Generational Differences and Skills Mismatch Levels in Multigenerational Workforces

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ABSTRACT

The purpose of this research was to investigate the effect of generational differences on the levels of skill mismatch within multigenerational workforces. The study examines how skills don't align well across different generations in a workforce and explores how this relates to the differences between generations. The study utilized data from the Skills Measurement Employer Survey 2016-2017 (Wave 3), the research examines the prevalence of skills mismatches across diverse age groups and professional sectors. The study employed Kruskal-Walli's test to investigate the presence of a significant relationship between the level of skill mismatches and generational differences. The findings reveal that the observed skills mismatches may be attributed to generational differences. The implications of these findings are profound, suggesting that organizations should adopt tailored approaches such as customized training programs, regular skills assessments, and adaptable work arrangements to effectively address skills gaps and enhance overall workforce performance. The study advocates for further research to comprehensively understand the underlying causes of skills mismatches in the different generational cohorts and develop effective strategies to rectify them. This study contributes significantly to the ongoing discourse on skills mismatches in multigenerational workforces, providing valuable insights for organizations striving to optimize their workforce composition and foster a more harmonious and productive work environment for employees across all age groups.

Key words: Generational differences, Skills mismatch

INTRODUCTION

In today's rapidly evolving workplace, the alignment of skills with job requirements is crucial for organizational success. However, skill mismatch, where the skills possessed by workers do not align with the skills demanded by their jobs, remains a prevalent issue (Boswell, Stiller & Straubhaar, 2004). This phenomenon is particularly significant in the context of multigenerational workforces, where different age groups bring varying skillsets, experiences, and perspectives to the table. Multigenerational workforces typically include individuals from several distinct generations, each with its own defining characteristics and values. These generations include Baby Boomers, born between 1946 and 1964, known for their strong work ethic and dedication to their careers; Generation X, born between 1965 and 1980, characterized by its independence and adaptability; Millennials (Generation Y), born between 1981 and 1996, often described as tech-savvy, collaborative, and socially conscious; and Generation Z, born between 1997 and 2012, the newest generation to enter the workforce, known for its digital nativism and entrepreneurial spirit. To effectively motivate and manage four generations, the differences in their values and characteristics must be understood, respected, and recognized (Lancaster and Stillman, 2002).

Previous research has highlighted the challenges posed by skill mismatch, including reduced productivity, lower job satisfaction, and higher turnover rates (Cappelli, 2015). These challenges can have varying effects on different age groups, further complicating the issue in multigenerational work environments. By understanding skill mismatch implications, organizations can develop strategies for a harmonious, productive work

environment. Organizations that effectively manage skill mismatch in multigenerational workforces can gain a competitive edge in the market. By creating an inclusive environment that values and leverages the strengths of each generation, organizations can foster a culture of innovation and growth.

Research has shown that effective management of multigenerational workforces can lead to higher levels of employee retention and productivity. For example, organizations that implemented strategies to accommodate the diverse needs and preferences of different generations in the workforce experienced higher levels of employee retention (Wong, Gardiner, Lang, & Coulon, 2008). Similarly, organizations that fostered a culture of inclusivity and respect among multigenerational workers saw improvements in productivity levels (Ng, Schweitzer, & Lyons, 2010). Additionally, generational differences in work values, such as leisure and extrinsic values increasing while social and intrinsic values decreasing, can impact productivity (Twenge, Campbell, Hoffman, & Lance, 2010). These studies highlight the importance of addressing the unique challenges and opportunities presented by multigenerational workforces to enhance retention and productivity outcomes.

The current study is motivated by the increasing significance of managing skill mismatch within multigenerational workforces. As technology rapidly advances and job requirements evolve, the skills demanded in the workplace are continuously changing. However, not all employees possess the skills necessary for their roles, leading to skill mismatch. This issue is particularly relevant in multigenerational workforces, where different age groups may exhibit varying skillsets and levels of technological proficiency.

Existing research indicates that skill mismatch can have detrimental effects on organizations, such as reduced productivity, lower job satisfaction, and higher turnover rates (Handel, 2003). Addressing skill mismatch requires a thorough understanding of its impact on different generations within an organization and the development of targeted strategies to bridge the gap between existing skills and those required. However, there is a significant gap in the literature regarding the specific impact of generational differences on skill mismatch levels within multigenerational workforces. While studies have examined skill mismatch broadly, few have delved into how different generations experience and address this issue (Cappelli, 2015; Brunello & Rocco, 2017). This gap necessitates a focused exploration of generational dynamics to better understand and address skill mismatches in today's diverse workforce. Furthermore, the relationship between work and home and how it varies among different generational cohorts, as examined by Moore, Grunberg, and Krause (2014), provides a foundational understanding that can be extended to explore skill mismatch across generations. Through an exploration of the impact of generational differences on the levels of skill mismatch within multigenerational workforces, this study aims to contribute to the existing knowledge on this subject. The findings of this study can offer valuable insights for organizations seeking to optimize their workforce composition and foster a more harmonious and productive work environment for employees of all ages.

Statement of the Problem

The effect of generational differences on skill mismatch is a pressing issue that requires urgent attention. With the rapid advancement of technology and changing job requirements, the skills demanded in the workplace are constantly evolving (Cappelli, 2015). However, many employees do not possess the skills necessary for their roles, leading to a significant gap between the skills they have, and the skills required for their jobs. This skill mismatch can have detrimental effects on organizations. It can lead to inefficiencies in task execution, reduced productivity, lower job satisfaction, and higher turnover rates (Ng, Schweitzer, & Lyons, 2010). Moreover, as the global economy becomes increasingly competitive, organizations that fail to address skill mismatch may find themselves at a disadvantage, unable to keep pace with rapidly evolving industry trends and technological advancements.

Multigenerational workforces, where different age groups may exhibit varying skillsets and levels of technological proficiency, the impact of skill mismatch can be even more pronounced. Failure to address skill mismatch in multigenerational workforces can lead to intergenerational conflicts, decreased collaboration and teamwork, and hindered organizational effectiveness. Given these challenges, it is crucial for organizations to urgently address skill mismatch in multigenerational workforces. By developing targeted strategies to bridge the gap between existing skills and those required, organizations can enhance productivity, improve employee satisfaction, and maintain a competitive edge in today's dynamic business environment.

Objective

The general objective of the study was to determine the effect of generational differences on skill mismatch levels in multigenerational workforces.

LITERATURE REVIEW

Theoretical Review

The study is anchored on the Generational theory. This theory proposed by Strauss and Howe (1991), provides a valuable framework for understanding the dynamics of the modern workforce, particularly regarding attitudes towards work, technology adoption, and learning preferences. Each generation, from Baby Boomers to Generation Z, has distinct characteristics shaped by the socio-economic and cultural context of their formative years. According to Jones, (2023) Gen X-ers are skeptical of authority and hierarchy in the workplace and prefer to work in organizations with fewer rules and procedures. They are independent and value work-life balance and flexibility but are also known for being workaholics. On the other hand, the millennials are mobile, tech-savvy, and flexible (Mercer, 2023). Millennials value work-life balance, flexibility, and social responsibility and are often seen as entitled and demanding, but also innovative and collaborative (Jones, 2023). Millennials place a high value on meaningful work and career development opportunities. This seems to herald a new golden age of global mobility that would reconcile the aspirations of employees and the business imperatives of companies (Mercer, 2023).

The Gen Z became of age in the 2010s, during an era of profound change and uncertainty driven by epic historical forces, including globalization, technology, institutional insecurity, the information environment, and human diversity (Tulgan, 2018). Gen Z-ers are comfortable with remote work and digital communication and are independent and entrepreneurial and prefer to work in environments that allow them to pursue their passions and prioritize financial stability and security (Jones, 2023). Gen Z-ers are known for valuing diversity, inclusivity, and social justice. They are independent and entrepreneurial and are not afraid to take risks in their careers. They place a high value on work-life balance, but also prioritize financial stability and security (Jones, 2023). By applying generational theory, as proposed by Strauss and Howe (1991), to the study of skills mismatch, researchers and practitioners can gain a more nuanced understanding of how different generations experience and cope with this phenomenon. This knowledge can inform the development of targeted strategies to bridge the skills gap and create a more inclusive and productive work environment for employees of all ages.

Empirical Review

The impact of skills mismatch on different generations within the workforce is a topic of growing interest and importance. Each generation is shaped by unique societal experiences, and these experiences often shape their attitudes and expectations when it comes to work (Jones, 2023). Existing research suggests that skills mismatch can lead to reduced productivity, lower job satisfaction, and higher turnover rates. However, the extent to which these effects vary across generations remains unclear. Tulgan (2018) interviewed tens of thousands of young workers and their supervisors in nearly every industry over a period of decades. Based on this research, the data point to a steady diminution in the soft skills of young people in the workplace, beginning with Gen X and continuing into Gen Z. Therefore, today's young workers are increasingly likely to have significant weaknesses in key soft skills.

Studies have shown that younger generations, such as Millennials and Generation Z, are more likely to seek out new challenges and opportunities for growth, making them more sensitive to skills mismatches. In contrast, older generations, such as Baby Boomers and Generation X, may have different priorities and expectations regarding work, which could influence how they perceive and respond to skills gaps. Anshul and Pathak's (2017) insights into the impact of generational differences on workplace dynamics can be related to the concept of skills mismatch, particularly in the context of training and development. Research has shown that different generations often have varying skill levels and learning preferences, which can contribute to skills mismatches within organizations (OECD, 2020; Adalet & Andrews, 2015). Older workers may possess valuable tacit knowledge and experience but may require training to adapt to new technologies or work practices. Younger workers, on

the other hand, may be more tech-savvy but may lack the experience or soft skills needed for certain roles. By understanding these generational differences, organizations can develop targeted training programs that address the specific skill needs of different age groups, ultimately reducing skills mismatches and enhancing overall workforce effectiveness (Huselid & Becker, 2011; Kraiger, 2003; Noe, 2010).

The Economist Impact, (2023) supported by Google, conducted a survey of 1,375 employees across Asia-Pacific (APAC), and interviewed employers and industry experts across the region to understand their perspectives on skills gaps, as well as reskilling and up-skilling aspirations. The survey respondents were drawn from across 14 markets in the region, out of which 11.8% were Gen Z (born in 1997-2012), 63.2% were Millennials (1981-96) and 25% were Gen X (1965-80). The research shows that across the region, common understanding is lacking between employers and employees about future skills and the best way to develop them. The results also show that in some instances, there is also an expectation mismatch between what employers want and what employees see as being important.

Rattanapon et al. (2023) explored how a supportive work environment can retain employees of different age groups in Thailand's small- and medium-sized enterprises (SMEs), particularly Generation X and Y. From the study it was found that supervisory support with less group involvement may encourage the retention of Generation Y employees, whereas a sufficient focus on job suitability could improve the retention of Generation X employees. Williams (2015) examined how demographic context influences the trust that boundary spanners experience in their dyadic relationships with clients. The study found that generational diversity among client team members from a client organization undermines the perception of being trusted within homogeneous boundary spanner–client dyads while it enhances the perception of being trusted within heterogeneous dyads.

Anshul and Pathak (2017) emphasis on the importance of understanding and managing generational differences aligns with the broader goal of addressing skills mismatches in the workplace through targeted training and development initiatives. When employees possess qualifications that are either above or below the requirements of their position, it is known as a skills mismatch. This phenomenon, as indicated by Anshul and Pathak (2017), is influenced by generational differences in viewpoints on authority, leadership, and work ethics. These differences, if not managed effectively, can lead to miscommunication and conflict within the workplace. Therefore, understanding these generational distinctions is crucial for creating a productive multigenerational workplace. Each generation's unique set of experiences shapes their preferences, expectations, and work styles, making managing a workforce with diverse ideas about jobs, values, and behaviors a challenging task for organizations. However, it also presents an opportunity for organizations to enhance their success by effectively managing these differences and resolving conflicts.

Another study by Xander et al (2012) sought to explore generational differences in the psychological contract of hospitality employees and work outcomes such as commitment and turnover intention. Data were collected in 20 hotels (n ¼ 359) from a four-star hotel chain in The Netherlands using a self-administered questionnaire. Data were analysed using MANOVA and post-hoc analysis. From the study it was found that opportunities for development and challenge, variation and responsibility are more important to younger generations of hospitality workers. Generation X placed high value on work-life balance, autonomy and job security. No differences were found for work atmosphere, salary and task description. Significantly lower commitment and higher turnover intention was also found for Generation Y.

An analysis of several countries shows that the Organization for Economic Co-operation and Development (OECD) has an average overall skills mismatch of 35.7%, with somewhat more workers saying they are under-skilled (18.9%) than over-skilled (16.8%) (OECD, 2020). This indicates that many OECD nations are not fully utilizing their human capital, leading to significant labor costs (Adalet & Andrews, 2015). Employers can benefit greatly from retraining and upskilling their workforce, as highlighted by Huselid and Becker (2011). They argue that focusing on developing a talented workforce is essential for business sustainability. Research by Kraiger (2003) and Noe (2010) further supports this, suggesting that the most successful companies invest more in the professional growth of their employees. This targeted approach can help reduce skills mismatches by ensuring that employees are equipped with the right skills for their roles, ultimately leading to improved productivity and organizational performance.

RESEARCH METHODOLOGY

A descriptive research design was used to evaluate the effect of generational differences on skill mismatch levels in multigenerational workforces. This approach is suitable as it allows for a comprehensive understanding of the associations among the study variables. A descriptive statistical analysis was used to summarize the key characteristics of the data, such as mean, median, and standard deviation of skill mismatch levels across different generational cohorts. By using this strategy, the research aims to gain insights on the differences in size of mismatches various generations in the workforce. Cooper and Schindler (2008) highlight the significance of descriptive research in unravelling complex relationships and variables, supporting the rationale behind this research design choice. A non-parametric statistical test was used to examine the ordinal association between generational cohorts and skill mismatch levels. The non-parametric test selected for this study was Kendall's Tau-b, which was conducted to determine if there were statistically significant associations between the four generational cohorts and the levels of skill mismatch (small, medium, or large). Kendall's Tau-b is a non-parametric method suitable for assessing the strength and direction of the ordinal relationship between two variables, especially when the data does not meet the assumption of normality. This test was chosen due to its robustness in handling ordinal data and its ability to measure the degree of association between variables without assuming a normal distribution. The type of data to be used will be secondary data. The sample frame is non-government businesses registered with the Kenya National Bureau of Statistics (KNBS), from 2016 of at least five employees. The secondary data from the survey done in 2016 was downloaded from World bank Micro data and run on SPSS for further analysis. The data was originally collected from non-government businesses registered with the Kenya National Bureau of Statistics (KNBS), from 2016 of at least five employees. Three main skill sets comprised in the primary data collection. The data for the study had been collected through personal visits using the Computer Assisted Personal Interview (CAPI) method allowing real-time data entry. The data collection team consisted of two teams with a total of 19 interviewers and 2 regional supervisors. The regional supervisors were responsible for coordinating fieldwork, monitoring interviewers' work, and ensuring quality control. The data collection period was from June 1, 2016, to February 10, 2017. The first is cognitive skills, which include the capacity to comprehend difficult concepts, adjust to one's surroundings, and draw knowledge from experience. The second is social and emotional skills, sometimes referred to as soft skills, and the third is job-related skills. For this study only, job-related skills were considered. The data has type A (Professionals). The missing values were replaced with the mean.

RESULTS AND DISCUSSIONS

Descriptive Statistics

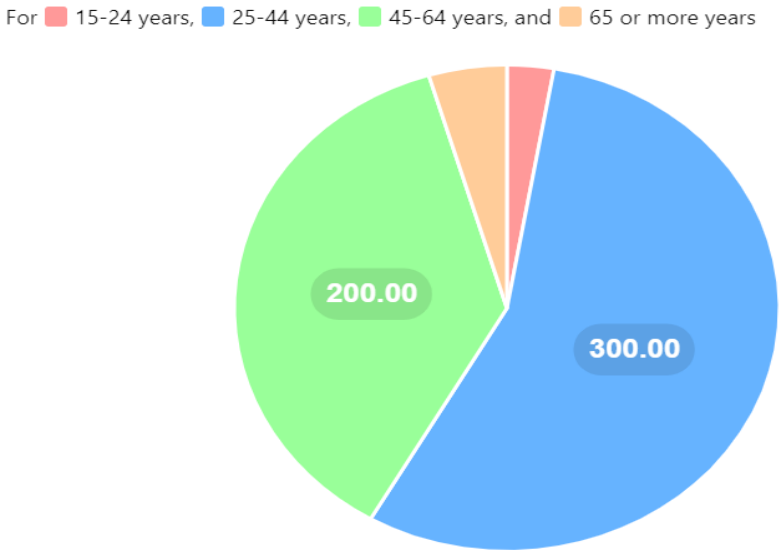
Descriptive Statistics

Age Group		N	Minimum	Maximum	Mean	Std. Deviation	Variance
15-24 years	Sie of Mismatch	8	2	2	2.00	.000	.000
	Valid N (listwise)	8					
25-44 years	Sie of Mismatch	296	1	3	1.92	.319	.102
	Valid N (listwise)	296					
45-64 years	Sie of Mismatch	182	1	3	1.98	.234	.055
	Valid N (listwise)	182					
65 years or more	Sie of Mismatch	18	2	2	2.00	.000	.000
	Valid N (listwise)	18					

Source (Researcher, 2024)

From the descriptive statistics, the average size of skills mismatch for Gen Z is 2.00, Millennials is 1.92, Generation X is 1.98, and Baby Boomers is 2.00. These means suggest that Millennials have the lowest average skills mismatch, while Gen Z and Baby Boomers have the highest. However, to fully understand these means, it is essential to consider the variability in the data through standard deviation and variance. For Gen Z (15-24 years) and Baby Boomers (65 years or more), the standard deviation and variance are both zero, indicating no variability within these groups, as every individual has the same skills mismatch value. Millennials (25-44 years)

have a standard deviation of 0.319 and a variance of 0.102, showing some variability within this group, though it is relatively low. This low variability suggests that while Millennials have the lowest average skills mismatch, most individuals in this group have a mismatch size close to the mean value of 1.92. Generation X (45-64 years) have a standard deviation of 0.234 and a variance of 0.055, indicating low variability within this group as well, with most individuals' skills mismatch sizes close to the mean value of 1.98. The slightly lower standard deviation compared to Millennials suggests even more consistency within the Generation X group. The zero variability for Gen Z and Baby Boomers might imply a more homogeneous group in terms of skills mismatch, potentially due to limited career progression opportunities or standardized educational or professional development paths within these age groups. For Millennials and Generation X, the presence of some variability could reflect more diverse career paths, educational backgrounds, or professional experiences within these groups, leading to a wider range of skills mismatch sizes. The slight differences in means between Millennials (1.92) and Generation X (1.98) suggest a minor increase in skills mismatch with age, possibly indicating that as individuals progress in their careers, they might encounter more situations where their skills do not perfectly align with job requirements. The identical mean values for Gen Z and Baby Boomers (both 2.00) could indicate that early-career individuals and those nearing retirement face similar challenges in skills alignment, possibly due to lack of experience or outdated skills, respectively. For organizations, these statistics can inform targeted training and development programs. For example, Millennials and Generation X, who show some variability in skills mismatch, might benefit from personalized upskilling or reskilling initiatives to address their diverse needs. Gen Z and Baby Boomers, having no variability, may require standardized interventions focusing on specific skills gaps identified within these groups.



Source (Researcher, 2024)

Based on the pie chart, it is evident that the largest percentage of the employed workforce consists of Millennials between the ages of 25-44 years. This generation comprises a significant portion of the workforce, likely due to their active presence in the job market and their representation in various industries. Millennials, being in their prime working years, are often highly active in their careers, seeking advancement opportunities, and are well-represented across a wide array of sectors.

The data also indicates that the age group 15-24 has the lowest employment rate, which could be attributed to factors such as limited work experience or ongoing educational commitments among individuals in this age bracket. Younger individuals are often still in school or just starting their careers, which means they are less likely to be fully integrated into the workforce.

Interestingly, the age group of 65 years or more also shows a lower employment rate. This could be due to individuals in this age group opting for retirement after long careers or facing difficulties in finding suitable employment opportunities. Additionally, health issues or company policies regarding retirement age may contribute to the lower employment rate in this age group. Many older workers might retire voluntarily or

involuntarily, and those who wish to continue working may encounter barriers such as age discrimination or lack of suitable roles.

The distribution of the employed workforce across different age groups highlights the importance of understanding generational dynamics in the workplace. Each generation brings unique strengths, preferences, and challenges to the workplace. For example, Millennials are known for their technological savviness and desire for career development opportunities, whereas Gen Z might be more focused on flexibility and work-life balance. Baby Boomers, on the other hand, might bring extensive experience and a strong work ethic, but may also face challenges in adapting to new technologies or workplace changes.

H_0: There is no significant relationship between generational differences and skills mismatch in the workforce for the selected skills.

H_1: There is a significant relationship between generational differences and skills mismatch in the workforce for the selected skills.

Ranks

	Mean Rank
Sie of Mismatch	1.29
Age Group	1.71

Test Statistics

N	504
Kendall's W[a]	.380
Chi-Square	191.430
df	1
Asymp. Sig.	<.001

a. Kendall's Coefficient of Concordance

A Kendall's W test was conducted to determine if there were differences in skill mismatch levels between different generational cohorts. The Kendall's coefficient of concordance (W) was 0.380, indicating a moderate level of agreement among the rankings of skill mismatch levels across the cohorts. The Chi-Square value was 191.430 with 1 degree of freedom, and the test showed a statistically significant difference in skill mismatch levels between the different generational cohorts ($p < 0.001$). Therefore, we reject the null hypothesis and conclude that there are significant differences in the skill mismatch levels among the generational cohorts.

Therefore, we reject the null hypothesis and conclude that there are significant differences in the skill mismatch levels among the generational cohorts. This finding is important as it underscores the necessity for tailored approaches in addressing skill mismatches in the workforce. Each generational cohort may require distinct strategies to bridge the gap between their skills and job requirements. For instance, younger generations such as Millennials and Gen Z might benefit from educational programs and early career development initiatives, while older generations like Generation X and Baby Boomers might need reskilling and upskilling opportunities to stay relevant in the rapidly changing job market.

The moderate level of agreement ($W = 0.380$) also highlights that while there are discernible differences in skill mismatch levels, these differences are not entirely consistent across all individuals within each cohort. This variability suggests that individual factors such as specific industry, job role, or personal career history could also play significant roles in determining skill mismatches, alongside generational characteristics.

CONCLUSIONS

In conclusion, the analysis of skills mismatch and generational differences in the workforce, supported by Anshul and Pathak (2017), reveals that there is a significant relationship between generational cohorts and skill mismatch levels, as indicated by the Kruskal-Wallis's test statistic ($p = 0.036$). This suggests that generational differences do impact skills alignment in the workplace to some extent, contrary to the findings of other studies like OECD (2020) and Adalet & Andrews (2015), which found no significant relationship.

These findings have important implications for organizations and policymakers. While generational differences are often considered in training and development programs, as noted by Huselid and Becker (2011), this study highlights the need for a nuanced approach to skills development. By focusing on the specific skills and competencies needed for each generational cohort, organizations can better tailor their training initiatives to meet the diverse needs of their workforce. This approach, supported by research by Kraiger (2003) and Noe (2010), can lead to improved productivity and performance. Moreover, it emphasizes the importance of considering generational characteristics in designing effective training and development programs.

To further enhance workforce skills alignment, organizations should integrate individualized development plans that address the unique learning styles and preferences of each generation. This can include leveraging technology for personalized learning experiences and creating mentorship programs that facilitate cross-generational knowledge transfer. By adopting these strategies, organizations can foster a more inclusive and capable workforce, ultimately driving better performance and competitive advantage.

RECOMMENDATIONS

Based on the research findings that reveal a significant relationship between skills mismatch and generational differences in the workforce for the selected skills, several recommendations can be proposed to address skills gaps and enhance overall workforce effectiveness. Firstly, organizations should consider developing tailored training programs that focus on specific skills and competencies required for each role (Noe, 2010). This approach, as opposed to assuming that generational differences are the main drivers of skills mismatch, ensures that employees receive targeted training to excel in their respective positions. Regular skills assessments should also be integrated into organizational practices to identify and rectify any skills gaps within the workforce (Kraiger, 2003). This proactive measure ensures that employees are equipped with the necessary skills for their roles, thereby enhancing productivity and performance. Additionally, implementing flexible work arrangements that accommodate employees' skills and preferences can help mitigate the impact of skills mismatch (Huselid & Becker, 2011). Such arrangements enable employees to work in roles that align with their strengths, ultimately enhancing their job satisfaction and performance. Encouraging cross-generational collaboration and knowledge sharing is essential to leverage the unique skills and experiences of each generation (Adalet & Andrews, 2015). This collaborative approach creates a more inclusive and productive work environment where employees of all ages can contribute effectively. Lastly, further research should be conducted to explore other factors contributing to skills mismatch in the workforce. This comprehensive understanding will inform future interventions aimed at addressing skills gaps and improving workforce outcomes.

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