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## Article

# Exploring the Impact of Age Diversity on Organizational Identification: A Study of HR Practices and Perceived Age Discrimination Climate

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**Abstract:** This study explores how age diversity influences organizational identification, emphasizing the role of HR practices and the perceived age discrimination climate in Polish enterprises. Background: Anchored in social identity and social categorization theories, the study posits that observable age diversity may trigger workplace conflicts over resources and power, potentially heightening perceptions of discrimination and lowering employee satisfaction. Methods: Quantitative data were gathered from 30 Polish organizations with more than 50 employees. The sample, comprising HR managers and employees, was analyzed using linear regression and mediation analysis. Results: The findings reveal that HR practices promoting age diversity have a significant positive effect on organizational identification, with effective diversity management reducing perceived discrimination and enhancing employee satisfaction. Conclusions: This study concludes that inclusive HR practices are vital for integrating diverse age groups and ensuring equitable opportunities within the workplace. Future research should investigate the long-term organizational and employee outcomes of age-inclusive HR strategies.

**Keywords:** age diversity; organizational identification; HR practices supporting employees of different ages; perceived age discrimination climate



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## 1. Introduction

Social identity theory and social categorization theory suggest that individuals classify themselves and others into social groups, leading to distinctions between in-group and out-group members (Guerrero et al. 2013). Social identity theory, developed by Henri Tajfel (1974), posits that group behaviors stem from a sense of belonging to a social category. Visible diversity can lead to conflicts over resources and power in the workplace, resulting in unfair treatment and perceived discrimination, which, in turn, leads to employee dissatisfaction and reduced performance (Tajfel 1974). This is corroborated by social categorization theory, which suggests that people automatically categorize others into in-groups and out-groups, potentially leading to discrimination and perceptions of unfairness in the workplace (Roberson et al. 2017). Age group conflicts may exacerbate discrimination, with minority group employees experiencing age discrimination, thereby reducing their job satisfaction (Kunze et al. 2011, 2013). The integration of social identity theory and self-categorization theory indicates that age categorization influences employees' behaviors and attitudes towards other age groups (Bellotti et al. 2022).

Socio-cognitive theory explains that the level of discrimination depends on the effectiveness of organizational management (Alam and Shin 2021). Conscious actions by managers and employees in the area of diversity are crucial for minimizing negative effects and maximizing the benefits of age diversity (Alam and Shin 2021). Effective diversity management policies can reduce perceived discrimination and increase job satisfaction (Alam and Shin 2021). Social exchange theory further elucidates that employees who feel valued and fairly treated by their organization reciprocate with greater engagement and

performance (Boone James et al. 2013). Moreover, in the context of age diversity, promoting a positive organizational climate that supports fairness and mutual trust can benefit both the organization and its employees (Bellotti et al. 2022).

The purpose of this article is to examine the impact of age diversity on organizational identification and analyze the role of HR practices and the perceived age discrimination climate. The main aim of this work is to provide a comprehensive understanding of how age diversity influences organizational identification and to offer practical recommendations for organizations to manage age diversity effectively. The principal conclusions indicate that inclusive HR practices and a positive age discrimination climate are essential for harnessing the benefits of age diversity and fostering a strong sense of organizational identification among employees. This study contributes to the broader discussion on diversity management by emphasizing the need for age-inclusive policies and practices in modern organizations. Addressing these aspects aims to develop strategies that enhance organizational identification and overall organizational performance in age-diverse workplaces.

## 2. The Relationship between Age Diversity and Organizational Identification

Diversity is defined as objective or subjective differences concerning age, gender, race, and other characteristics of employees, which can positively or negatively affect organizational goals related to competitiveness and efficiency (Bellotti et al. 2022, Alam and Shin 2021). Age diversity in the workplace is becoming increasingly significant in the context of changing demographic structures of societies (Guerrero et al. 2013). Age diversity reflects differences among individuals within groups concerning age-related characteristics (Ellwart et al. 2013). Demographic changes, such as the aging population and retirement age reforms, contribute to the growing age diversity in the workplace (Boehm and Dwertmann 2015). More people are working later in life due to extended working life expectancy, which compels organizations to adapt to the varying expectations and work styles of different generations (Bellotti et al. 2022). Global competition, technological innovations, and changes in job roles further drive organizational transformation and workplace culture, necessitating lifelong adaptation and development (Alam and Shin 2021). However, improper management of age diversity can lead to negative outcomes, such as increased intergenerational conflicts and age-related biases and discrimination (Bellotti et al. 2022).

Organizational identification refers to the alignment of an individual's values with those of the organization and the sense of belonging to it, which is crucial for perceiving organizational successes and failures as personal ones (Klimchak et al. 2019). Research indicates that strong employee identification with the organization can enhance job performance, increase extra-role engagement, and reduce absenteeism (Klimchak et al. 2019). An organization's integration with a positive approach to diversity can mitigate negative behaviors, such as employee turnover, which is a growing challenge for contemporary firms (Cole et al. 2016). The psychological process of identification involves incorporating aspects of group identity into one's own identity, helping individuals define themselves within the context of the organization. People identify with organizations perceived as fair and supportive of diversity, as this fulfills their psychological needs and maintains a positive self-perception. Conversely, a negative approach to diversity can lead to individuals distancing themselves from the organization (Cole et al. 2016). Research and theory suggest that age diversity can benefit organizations by enriching perspectives, adapting to diverse employee needs and expectations, creating an inclusive organizational culture, and promoting knowledge management and skill transfer. Integrating different age groups can also support employees' identification with the organization, strengthening their commitment and loyalty. Therefore, there is theoretical and empirical justification for hypothesizing that age diversity is a significant factor supporting organizational identification (Alam and Shin 2021):

**H1:** *Age diversity among employees is positively associated with organizational identification.*

### **3. Variables Influencing the Relationship between Age Diversity and Organizational Identification: Perceived Age Discrimination Climate and HR Practices Supporting Employees of Different Ages**

Age discrimination is a prevalent issue with significant consequences for both individuals and organizations. In the context of mental health and well-being of older adults, discriminatory experiences, including those related to age, are strongly associated with symptoms of depression, lower life satisfaction, and loss of purpose (Lee and Song 2022). Additionally, age discrimination is linked to health problems, such as heart disease, and poorer self-rated health (Lee and Song 2022). Previous studies also confirm that perceived workplace discrimination negatively impacts employees' psychological well-being, organizational commitment, morale, job satisfaction, and performance (Kartolo and Kwantes 2019). Perceived discrimination refers to an individual's experience of being selectively and unfairly treated due to their membership in a particular age group (Foley et al. 2015). Specifically, age discrimination affects employees in mid and late career stages, presenting significant challenges for both individuals and organizations (Alam and Shin 2021, Rabl and Triana 2014). Research indicates that biases and negative attitudes toward older workers manifest through limited career development opportunities, exclusion from promotions, and marginalization in decision-making processes (Boone James et al. 2013). Such organizational practices not only exacerbate age discrimination but also increase the risk of lowered self-esteem and engagement among older employees (Boone James et al. 2013).

Literature suggests that organizations with greater age diversity may be more susceptible to instances of age discrimination. Age diversity can lead to a broader range of perspectives and experiences in the workplace, which may foster stereotypes and unfavorable attitudes toward older employees (Kunze et al. 2013). Studies indicate that higher age diversity increases the risk of an organizational climate conducive to age discrimination, which can have negative consequences for both individuals and the organization. Furthermore, Fasbender and Gerpott (2021) emphasize that stereotypes regarding older workers as less competent and less motivated are common and can result in unconscious or deliberate discrimination.

Considering these findings, it can be hypothesized that the greater the age diversity within an organization, the higher the likelihood of age-related discrimination among employees. In the context of hypothesis H2, age diversity may be a significant factor contributing to the emergence of such discrimination, warranting further research to understand this phenomenon more comprehensively:

**H2:** *Age diversity among employees influences the occurrence of perceived age discrimination climate.*

Existing research indicates that age diversity in the workplace may increase the risk of age discrimination. Kunze and colleagues (2013) highlight a significant positive relationship between age diversity and a discriminatory climate, suggesting that organizations with greater age diversity are more likely to exhibit negative attitudes and practices toward older employees.

Studies also show that experiencing age discrimination negatively affects employees' organizational identification. Boone James et al. (2013) found that older employees who face negative attitudes and age-related limitations may feel less valued and emotionally connected to their organization. Additionally, De Meulenaere et al. (2024) identified that perceptions of unfair treatment and lack of support from the organization lead to decreased motivation and employee engagement.

According to social exchange theory (Cropanzano and Mitchell 2005), organizational identification is strengthened through reciprocity in employee–organization relationships. When employees experience age discrimination, they may feel a lack of reciprocity and equality in treatment, negatively impacting their identification with the organization.

In conclusion, based on available evidence, it can be hypothesized that experiencing age discrimination may lead to decreased organizational identification (Ng and Feldman 2023). In the context of hypothesis H3, there is a rationale for conducting research to confirm this relationship and identify potential mechanisms influencing it:

**H3:** *A perceived age discrimination climate negatively impacts organizational identification.*

In the past decade, research on age diversity in the workplace has become increasingly prevalent and significant, responding to the changing demographic composition of the workforce. However, there remains a lack of comprehensive understanding regarding how various organizational initiatives impact employee experiences (Cole et al. 2016). Fasbender and Gerpott (2021) identify two primary types of age-adapted HR practices: developmental HR practices, which focus on optimizing the production and cognitive capabilities of older employees through training and career development opportunities, and adaptive HR practices, which reduce physical burdens and organize tasks to maintain the productivity of older workers. HR practices related to diversity aim to promote fair human resource policies and integrate employees from various age groups (Guerrero et al. 2013; Zhang and Zhang 2022). Boehm and Dwertmann (2015) summarize the different HR practices associated with diversity, highlighting their critical importance for addressing changes in workforce composition. Based on the existing literature, the following hypothesis can be proposed:

**H4:** *Age diversity among employees influences the prevalence of HR practices supporting employees of different ages.*

Human resource (HR) practices are critical elements that not only enhance employee capabilities but also contribute to a sustained competitive advantage for organizations (Liu et al. 2022). Organizations that actively engage in the recruitment and retention of employees across different age groups are perceived by their teams as fair and supportive. Consequently, employees are more likely to reciprocate trust, demonstrate higher performance, exhibit organizational citizenship behaviors, and experience reduced turnover (Bellotti et al. 2022).

Research suggests that organizations with greater age diversity are more inclined to implement HR practices tailored to different age groups. These practices may encompass measures that support the professional development and mental health of older employees, as well as adaptations in working conditions to meet the physical and cognitive needs of this group. Age diversity can influence the organizational climate, fostering integration and equality in the workplace, which translates into positive employee experiences (Fasbender and Gerpott 2021). HR practices that account for age differences can contribute to increased organizational identification by creating work conditions that promote a sense of fairness and equality among employees of various age groups. By promoting equitable HR practices, such initiatives can enhance employee engagement, leading to greater loyalty and organizational citizenship behaviors (Boehm and Dwertmann 2015). Good HR practices that enhance organizational identification include ensuring equal access to job opportunities and professional development for both younger and older employees, without age discrimination (Walker 1997). Additionally, optimizing work processes to support high performance while maintaining employee health and work capacity is essential (Naegle and Walker 2006). Based on the above considerations, the following hypothesis can be proposed:

**H5:** *HR practices supporting employees across different age groups positively influence organizational identification.*

However, increased age diversity in the workplace can lead to a rise in age-related biases and discrimination, which may negatively impact organizational climate and in-

dividual employee experiences (Bellotti et al. 2022). Effective diversity management and appropriate workplace practices play a crucial role in mitigating potential negative effects associated with age differences (Bellotti et al. 2022).

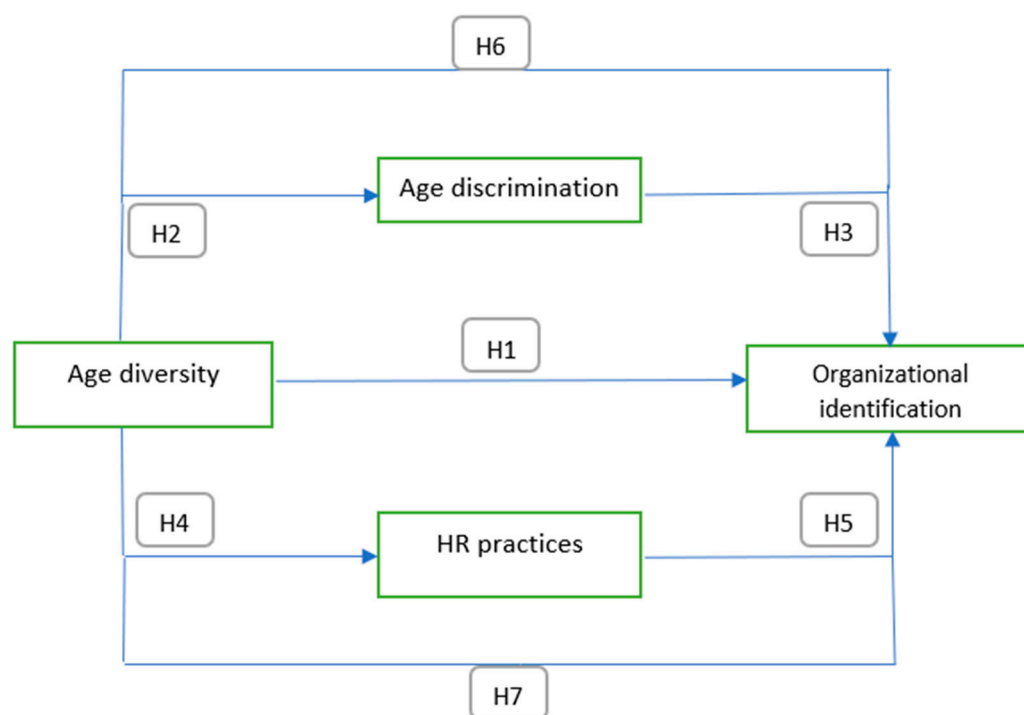
Organizations that actively promote the value of diversity through their policies and procedures are perceived by employees as supportive and fair, which fosters a positive attitude towards diversity (Cole et al. 2016). This perception significantly influences key organizational outcomes, including organizational identification, which represents the cognitive connection between an individual and the organization (Cole et al. 2016). Social identity theory, particularly the concept of self-enhancement motivation, suggests that when an organization is seen as engaging in desirable practices, employees are more likely to identify with it (Cole et al. 2016).

Based on these considerations, the following hypotheses can be formulated:

**H6:** *A perceived age discrimination climate mediates the relationship between age diversity and organizational identification.*

**H7:** *HR practices that support employees across different age groups mediate the relationship between age diversity and organizational identification.*

In summary, age discrimination presents a significant challenge for both individuals and organizations. It adversely affects the mental well-being of older employees and organizational effectiveness by limiting the diversity of perspectives and experiences in the workplace. Understanding this phenomenon is crucial for developing effective strategies for managing age diversity and promoting fair organizational practices. Figure 1 illustrates the conceptual framework of the research model.



**Figure 1.** The conceptual framework of the relationship between employee age diversity and organizational identification.

#### 4. Research Methods and Tools

To verify the research hypotheses proposed in this study, quantitative research was conducted among businesses in Poland. Data were collected from May to October 2023 from 30 organizations employing more than 50 employees (medium, large, and very large



organizations). The respondents in the study were HR managers (30 people) and junior employees (3 employees from each company), totaling 120 responses. The approach to the research sample was adapted from: (De Meulenaere et al. 2024; Boehm and Kunze 2015; Boehm and Dwertmann 2015; Kunze et al. 2011, 2013). The research sample was selected randomly. For analyzing the constructs in this study, the opinion survey technique was used, which is a valid tool for assessing phenomena in management sciences. The respondents included HR managers and junior employees from selected medium, large, and very large enterprises operating in Poland.

To measure employee age diversity, the estimated average age of employees was used, along with the Teachman index and the Blau index. The estimated average age of employees in a given organization in Poland was provided by HR managers and was as of 31 December 2022.

The Teachman index is calculated using the formula:

$$IT = - \sum_{i=1}^n [P_k \times \ln(P_k)] \quad (1)$$

where  $P_k$  is the decimal fraction representing the proportion of members in each age category relative to the total number of employees, and  $n$  is the number of categories. In this study, there were four categories corresponding to four generations. The Teachman index ranges from 0 to 1.11 (according to the formula:  $0 - 1 \times \ln(1/n)$ ). It reaches its highest value when the number of employees in each category is equal (Harrison and Klein 2007). In the studied sample of organizations, the average Teachman index was 1.19, indicating high age diversity.

The Blau index is calculated using the formula:

$$IB = 1 - \sum_{i=1}^n P_k^2 \quad (2)$$

where  $P_k$  is the decimal fraction representing the proportion of members in each age category relative to the total number of employees, and  $n$  is the number of categories. In this study, there were four categories corresponding to four generations. The Blau index ranges from 0 to 0.75 (according to the formula:  $0 - (n - 1)/n$ ). It reaches its highest value when the number of employees in each category is equal (Harrison and Klein 2007). In the studied sample of organizations, the average Blau index was 0.62, indicating high age diversity.

Organizational identification was measured using a scale developed by Marique, Stinglhamber, Desmette, Caesens, and De Zanet (Marique et al. 2013), later verified by Hameed, Roques, and Ali Arain (Hameed et al. 2013) and Sammarra, Profili, Peccei, and Innocenti (Sammarra et al. 2021). This scale includes six statements. HR practices promoting age diversity among employees were assessed using an original, test-based research tool containing nineteen statements. Discrimination was measured using a five-item perceived age discrimination scale developed by Kunze et al. (2011), based on Abraham's (Abraham and Hansson 1995) scale and enhanced by including leadership behaviors as a key source of potential age discrimination. This scale evaluates employees' observations regarding discriminatory practices related to age within their company (Kunze et al. 2011, 2013), including five statements. Recently, social scientists have validated instruments to measure targets' reported experiences of age discrimination. Four examples of psychometrically sound instruments include: The Nordic Age Discrimination Scale—NADS (Furunes and Mykletun 2010); The Workplace Age Discrimination Scale—WADS (Marchiondo et al. 2016); The Work-related Age-based Stereotypes Scale—WAS (Marcus et al. 2016); and the Workplace Intergenerational Climate Scale—WICS (King and Bryant 2017). For the questionnaire, both for employees and HR managers, control variables included the type of organizational activity and the sector/industry in which the organization operates.

## 5. Results of the Empirical Research

Firstly, the reliability and internal consistency of the scales were assessed using Cronbach's alpha coefficient, which is the most commonly used tool for measuring reliability. The custom scale examining HR practices related to age, encompassing all HR functions, had a Cronbach's alpha coefficient of 0.830. The scale assessing organizational identification had a Cronbach's alpha coefficient of 0.837. The scale measuring the shared perception of negative age discrimination climate had a Cronbach's alpha coefficient of 0.915. The analysis revealed that all scales had Cronbach's alpha values above 0.6.

Additionally, the Kaiser–Meyer–Olkin (KMO) measure and Bartlett's test of sphericity were conducted. These measures assess the adequacy of variable selection for factor analysis. Both the KMO values (each tool showing a value above 0.5) and Bartlett's test results (all indicating statistically significant solutions) support the appropriateness of performing factor analysis due to the presence of intercorrelations among the measurement variables.

Confirmatory factor analysis involves verifying hypotheses about a pre-specified factor structure and estimating the parameters of the developed model. Factor analysis enables the reduction of the number of variables by replacing them with meta-factors, which will be subject to further analysis. The identified main factors reflect the structure of the intercorrelations among the examined traits. For HR practices related to age, there were six dimensions exceeding the value of 1. For organizational identification, two dimensions described this variable. Only one dimension described the variable of age discrimination.

Another area of statistical analysis was correlation. The linear correlation coefficient  $\rho$ , often referred to as Pearson's correlation coefficient, measures the covariance between two random variables, X and Y. Correlation analysis between the individual constructs was conducted to determine if and how they are related according to the respondents' opinions. A strong positive statistical relationship was found between age-inclusive HR practices and organizational identification (H5). A moderate positive statistical relationship was observed between diversity and age-inclusive HR practices (H4). Moreover, these relationships were statistically significant. The findings indicate that discrimination is not a statistically significant variable in relation to other variables, which is a rather surprising observation. It is worth noting that employees assessed the perception of discriminatory behaviors and generally disagreed with the notion that age discrimination occurs in their workplace, whether regarding task assignments, individual promotion opportunities, or managerial behaviors toward older employees. The lack of significant correlation between age discrimination and other variables, particularly age diversity and organizational identification, was unexpected given previous literature. One possible explanation is that employees may not perceive age discrimination as prevalent within their organizations, which could be due to effective HR practices already in place. Additionally, cultural or organizational factors specific to the study's sample, such as a general tolerance for age diversity, may mitigate the perception of discrimination. Another explanation might be that employees experience subtle, unconscious forms of discrimination that are not easily recognized or reported, leading to weaker correlations. These analyses are presented in Table 1.

All the presented results from the correlation analysis provide a basis for further exploration of the interdependencies between the variables. In the regression analysis, the variables are quantitative, with the assumption that one variable is dependent while the other is independent. Initially, linear regression is performed to examine the presence of a linear relationship.



**Table 1.** Correlation coefficient between constructs of the research model.

Pearson Correlation		Age Discrimination	Age Diversity	HR Practices	Organizational Identification
Age discrimination	$\rho$	1	−0.045	0.004	−0.061
	Sig.		0.813	0.985	0.749
Age diversity	$\rho$	−0.045	1	0.388 *	−0.112
	Sig.	0.813		0.034	0.557
HR practices	$\rho$	0.004	0.388 *	1	0.701 **
	Sig.	0.985	0.034		<0.001
Organizational identification	$\rho$	−0.061	−0.112	0.701 **	1
	Sig.	0.749	0.557	<0.001	

\*\* Correlation is significant at the 0.01 level (two-tailed). \* Correlation is significant at the 0.05 level (two-tailed). N = 30 (mean value). Source: author's own work based on research results using IBM SPSS (<https://www.ibm.com/spss>).

The linear relationship between variables was challenging to substantiate due to the absence of a relationship between the variables in hypotheses H1, H2, and H3. The hypothesis of a linear relationship between the following variables—employee age diversity, age discrimination, and organizational identification—could not be supported. Consequently, regression analysis could not be conducted with these variables. Therefore, the mediating hypothesis H6 was also falsified. The failure to support linear relationships between age diversity, age discrimination, and organizational identification suggests that these relationships may be more complex than initially hypothesized. It is possible that other moderating factors, such as organizational culture or leadership style, play a significant role in shaping the outcomes of age diversity. These findings highlight the need for a more nuanced approach to understanding how age diversity affects organizational identification, possibly through non-linear or interaction effects. This suggests that future research should explore alternative models or additional variables that could explain these dynamics. The results of the linear regression analysis are presented in Table 2.

**Table 2.** Linear regression analysis between constructs of the research model.

Model Summary and Parameter Estimates: H1							
Dependent Variable: Organizational identification							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	0.012	0.353	1	28	0.557	5.163	−0.451
The independent variable is age diversity							
Model Summary and Parameter Estimates: H2							
Dependent variable: age discrimination							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	0.002	0.057	1	28	0.813	5.439	−0.154

Table 2. Cont.

The independent variable is age diversity							
Model Summary and Parameter Estimates: H3							
Dependent variable: organizational identification							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	0.004	0.105	1	28	0.749	5.044	−0.072
The independent variable is age discrimination.							
Model Summary and Parameter Estimates: H4							
Dependent variable: HR practices							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	0.150	4.959	1	28	0.034	3.552	1.077
The independent variable is age diversity							
Model Summary and Parameter Estimates: H5							
Dependent variable: organizational identification							
Equation	Model Summary					Parameter Estimates	
	R Square	F	df1	df2	Sig.	Constant	b1
Linear	0.492	27.070	1	28	<0.001	−0.187	1.022
The independent variable is HR practices							

Source: author's own work based on research results using IBM SPSS.

The sole exception was the independent variable: HR practices supporting employees of different ages. A positive linear relationship was observed between these variables. The presence of age diversity among employees stimulates the development of actions and practices tailored to employees' age (H4). Additionally, the greater the number of age-adapted HR practices, the higher the perceived organizational identification among employees (H5). The results of the linear regression analysis are detailed in Table 2.

The remaining hypothesis to be tested was H7, which pertains to mediation. Mediation analysis in this study was conducted following the approach outlined by Baron and Kenny (1986), where the mediator (M) is considered a variable that significantly explains the relationship between the independent variable (X) and the outcome variable (Y). According to this approach, the dependencies were examined through the following steps (Baron and Kenny 1986). To assess whether the mediation effect was statistically significant, Sobel and Aroian tests were employed. For hypothesis H7, which examines the mediating effect of age-inclusive HR practices on the relationship between employee diversity and organizational identification, confirmation of the hypothesis was obtained.

Although regression analysis indicated that the relationship between age diversity among employees and organizational identification is statistically insignificant, the influence of HR practices on diversity is strong enough that, together, these variables significantly affect organizational identification (strong positive statistically significant relationship, standardized Beta: 0.876). This means that the more frequently an organization implements practices and actions that support employees of different ages, the stronger the organizational identification among employees becomes. The verification of the mediating effect of the variables is presented in Table 3.

**Table 3.** Verification of the mediating effect of age-inclusive HR practices on the relationship between employee diversity and organizational identification.

		Coefficients <sup>a</sup>			t	Sig.
Model H7		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	0.628	0.809		0.776	0.444
	Age diversity	−1.826	0.489	−0.452	−3.735	<0.001
	HR practices	1.277	0.176	0.876	7.248	<0.001

<sup>a</sup> Dependent variable: organizational identification. Source: author's own work based on research results using IBM SPSS.

To determine whether the mediation effect was statistically significant, Sobel and Aroian tests were used (Table 4). According to the approach described by R. M. Baron and D. A. Kenny, all conditions for mediation were met. The analysis indicates that both the significance levels of the Sobel and Aroian tests confirm the hypothesis that age-inclusive HR practices mediate the relationship between employee age diversity and organizational identification. The Sobel and Aroian test results confirm that age-inclusive HR practices mediate the relationship between age diversity and organizational identification. This finding underscores the critical role that HR practices play in shaping how employees perceive and engage with age diversity in the workplace. The mediation results suggest that without proper HR support, age diversity alone may not lead to stronger organizational identification. These tests provide statistical validation of the mediating role of HR practices, reinforcing the need for organizations to adopt inclusive policies that foster a positive work environment for employees of all ages.

**Table 4.** Verification of the mediating effect of age-inclusive HR practices on the relationship between employee diversity and organizational identification using Sobel and Aroian tests.

Tests	Results	
	Test statistic	p-value
Sobel test	2.12878005	0.03327246
Aroian test	2.11050474	0.0348149

Source: author's own work based on research results using IBM SPSS.

Of the seven hypotheses, three were confirmed, including the role of HR practices in supporting age diversity and its positive effect on organizational identification. These results highlight the practical importance of age-inclusive HR strategies in building cohesive, engaged workforces. Conversely, the falsified hypotheses suggest that age diversity does not automatically lead to higher organizational identification or reduced discrimination. These findings point to the need for further research on how age diversity interacts with other organizational factors. The results contribute to both theoretical and practical discussions on managing age diversity and underscore the importance of tailored HR interventions. Thus, three out of seven hypotheses were confirmed, as summarized in Table 5.

**Table 5.** Summary of hypothesis testing.

Hypothesis	Testing Result
H1: Age diversity among employees is positively associated with organizational identification	Falsified
H2: Age diversity among employees influences the occurrence of perceived age discrimination climate.	Falsified
H3: A perceived age discrimination climate negatively impacts organizational identification.	Falsified
H4: Age diversity among employees influences the presence of HR practices supporting employees of different ages.	Confirmed
H5: HR practices supporting employees of different ages positively affect organizational identification.	Confirmed
H6: A perceived age discrimination climate mediates the relationship between age diversity among employees and organizational identification.	Falsified
H7: HR practices supporting employees of different ages mediate the relationship between age diversity among employees and organizational identification.	Confirmed

Source: author's own work based on research results using IBM SPSS.

## 6. Conclusions

This study highlights several practical implications for organizations. Age-inclusive HR practices, such as equitable recruitment, training, and development opportunities for all age groups, have been shown to enhance organizational identification by creating an inclusive work environment. These practices not only support age diversity but also mitigate perceived discrimination, which can negatively impact employee engagement and retention.

The mediating role of HR practices in the relationship between age diversity and organizational identification is crucial. By fostering a positive climate through tailored HR initiatives, organizations can strengthen employees' connection to the organization, especially in age-diverse settings. These practices act as a bridge, reducing the potential for discrimination and improving job satisfaction and organizational commitment.

The findings also extend beyond organizational identification, suggesting that age-inclusive HR practices can enhance overall employee engagement and retention, providing a broader impact on HR strategies. This shift in focus towards a more inclusive approach supports the well-being of all employees, contributing to long-term organizational success.

Future research should explore the longitudinal effects of age diversity on organizational outcomes, investigating how age-inclusive practices evolve and what specific mechanisms further drive organizational identification over time. Expanding the analysis to different cultural contexts will also enrich understanding of how diversity practices can be optimized across various organizational environments.

### 6.1. Limitations and Future Research Directions

Despite its value, the study is not without limitations. The data, which are cross-sectional, limit the ability to draw causal inferences. Future research should utilize longitudinal data to track changes over time and gain a better understanding of the dynamics between the variables (De Meulenaere et al. 2024).

The relatively small sample size ( $N = 30$ ) limits the statistical power of the analyses, which could explain why some hypotheses were not supported. A larger sample size might increase the likelihood of detecting significant relationships and provide more robust conclusions. The limited number of organizations in the study may also reduce the generalizability of the findings. Increasing the sample size in future studies could lead to more reliable results, especially when investigating complex relationships, like those between age diversity, discrimination, and organizational identification.

Another limitation is the generalizability of the results. The study was conducted with a sample of Polish firms, which may affect the applicability of the findings to organizations in different countries with diverse cultural norms regarding age in the workplace.

Replicating the study with more varied samples could validate the results across different organizational and cultural contexts (De Meulenaere et al. 2024).

Measurement issues also need to be addressed. Future research might focus on using more objective metrics than self-reported measures and incorporate multiple data sources to enhance the reliability of the findings (De Meulenaere et al. 2024).

Additionally, age data were collected from employees rather than personnel records due to privacy regulations, which may introduce some distortions. Future studies could consider alternative methods of collecting demographic data that comply with privacy standards (De Meulenaere et al. 2024).

In terms of replicability and further research, identifying additional organizational factors that might moderate the effects of age on organizational identification is crucial. Research could explore various organizational contexts to better understand how different factors influence the analyzed relationships (De Meulenaere et al. 2024).

Other limitations, such as potential methodological errors due to self-reported measures and the need to account for organizational diversity in future studies, indicate the necessity for further analysis (Alam and Shin 2021; Cole et al. 2016; Fasbender and Gerpott 2021).

Furthermore, future research planned by the author will focus on serial mediation, assuming that there are interrelated mediating variables that additionally influence the relationship between age and organizational identification (De Meulenaere et al. 2024; Hayes 2013). Currently, the mediating variables analyzed are considered independent of each other.

## 6.2. Practical Implications

The creation and reinforcement of negative stereotypes have been identified as key factors leading to age discrimination in the workplace. Organizations should take steps to directly challenge such beliefs, such as the notion that older employees are less capable of learning and adapting to change, or that they have diminished mental and physical abilities (Boehm et al. 2014).

To effectively manage age diversity, organizations should implement both proactive and reactive strategies. Proactive approaches might include educational programs aimed at increasing employees' awareness of age diversity and debunking stereotypes. Additionally, organizations should foster acceptance of age diversity by cultivating an organizational climate where norms promoting tolerance and acceptance are rewarded (Alam and Shin 2021).

Effective management of age diversity is crucial for enhancing job satisfaction and overall organizational performance. Inadequate management may lead to unfair treatment of employees based on their diversity characteristics, negatively impacting their engagement and work outcomes (Alam and Shin 2021).

HR departments can play a significant role in eliminating age-based biases by developing skills to recognize stereotypes, avoiding age-based recruitment and promotion decisions, and offering diversity training that includes age considerations. Furthermore, older employees can be leveraged as a strategic competitive advantage through programs that reward long service and provide mentoring opportunities (Boone James et al. 2013).

In dynamic work environments, it is advisable to implement age-inclusive practices that support organizational innovation and performance without favoring any particular age group. Inclusive approaches to age diversity, ensuring equal access to training and development for all employees, can support contributions from all age groups to organizational innovation (De Meulenaere et al. 2024).

Organizations can mitigate the negative effects of age diversity by implementing appropriate HR practices, such as age-specific training programs and adjusting work conditions (Fasbender and Gerpott 2021).



HR practices oriented towards diversity can support organizational identification by creating fair working conditions and equality among employees of different age groups (Boehm and Dwertmann 2015).

To promote fair and transparent treatment of employees, it is recommended to avoid clearly categorizing employees by age, reflect on age norms, and design HR strategies that do not rely on age as a central category. Age diversity training and consideration of this diversity when forming work teams are essential for effective management of age diversity (Hertel et al. 2013).

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