, such as contentment, healthy ageing, and success at work.

**Technology Challenge**

Technology is a significant challenge in intergenerational relations (Nurhas, Aditya, Geisler, & Pawlowski, 2019; Reis et al., 2021). In their two studies, Nurhas, Aditya, Geisler, & Pawlowski (2019) said there are two main problems in building good intergenerational relationships for the young and the old. The two problems include technological complexity for the old and limited access to technology for the young. These two problems are no longer new because older people are considered to have no agility in learning technology that is constantly developing. However, on the other hand, technology can be a pathway to intergenerational learning and ultimately build good intergenerational relationships (Berčan & Ovsenik, 2019; Nurhas, Aditya, Geisler, & Pawlowski, 2019; Reis et al., 2021).
Leadership

Strukan et al. (2017) define leadership as the process of guiding the behaviour of other individuals toward the achievement of some goals and has always been considered the key to organizational success. The same study also states that leading is not the same as management. Leadership is part of management, and modern managers must know the difference between management and leadership and how to combine the two roles to achieve organizational goals. In short, leadership focuses on change by setting direction, alignment, and motivating people.

Scholars and practitioners have recognized the importance of leaders planning action to continuously stimulate the involvement of their followers in various fields (Çop et al., 2021). There are two types of leaders based on their behaviour, i.e., transactional and transformational leadership which are explained below (Burns, 1978; Choi Sang Long et al., 2012):

1. Transactional Leadership
   A leader focuses on leader-follower interaction in which subordinates are expected to carry out their duties and do as they are told. Followers, who are critical in reducing turnover, expect positive compensation according to their intentions.

2. Transformational Leadership.
   A leader who can motivate, inspire and transform his subordinates to work harder to achieve extraordinary results. Burns (1978) divides Transforming Leadership into several characteristics such as:
   a. Intellectual Leadership uses ideas as a moral force.
   b. Reform Leadership strives for modifications that align with existing trends and are consistent with prevailing principles and movements.
   c. Revolutionary Leadership demands commitment, persistence, courage, selflessness, and even self-denial.

There is no good or bad leadership style between Transactional and Transformational Leadership. Leaders can choose Transactional or Transformational Leadership based on their company's current needs. Research from Hamstra et al. (2014) states that organizations can encourage transactional leadership in situations where employees must outperform others. On the other hand, organizations can encourage transformational leadership in contexts requiring learning and development. Research from Li et al. (2018) states that top innovative universities have a transformational leadership style that directly triggers organizational innovation. Transactional leadership positively correlates with organizational culture and innovation, but the results are not statistically significant. The transformational leader's charismatic power helps create inspirational thoughts among followers, which leads to gaining respect and, ultimately, loyalty (Mittal & Dhar, 2016).

Research methods

This study uses a literature study method that brings previous research to build a model related to developing good intergenerational cooperation. The approach to identifying relevant literature includes a broad sampling framework covering various disciplines, including psychology (ICT theory), technology, leadership, and organizational communication.

The literature study begins with a keyword search, especially using Google Scholar. The keywords used are "Intergenerational Interaction/Cooperation", "Intergroup Contact Theory", and "Perceived Ageism". This study also seeks references from scientific works with the same research focus as the variables used. From these studies, a model related to Increasing Intergenerational Cooperation was formed with antecedents such as Technology Challenges, Corporate Culture, Leadership, and Perceived Ageism.
Discussion

Based on the literature study from previous research, the proposed research design model is as follows:

![Figure 2. Model Research Design]

The above model is built based on previous studies, which state that leadership is essential to build intergenerational cooperation in the work environment. Research from Urick (2020) stated that Transformational Leadership has a significant role in facilitating intergenerational relations during the crisis resulting from the COVID-19 pandemic. Laudert (2018) also stated that good leadership can change the perspective of the younger generation and can begin to embrace the rapidly changing world of the future. In addition to dealing with the digital world, Akcil et al. (2018) state in their research results that E-transformational Leadership has a huge role in building intergenerational cooperation. Based on the two studies above, the model chooses to use Transactional Leadership as a factor that can affect the Intergeneration Work Climate.

Another factor that will also affect Intergenerational Interaction is the Intergeneration Work Climate (IWC) and technological challenges. For IWC, it can be measured using the Workplace Intergenerational Climate Scale (WICS) built by King & Bryant, which consists of 16 items which are divided into four indicators, namely:

1. Lack of Generational Stereotypes (5 items).
2. Workplace Generational Inclusiveness (3 items).
3. Intergenerational Positive Feelings (5 items).
4. Intergenerational Contacts (3 items)

Meanwhile, for technological challenges, based on research from Nurhas et al. (2019), then there are two indicators, and each consists of 3 items, namely technological complexity and limited access to technology.

The relationship between the quality of Intergenerational training is also an essential factor in improving Intergenerational cooperation because there is a joint project in it (Tuori & Herlina, 2021). The quality of Intergenerational training can show how the company supports the creation of an open environment for all generations to develop (Nurhas, Aditya, Geisler, & Pawlowski, 2019).
of this training included the extent to which the organization supports the presence of a climate that builds quality intergenerational cooperation.

Finally, this research again wants to emphasize its primary goal: to create a model that can reduce ageism in the work environment. Ageism affects employees’ health and emotional well-being at work and is even the most severe form of discrimination compared to racism and sexism. (Marchiondo et al., 2019; Okun, 2022; Paleari et al., 2019). It is said by previous research that by building IWC, perceived ageism can be reduced so that areas such as emotional health and employee welfare, perceptions of the sustainability of their work, and job satisfaction will increase (Jelenko, 2020; Lagacé et al., 2019; Zhang & Gibney, 2020). Here is an Overall Model for Reducing Ageism and Increasing IWC in the workplace:

**Conclusion**

Based on the literature study above, Intergenerational Cooperation can be influenced by three variables: Technological Challenges, Organizational Culture that supports the formation of an Intergenerational Climate, and Leadership. Intergenerational Cooperation also influences how employees view their experiences related to age discrimination (perceived ageism). Knowing and
studying this model is important because perceived ageism can affect every employee’s well-being and emotional health. Perceived Ageism also affects employee involvement in work.

Bibliography:


