

# “Business students’ perceptions of an aging workforce, higher retirement age and youth unemployment”

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# BUSINESS STUDENTS' PERCEPTIONS OF AN AGING WORKFORCE, HIGHER RETIREMENT AGE AND YOUTH UNEMPLOYMENT

## Abstract

The relationship between an aging workforce, higher retirement age, and youth unemployment has already been established in the available literature. However, empirical research on the impact of an aging workforce, and higher retirement age on youth unemployment is limited, has conflicting results, has occurred mostly overseas, and has not considered the perceptions of young people who are about to enter the workforce. Hence, this paper aims to investigate the perceptions of the youth on the relationship between the aging workforce, higher retirement age, immigration policies, and youth unemployment. Structural equation modelling was used to analyze the responses of 183 business students. The findings establish that five relationships were supported out of seven hypothesized relationships. The key research finding reveal that immigration policies and higher retirement age are significantly related to youth unemployment. Lastly, the theoretical and managerial implications of the study were discussed, along with the limitations and recommendations for future research.

## Keywords

aging workforce, aging population, higher retirement age, immigration policies, youth unemployment

## JEL Classification

J26, J61, J64

## INTRODUCTION

Population aging is a global issue. Although every country faces the phenomenon, the process is occurring at different speeds in different parts of the world. It is good news that healthier ways of living and advances made by medical science have led people to live longer than ever before. The trend of people living longer is expected to continue for several decades (Chybalski & Marcinkiewicz, 2014). However, this trend of living longer has led to an increase in the number of aging population. A United Nations (2017) report revealed that the number of people aged 60 years and over was 205 million in 1950, this further increased to around 606 million in 2000 and is projected to increase to 1.2 billion and 2 billion in 2025 and 2050, respectively. Worldwide, one in eight people were aged 60 or over in 2017, while by 2050, one in five people will be aged 60 or over. However, the increase in lifespan has led to a large increase in the number of years an individual may spend in retirement (Sundali, Westerman, & Stedham, 2008). Owing to this, people can obtain more pension funds from their government without working longer or paying more tax. This remarkable change in population age structure can negatively influence the performance of economies, as well as the sustainability of government entitlement programs. Accordingly, various measures have been taken by governments to tackle the issue such as increase in retirement age. However, the proposal to increase the retirement age is subject to disapproval and opposition (Bertoni & Brunello, 2017). Previous studies investi-

gated the impact of an aging workforce on job opportunities among the youth and revealed that increased professional activity of older workers in the workforce limits youth labor force participation (Boeri, Garibaldi, & Moen, 2016; Munnell & Wu, 2013). Other studies analyzed the effect of raising the retirement age on youth employment and have shown that higher retirement age negatively affects youth employment (Boeri, Garibaldi, & Moen, 2017). Therefore, these studies have concluded that an increase in the number of older workers in the labor market and older retirement age, contribute to the pressing issue of youth unemployment. On the other hand, Kreiger (2014) suggested that government immigration policies can also help to deal with the consequences of aging populations. Thomson (2017) stated that immigrants and young working-age people gain employment where workers are required. Hence, immigrants fill jobs where workers are needed. Additionally, immigrants pay taxes by working and, hence, contribute to public finances. Therefore, it can be concluded that immigrants play a dual role in destination countries. Firstly, immigrants help meet labor shortages and, secondly, immigrants contribute to public finance. However, immigrants can also hinder the entry of young graduates into the labor market, contributing to youth unemployment. Also, immigration policies introduced by various governments allow migrants to enter destination countries and, hence, generate new migrant labor. This new migrant labor may exclude native workers from jobs (Sechele, 2015). Consequently, immigration policies can also contribute to youth unemployment.

Ghafar (2016) pointed out the challenges of unemployment, specifically, faced by university graduates. Similarly, Hanna (2014) revealed that globally, the chances of young people being unemployed are around three times higher than for their parents. In the United States of America, Edwards and Hertel-Fernandez (2010) noted that young workers are twice as likely as older workers to be unemployed. In Australia, the rates of youth unemployment tend to be higher with larger swings, compared to the unemployment rates of adults (Carvalho, 2015). In New Zealand, a similar trend has been observed. Unemployment rates increased around 10% among young people aged from 15 to 19 between 2007 and 2009, while for the overall population, rates increased by 3% maximum (Johnson, 2016). This increase in unemployment rates for young people has motivated the researchers to investigate the determinants of youth unemployment. Therefore, this paper has formulated a conceptual framework of four variables (Figure 1). The research objective was to test the conceptual model for these four variables (aging workforce, immigration policies, higher retirement age, and youth unemployment). This study captured the research gap as the empirical research on the impact of aging workforce, higher retirement age on youth unemployment is limited (Bertoni & Brunello, 2017), has contrasting results, and has not considered the perceptions of young people about to enter the workforce. As a result, the current study contributes to literature by studying the student perceptions on a more holistic understanding of the links between higher retirement age, aging workforce, immigration policies and youth unemployment. To achieve this, the study combines the output of previous study and conclusive results from a survey of business students in New Zealand. The remainder of the paper is structured as follows: the literature review on four conceptualized variables is presented along with the research hypotheses. Next, under the methodology, analysis and findings are presented. The paper concludes by discussing the research implications, limitations, and future research directions.

## 1. LITERATURE REVIEW

### 1.1. Aging workforce

The aging workforce includes people who are 55 years of age or over and are still in employment or are keen to keep working for longer (Statistics New Zealand, 2013). With an aging population, an aging workforce would also be imminent, as people live longer and healthier lives, their ability and willingness to stay in the workforce will necessar-

ily increase. Johnson (2016) described how older people in New Zealand benefited most from jobs created in the economy since 2010. Fewer than 90,000 older people were in employment in 2010, but this number had increased to 153,000 by mid-2016. Around a quarter of jobs created between 2010 and 2016 went to older people, while people aged from 15 to 19 took up fewer than 2 percent of newly created jobs. Johnson's (2016) findings are consistent with a study by Chmelova (2013), which analyzed whether higher labor force participation

by older people worsened the employment situation of youth. The study confirmed that 10 percent increase in the professional activity of older workers related to a decrease in youth employment of 1 percentage point and 2 percent increase in the inactivity rate of young people. Therefore, it can be concluded that an increase in the employment rates of older people contributes to an increase in youth unemployment rates. However, existing literature reports that there are very few studies of the impact of changes in labor force participation of the older on the jobs available for youth (Queiroz, 2016). In light of the above, this study hypothesized that:

*H1: There is positive relationship between aging workforce and youth unemployment.*

## 1.2. Higher retirement age

Higher retirement age refers to increase in retirement eligibility age by the government. Extant literature acknowledges the crucial role which aging workforce has in any change in retirement eligibility age as any increase in ability and willingness of people to stay in workforce can increase the retirement eligibility age (Kondo, 2016). On the other hand, research found that an increase in the retirement age can result in youth unemployment (Boeri, Garibaldi, & Moen, 2016). Further, there are evidences, which show that three younger individuals lost their jobs for every additional ten older workers retained due to a rise in retirement age (Bertoni & Brunello, 2017). Research also shows that reduction in youth employment rate was accounted for by approximately 84.3% of the increase in retirement age (Isiaka & Woli-Jimoh, 2017). Although past research seems to focus on the impact of higher retirement age on youth unemployment, however, there is limited attention given to the pivotal role of higher retirement age on youth unemployment. Hence, research shows that this issue has not received much needed attention (Foster, 2012). Therefore, this research hypothesized that:

*H2: There is a positive relationship between aging workforce and higher retirement age.*

*H3: There is a positive relationship between higher retirement age and youth unemployment.*

## 1.3. Immigration policies

Research highlights that the higher retirement age is not a very promising policy to deal with the demographic challenge; immigration policies have therefore been suggested as a countermeasure to the demographic challenge (Kreiger, 2014). To deal with the consequences of aging population, encouraging the older to keep working for longer is a one-way solution. On the other hand, another solution is to promote immigration, usually by young people. These young immigrants take up jobs in the destination country and contribute to public finances, leading to an increase in economic growth along with growth in the labor supply (Muysken, 2008). Thus, immigration is vital to tackle the demographic challenge, as immigrants can increase the working-age population and, hence, financial pressure to pay pensions can be eased. Existing literature reports the positive contribution made by immigrants in Australia. Dean (2018) found a significant positive effect of immigrants on the age structure of Australia. If migration to Australia was cut to zero by 2053, 28.4% of Australians would be 65 years of age or over. However, if inward migration grew by 300,000, then, 21.2 percent would be. It can be concluded, therefore, that international migration has a big long-term impact on destination countries, as it increases the working-age population and grows the tax base. As a result, to manage the consequences of aging population, both aging workforce and immigration policies together play an important role. Hence, this research hypothesized that:

*H4: There is a positive relationship between aging workforce and immigration policies.*

## 1.4. Youth unemployment

Within the existing literature, there is a number of studies that examined the impact of immigration on unemployment with varying conclusions, however, most of the studies indicated a negative relationship between immigration and youth unemployment. Birrell and Healy (2013) found that the share of older workers aged 60 or over in the labor force increased from 39 percent in 2003 to 54 percent in 2013, while there were 168,000 recently arrived migrants aged over 15 in Australia. Of this number of recently arrived migrants, 108,200 were employed. Therefore, it was argued that young do-

mestic workers have to compete with the working older, along with an increasing number of migrants looking for the same work. Hence, it is the young domestic workers who have to enter a weak labor market where an increasing share of local workers aged 55 or over also remain in the labor force. All these contribute to higher unemployment amongst local workers aged from 15 to 24 years. Similarly, Johnson (2016) reported that New Zealand already has a persistent number of young people (75,000) not in employment, education, or training. It was emphasized that these youth remain outside the labor force, because as job numbers grow, migrants take those jobs and crowd out the most marginalized workers from the labor market (Johnson, 2016). Past research emphasized the relationship between labor market trends and immigration, however, the impact of immigrants on the labor market of native workers has received limited research attention (Neumark & Shupe, 2018). Therefore, this research hypothesized that:

*H5: There is a positive relationship between immigration policies and youth unemployment.*

### 1.5. Mediating impact of higher retirement age and immigration policies

Extant research acknowledges the direct relationship between aging workforce and higher retirement age (Kondo, 2016), higher retirement and youth unemployment (Isiaka & Woli-Jimoh, 2017)

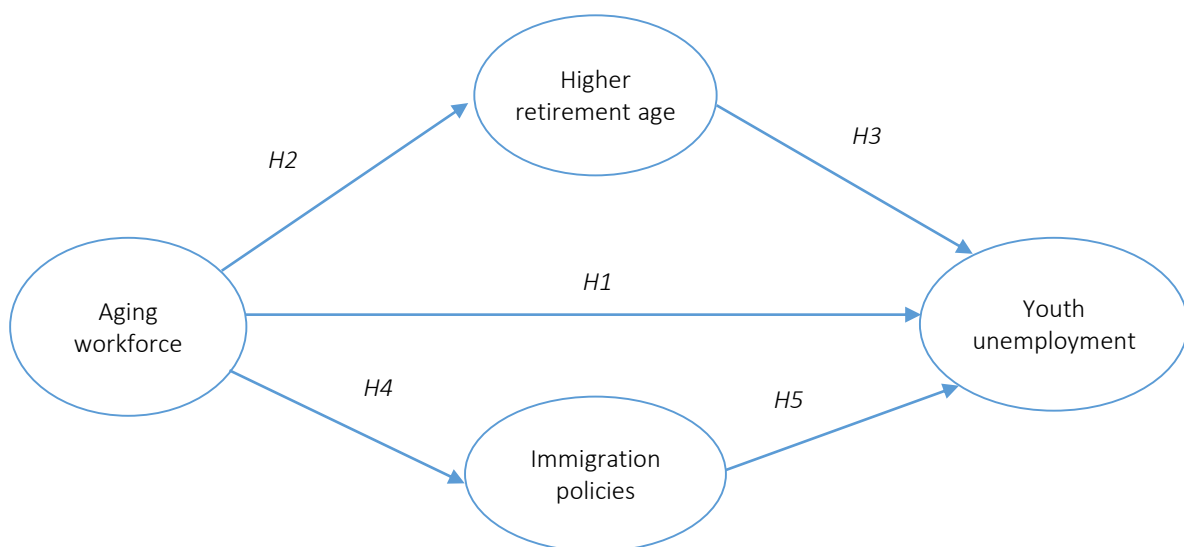
and aging workforce and youth unemployment (Boeri, Garibaldi, & Moen, 2016). Therefore, aging workforce is related to higher retirement age, which is further related to youth unemployment, while aging workforce is also related to youth unemployment. Hence, available empirical findings establish that higher retirement age mediates the relationship between aging workforce and youth unemployment. Similarly, aging workforce and immigration policies are related as together these can help to tackle the demographic challenge, however, immigration policies can be a potential threat to the youth unemployment. As a result, immigration policies demonstrated to mediate the relationship between aging workforce and youth unemployment. Therefore, in light of the evidence from previous studies, this study hypothesized that:

*H6: Higher retirement age mediates the relationship between aging workforce and youth unemployment.*

*H7: Immigration policies mediate the relationship between the aging workforce and youth unemployment.*

### 1.6. Research model

Based on the findings of literature review, a conceptual framework is proposed (Figure 1). The research model predicts the (i) relationship between aging workforce, higher retirement age, immigration policies and youth unemployment and (ii) high-



**Figure 1.** Conceptual framework



er retirement age and immigration policies mediates the relationship between aging workforce and youth unemployment. This conceptual framework grounded in lump of labor theory, which postulates that the amount of work to be done in the world is fixed, and if the amount of work done by one worker increases, then, the amount of work left to do by another worker is reduced. In the case of an aging workforce and immigration policies, this underpinning theory aligns with the assumption that if an older worker does not retire and chooses to stay in the workforce for longer, it means that one less job is available for a young worker. Similarly, in case of immigration policies, immigrants are said to take jobs away from local workers.

## 2. RESEARCH METHODOLOGY

### 2.1. Sample and data collection procedure

A survey questionnaire was used to collect the data from the business students studying in

Toi-Ohomai Institute of Technology in Rotorua and Tauranga campuses. 215 responses were received using a convenience non-probability sampling method. The researchers conducted the Mahalanobis distance test and found that 32 out of 215 responses as outliers. Hence, these 32 responses were deleted from the data set. After the deletion, the total number of respondents was 183. This sample size was consistent with the recommended statistical rule of thumb by Roscoe who proposed that sample sizes more than 30 and less than 500 are suitable for most research (Hills, 1998). By comparing early and late respondents, no response bias was evident in the sample (Armstrong & Overton, 1977). The sample consisted of 41 percent male and 59 percent female with most of the participants of age group over 30 (38.8%).

### 2.2. Measurements and data analysis

All the measurement items were adapted from the previous literature and all the latent variables were measured using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). The measure-

**Table 1.** Measurement items, factor loadings, Cronbach's alpha, and composite reliability

| Constructs and measurement items   | Factor loadings | $\alpha$ | Composite reliability |
|--|-----------------|----------|-----------------------|
| Aging workforce (AW)   |                 | 0.718    | 0.804                 |
| AW1: With people now living longer on average, it is right that people should have to work longer                                      | 0.425           |          |                       |
| AW2: Older people by working longer makes it harder for younger people to get good jobs  | 0.665           |          |                       |
| AW3: Many companies believe older people are more qualified than younger people  | 0.753           |          |                       |
| AW4: Older people dominate New Zealand society more than they should   | 0.726           |          |                       |
| AW5: Older people hold too many positions of power and responsibility in working sector  | 0.759           |          |                       |
| Immigration policies (IP)  |                 | 0.736    | 0.789                 |
| IP1: Migrants make an important contribution to New Zealand's economy  | 0.707           |          |                       |
| IP2: Migrants are needed to keep the economy going   | 0.499           |          |                       |
| IP3: Average wages are brought down by the immigrants  | 0.720           |          |                       |
| IP4: Immigration policies introduced by the government have made it more difficult for young New Zealanders to get jobs                | 0.720           |          |                       |
| IP5: Immigrants help to fill jobs where there is a shortage of workers   | 0.618           |          |                       |
| Higher retirement age (HRA)  |                 | 0.814    | 0.770                 |
| RRA1: Too much public expenditure is devoted to the older  | 0.574           |          |                       |
| RRA2: Workers should be willing to pay extra tax to improve state pensions   | 0.569           |          |                       |
| RRA3: Higher retirement age leads to fewer employment opportunities for young people   | 0.872           |          |                       |
| RRA4: Higher retirement age leads to improved retention of skills and knowledge by allowing the older workers to stay in the workforce | 0.870           |          |                       |
| RRA5: Historically, people have retired at 65, a further increase to 67 will reduce job opportunities for youth                        | 0.880           |          |                       |
| Youth unemployment (YE)  |                 | 0.789    | 0.826                 |
| YE1: Early retirement should be encouraged to improve job prospects for the young  | 0.858           |          |                       |
| YE2: Youth employment should be more important than employment of over 50s   | 0.759           |          |                       |
| YE3: Preference should be given to young people over the older for hiring for jobs   | 0.800           |          |                       |
| YE4: With people now living longer on average, it is difficult for young students to find employment                                   | 0.799           |          |                       |
| YE5: The lack of job opportunities is the main cause behind the youth unemployment   | 0.661           |          |                       |
| YE6: Young people should make more of an effort to obtain work   | 0.647           |          |                       |
| YE7: Immigrants taking jobs away from New Zealanders is the main cause behind the youth unemployment                                   | 0.745           |          |                       |

ment items for the aging workforce were adapted from MacLeod, Fitzpatrick, Hamlyn, Jones, Kinver, and Page (2012) and Ospina (2015), while the items for immigration policies were adapted from the Ministry of Business, Innovation and Employment (2015) and Dustmann and Preston (2006). The measures for higher retirement age were adapted from Loretto, Duncan, and White (2000) and Litwin, Achdut, and Youssim (2009). Finally, youth unemployment was measured using the items from Loretto, Duncan, and White (2000), and The Swedish National Board of Youth Affairs (2007). The measurement items are shown in Table 1.

Bryne (2010) suggested a factor loading of 0.50 or higher to be significant in this study. Therefore, Table 1 summarizes all the measurement items used in the analyses. The findings indicate that almost all the measurement items have met the cut off criterion for factor loadings suggested by Bryne (2010). The items with negative and low factor loadings were considered for deletion in the final analysis. The Cronbach's alpha of a loading 0.718 was achieved for the aging workforce, while the Cronbach's alpha of 0.736 was attained for immigration policies. Similarly, for higher retirement age and youth unemployment, the value of Cronbach's alpha achieved was 0.814 and 0.789, respectively. The Cronbach's alpha ranges from 0.71 to 0.81, confirming that the measurement items were internally consistent. It can also be noticed from Table 1 that the constructs have exceeded the

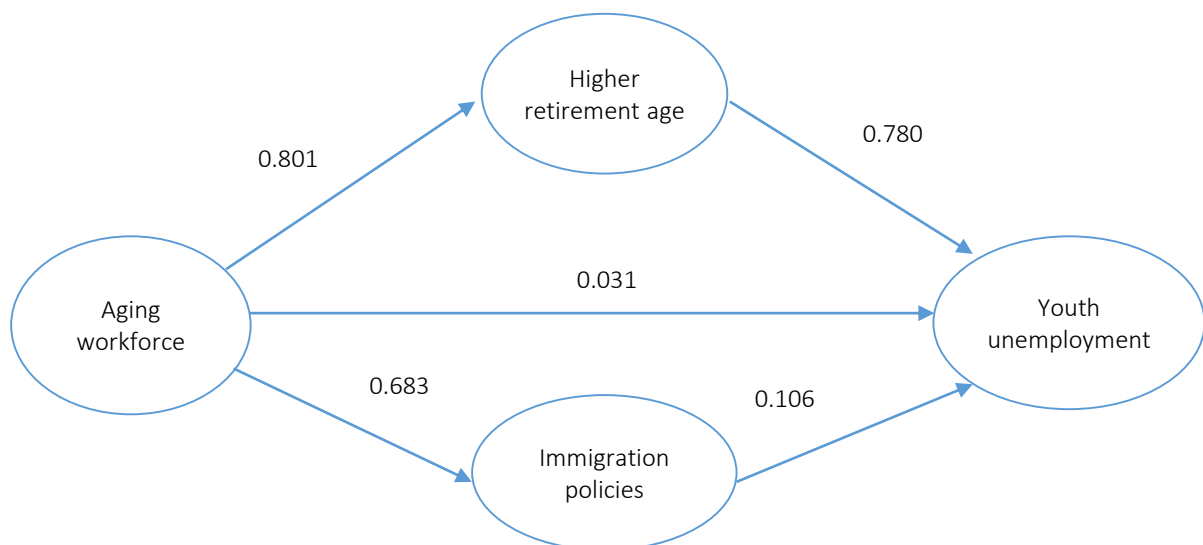
recommended criterion of 0.7, suggested by Hair, Black, Babin, Andersen, and Tatham (2010) for the composite reliability. This supports the overall validity of the construct measures used.

### 2.3. Measurement model

Following the above analyses, structural equation modelling (SEM) using the AMOS software was used to test the hypothesized relationships (H1-H5). As shown in Figure 1, a SEM model was estimated in which aging workforce was an independent variable, higher retirement age and immigration policies were mediating variables and youth unemployment was dependent variable. The research findings obtained through SEM analyses of the structural model are shown in Figure 2.

The findings from the structural equation modelling indicated that 46.6% of the variation in the immigration policies and 64.2% of the variation in the higher retirement age is explained by aging workforce. Furthermore, the cumulative result reveals that the 75.3% of variability in youth unemployment is explained by joint effect of an aging workforce, immigration policies, and higher retirement age. The detailed information about the variance explained ( $R^2$ ) is provided in Table 2.

As illustrated in Table 3, the fit indices indicated acceptable model fit ( $\chi^2/df = 1.18$ ,  $p$ -value = 0.28, CFI = .97, TLI = .96, RMSEA = .03). For statistical acceptance of model, Hair et al. (2010) suggested



**Figure 2.** Findings from the structural model

**Table 2.** Squared multiple correlations ( $R^2$ )

| $R^2$ for Endogenous variables | Estimate |
|--------------------------------|----------|
| Higher retirement age          | .642     |
| Immigration policies           | .466     |
| Youth unemployment             | .753     |

that it should generate  $p$ -value greater than 0.05. The model achieved a  $p$ -value of 0.276, which is a substantial indication that the model is statistically acceptable. Despite the Chi-square being statistically significant, all other statistics are within the acceptable ranges (Hair et al., 2010). The results are presented in Table 3.

**Table 3.** Goodness of fit index for the model

| Final model | Criteria | Results |
|-------------|----------|---------|
| CMIN/Df     | < 5      | 1.179   |
| $P$ -value  | > 0.05   | 0.276   |
| GFI         | > 0.9    | 0.976   |
| CFI         | > 0.95   | 0.972   |
| TLI         | > 0.9    | 0.962   |
| RMSEA       | < 0.05   | 0.031   |

## 2.4. Hypotheses testing

To test the hypothesized relationships, structural equation modelling (SEM) using the AMOS software was used. Five hypotheses were formulated based on direct relationships between aging workforce and youth unemployment, immigration policies and higher retirement age, and the impact of immigration policies and higher retirement age on youth unemployment. The analysis of five direct structural paths was based on an error level of 0.05. This level indicates 95% confidence that if the data were collected over time, the results would be the same. In Table 4, the results show that aging workforce was significantly related to higher retirement age (standardized estimate .801), immigration policies (standardized estimate .683), in support of  $H2$  and  $H4$ . Hypothesis 1 and 5 are not supported as aging workforce ( $p$ -value .886) and immigration policies ( $p$ -value .395) were not sig-

nificantly related to youth unemployment. Lastly, Hypothesis 3 is supported, as higher retirement age (standardized estimate .78) was significantly related to youth unemployment. The result of hypotheses testing is presented in Table 4.

**Table 4.** Results for the direct relationships

| Hypothesised Relationships                 | Estimate | $P$ -value | Status          |
|--|----------|------------|-----------------|
| Aging workforce → Higher retirement age    | .801     | 0.000      | Significant     |
| Aging workforce → Immigration policies     | .683     | 0.000      | Significant     |
| Higher retirement age → Youth unemployment | .780     | 0.000      | Significant     |
| Aging workforce → Youth unemployment       | .031     | .886       | Non-Significant |
| Immigration policies → Youth unemployment  | .106     | .395       | Non-Significant |

Note: \*\*\* = Significant at 1%

## 2.5. Mediation effects

Both immigration policies (IP) and higher retirement age (HRA) were postulated as mediators in the relationship between aging workforce and youth unemployment. This study followed procedures suggested by Preacher and Hayes (2008) to test mediation effects. The indirect and direct effects between the predictor and outcome constructs were estimated to assess mediation effects. The results in Table 5 show that  $H6$  and  $H7$  are supported, as immigration policies and higher retirement age fully mediate the relationship between aging workforce and youth unemployment. Full mediation was established, because indirect effects estimates are greater than direct effects estimates. Please refer to Table 5 to understand the mediation effect.

**Table 5.** Mediation effect

| Hypotheses | Exogenous | Mediated | Endogenous | Direct effects estimates | Indirect effects estimates | Mediating hypothesis |
|------------|-----------|----------|------------|--------------------------|----------------------------|----------------------|
| $H6$       | AW →      | IP →     | YE         | 0.031                    | 0.072398                   | Mediating            |
| $H7$       | AW →      | HRA →    | YE         | 0.031                    | 0.62478                    | Mediating            |



### 3. DISCUSSION

#### 3.1. Theoretical implications

Past research shows that there has been very little academic literature published on the relationships between aging workforce, higher retirement age, immigration policies and youth unemployment (Davey & Davies, 2006; McGregor & Gray, 2002). Therefore, this research has filled a theoretical gap in the literature, and contributed to more holistic understanding of the relationship between higher retirement age, aging workforce, immigration policies, and youth unemployment. This is a major theoretical contribution in the area of aging workforce, higher retirement age, and youth unemployment. This study has captured the research gap noted by Isiaka and Woli-Jimoh (2017) concerning the relationship between retirement age and youth employment. Thus, the present study contributes further insights into this research stream by establishing the positive significant relationship between higher retirement age, and youth unemployment. Past research shows that most literature on aging workforce, higher retirement age, and youth unemployment was conducted separately; however, this research provides a different theoretical lens by establishing the combined effects of the relationships between aging workforce, higher retirement age, immigration policies and youth unemployment in a single research model. This study has provided empirical evidences that higher retirement age and immigration policies mediate the relationship between aging workforce and youth unemployment.

#### 3.2. Methodological implications

Along with the theoretical contributions, this research has contributed to the methodological knowledge. The present study has identified relevant measurement instruments for the conceptualized variables and tested these relationships using SPSS and AMOS (SEM). Past research carried out a quantitative survey in China to investigate

the perceptions of people to investigate the impact of increase in the retirement age on youth employment (Li, Xi, & Ning, 2016). However, present research reports that there are very limited quantitative researches conducted with identified constructs (aging workforce, higher retirement age, youth unemployment, and immigration policies). Hence, the current research addressed this gap by undertaking similar quantitative research.

#### 3.3. Managerial implications

In terms of managerial implications, the findings of this study suggest major implications for policymakers and government agencies whose main concern is to plan and implement employment policies to provide better access to labor market for everyone. First, the findings highlight that any increase in the retirement age will also increase youth unemployment. The past research shows that policies introduced by the government to increase the retirement age benefit the government and older; however, the present study suggest that higher retirement age negatively impacts the youth unemployment. Therefore, a major implication of this study is that policymakers and government agencies need to plan and introduce better employment policies for older people and youth. Second, the findings established that immigrants do not crowd native workers out of the labor market. This result has provided the empirical evidence that immigration policies implemented by the government have a positive impact on the labor market. Third, the findings revealed that immigrants can potentially slow population aging, can fill jobs and provide services needed by the aging population, as they complement the skills of native workers and represent an important contribution to population growth (Kreiger, 2014). Therefore, the study suggests that policymakers should encourage larger immigration flows of skilled workers who will contribute to society. This would help mitigate the consequences of an aging population along with meeting labor shortages.

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### CONCLUSION

This paper has investigated the impact of an aging workforce, higher retirement age and immigration policies on youth unemployment. The study provides evidence that higher retirement age has a negative impact on youth employment. Therefore, there is a need to employ relevant strategies in order to

tackle the higher rates of youth unemployment. The introduction of the higher retirement age policy is a great event to encourage the older to stay in the workforce for longer. However, the government must adequately consider the negative effects which this higher retirement age policy may have on youth employment and, hence, active and effective measures must be taken to deal with them. Under the severe unemployment rates for young people, policymakers and government agencies should consider the crowding out effect of higher retirement age on youth employment. The findings from this study provide a sound argument in support of more youth employment compared to older people. If this issue is not urgently addressed, likely consequences could be the youth involvement in crimes, insecurity in the nation and other long-term consequences of unemployed people. Despite the achieved findings, this study has some limitations. First, there are various other determinants of youth employment, besides those focused on in this study (aging workforce, higher retirement age, and immigration policies). Consequently, the study's focus is limited to the impact of an aging workforce, higher retirement age, and immigration policies on youth unemployment. Future researchers might, therefore, explore the other determinants of youth unemployment, which remain unexplained in this study. Second, the current study deals with snapshots of business students' perceptions of the impact of an aging workforce, higher retirement age, and immigration policies on youth unemployment within a short time frame. Hence, the cross-sectional design of the research may be a limitation. Lastly, the other limitation observed by the researchers is the sample of 183; in multivariate analysis, this small sample is a methodological limitation. Some of the limitations of this research can be addressed by emphasizing the areas for future research. The current research focused on the impact of three variables on youth unemployment; the study suggests that there is a need for future research to study in detail, other determinants of youth unemployment such as employer attitudes, education, and training and the skills of young people (Ministry of Social Development, 2015). The authors conducted a detailed literature review to establish that aging workforce, higher retirement age, and immigration policies affect the youth unemployment. Likewise, it will be important for future researchers to conceptualize other constructs for measuring youth unemployment. Although the research findings have shown that the aging workforce showed a positive, but insignificant impact on youth unemployment, the researchers believe that further investigation is needed due to the mixed opinions of researchers in past studies of the impact of an aging workforce on youth employment. Furthermore, a limitation of this study was that it used a cross-sectional design, so future research is needed to apply longitudinal design to the model, to establish causative relationships.

## REFERENCES

1. Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research*, 14, 396-402. <https://doi.org/10.1177/2F002224377701400320>
2. Beaudry, P., Green, D. A., & Sand, B. M. (2014). The declining fortunes of young since 2000. *The American Economic Review*, 104(5), 381-386. <https://doi.org/10.1257/aer.104.5.381>
3. Bertoni, M., & Brunello, G. (2017). *Does delayed retirement affect youth employment? Evidence from Italian local labour markets* (IZA Discussion Paper No. 10733). Retrieved from <http://ftp.iza.org/dp10733.pdf>
4. Birrell, R., & Healy, E. (2013). *Scarce jobs: Migrants or locals at the end of the queue?* Retrieved from <http://theconversation.com/scarce-jobs-migrants-or-locals-at-the-end-of-the-job-queue-17496>
5. Boeri, T., Garibaldi, P., & Moen, E. (2016). *A clash of generations? Increase in retirement age and labour demand for youth* (WorkInps Paper No. 11422). Retrieved from <http://www.reforming.it/doc/931/workinps-papers.pdf>
6. Boeri, T., Garibaldi, P., & Moen, E. (2017). *Closing the retirement door and the lump of door*. Retrieved from [http://sites.carloalberto.org/garibaldi/doc/papers/Lump\\_of\\_Labor\\_26may\\_2017.pdf](http://sites.carloalberto.org/garibaldi/doc/papers/Lump_of_Labor_26may_2017.pdf)
7. Bryne, B. M. (2010). *Structural Equation Modelling with AMOS: Basic Concepts, Application and Programming* (2nd ed.). New York, USA: Routledge. Retrieved from <https://www.crcpress.com/Structural-Equation-Modeling-With-AMOS-Basic-Concepts-Applications-and-Byrne/p/book/9781138797031>
8. Carvalho, P. (2015). Youth unemployment in Australia. *Policy: A Journal of Public Policies and Ideas*, 31(4), 36-43. Retrieved from <https://www.ebsco.com/>

- products/research-databases/academic-search
9. Chmelova, K. (2013). *Intergenerational conflict: Does longer working life of older generation threatens young employment in transition countries?* (Master's thesis). Retrieved from <http://www.kse.org.ua/download.php?downloadid=295>
  10. Chybalski, F., & Marcinkiewicz, E. (2014). Does the professional activity of older workers contribute to youth unemployment? A cross-section study of European countries. *Business and Economic Horizons*, 10(4), 238-252. <https://doi.org/10.15208/beh.2014.20>
  11. Dean, L. (2018). *Migration's 'very powerful' effect on aging population*. Retrieved from <https://www.nestegg.com.au/retirement/11530-migration-s-very-powerful-effect-on-aging-population-2>
  12. Dhanjal, S., & Schirle, T. (2014). *Workforce aging and the labour market opportunities of youth: Evidence from Canada* (Working paper number 2014-9). Retrieved from <http://www.clsrn.econ.ubc.ca/workingpapers/CLSRN%20Working%20Paper%20no.%20139%20-%20Dhanjal%20and%20Schirle.pdf>
  13. Dustmann, C., & Preston, I. (2006). *Is immigration good or bad for the economy? Analysis of attitudinal responses* (Discussion Paper No. 06/04). Retrieved from Centre for Research and Analysis of Migration website: <http://discovery.ucl.ac.uk/14318/1/14318.pdf>
  14. Dustmann, C., & Frattini, T. (2014). The fiscal effects of immigration to the UK. *The Economic Journal*, 124(580), 593-643. <https://doi.org/10.1111/eoj.12181>
  15. Foster, K. (2012). *Delaying retirement: What does it mean for younger workers?* Retrieved from <http://behindthenumbers.ca/2012/02/01/delaying-retirement-what-does-it-mean-for-younger-workers/>
  16. Ghafar, A. A. (2016). Educated but uneducated: The challenge facing Egypt's youth. *Brookings Doha Center*, 1-16. Retrieved from [https://www.academia.edu/37373747/Educated\\_but\\_unemployed\\_The\\_challenge\\_facing\\_Egypt\\_s\\_youth](https://www.academia.edu/37373747/Educated_but_unemployed_The_challenge_facing_Egypt_s_youth)
  17. Hair, J. F., Black, W. C., Babin, B. J., Andersen, R. E., & Tatham, R. L. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall. Retrieved from [https://is.muni.cz/el/1423/podzim2017/PSY028/um/\\_Hair\\_-\\_Multivariate\\_data\\_analysis\\_7th\\_revised.pdf](https://is.muni.cz/el/1423/podzim2017/PSY028/um/_Hair_-_Multivariate_data_analysis_7th_revised.pdf)
  18. Hill, R. (1998). What sample size is "enough" in internet survey research. *Interpersonal Computing and Technology: An electronic journal for the 21st century*, 6(3-4), 1-10. Retrieved from <http://www.reconstrue.co.nz/IPCTJ%20Vol%206%20Robin%20hill%20SampleSize.pdf>
  19. Isiaka, S. B., & Woli-Jimoh, I. A. (2017). Impact of statutory retirement age on youth unemployment in Kwara state, Nigeria. *Archives of Business Research*, 5(1), 182-192. <https://doi.org/10.14738/abr.51.2635>
  20. Johnson, A. (2016). *Addressing New Zealand's youth unemployment. The Salvation Army social policy & Parliamentary Unit* (62 p.). (Report). Retrieved from <https://www.salvation-army.org.nz/sites/default/files/uploads/20161019TSA-Youth-Report-FINAL.pdf>
  21. Kirk, S. (2016, October 19). *Young New Zealanders' crowded out of job market' - Salvation Army*. Retrieved from <https://www.stuff.co.nz/national/politics/85494322/young-new-zealanders-crowded-out-of-job-market--salvation-army>
  22. Kondo, A. (2016). Effects of increased elderly employment on older workers' employment and elderly's earnings in Japan. *IZA*, 5(1). <https://doi.org/10.1186/s40173-016-0063-z>
  23. Kreiger, J. (2014). *Public pensions and immigration* (Report). Retrieved from <https://www.cesifo-group.de/DocDL/dicere-port214-forum2.pdf>
  24. Li, L., Xi, H., & Ning, Y. (2016). Does delayed retirement influence the employment of young men? *Journal of Residuals Science & Technology*, 13(8). Retrieved from <http://www.dpi-journals.com/index.php/JRST/article/view/4109Doi:10.12783/issn.15448053/13/8/388>
  25. Litwin, H., Achdut, L., & Youssim, I. (2009). Who supports delayed retirement? A study of older workers in Israel. *Journal of European Social Policy*, 9(3), 245-257. <https://doi.org/10.1177/0958928709104739>
  26. Loretto, W., Duncan, C., & White, P. J. (2000). Ageism and employment: Controversies, ambiguities and younger people's perceptions. *Aging and Society*, 20(3), 279-302. <https://doi.org/10.1017/S0144686X00007741>
  27. MacLeod, P., Fitzpatrick, A., Hamlyn, B., Jones, A., Kinver, A., & Page, L. (2012). *Attitudes to pensions: The 2012 survey* (Department of Work and Pensions Research Report, No. 813). Retrieved from [http://headlinemoney.co.uk/Company/Media/DWP/dwp\\_27112012\\_2.pdf](http://headlinemoney.co.uk/Company/Media/DWP/dwp_27112012_2.pdf)
  28. McGregor, J., & Gray, L. (2002). Stereotypes and older workers: The New Zealand experience. *Social Policy Journal of New Zealand*, 18, 163. Retrieved from <https://www.msd.govt.nz/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj18/stereotypes-and-older-workers18-pages163-177.html>
  29. Ministry of Business, Innovation & Employment. (2015). *Community perceptions of migrants and immigration* (Report). Retrieved from <https://www.mbie.govt.nz/assets/c3c87370d1/community-perceptions-migrants-immigration-2015.pdf>
  30. Ministry of Social Development. (2015). *Inquiry into the barriers to young people entering employment across New Zealand workplaces and how these can be addressed* (Report). Retrieved from <http://www.msd.govt.nz/assets/c3c87370d1/community-perceptions-migrants-immigration-2015.pdf>

- [www.myd.govt.nz/documents/youth-parliament-/transport-and-industrial-relations-sc-back-ground-paper.pdf](http://www.myd.govt.nz/documents/youth-parliament-/transport-and-industrial-relations-sc-back-ground-paper.pdf)
31. Munnell, A., & Wu, A. (2013). *Do older workers squeeze out younger workers?* (Stanford Institute for Economic Policy Research Discussion Paper, No. 13-011). Retrieved from <http://www.siepr.stanford.edu/RePEc/sip/13-011.pdf>
32. Muysken, J., Corvers, F., & Ziesemer, T. (2008). Immigration can alleviate the aging problem (Discussion Paper No. 07/2011-058). *Netspar*. Retrieved from [https://www.netspar.nl/assets/uploads/058\\_Corvers.pdf](https://www.netspar.nl/assets/uploads/058_Corvers.pdf)
33. Neumark, D., & Shupe, C. (2018). *Declining teen employment minimum wages, other explanations, and implications for human capital investment* (Mercatus Working Paper). Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3191510](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3191510)
34. Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
35. Ospina, J. H. (2015). *Resource competition and ageism: A study of the influence of employment scarcity on the endorsement of ageist attitudes* (Master's thesis). Retrieved from [https://dspace.library.colostate.edu/bitstream/handle/10217/166857/Ospina\\_colostate\\_0053N\\_12674.pdf?sequence=1&isAllowed=y](https://dspace.library.colostate.edu/bitstream/handle/10217/166857/Ospina_colostate_0053N_12674.pdf?sequence=1&isAllowed=y)
36. Pettinger, T. (2016). *The impact of an aging population on the economy*. Retrieved from <https://www.economicshelp.org/blog/8950/society/impact-aging-population-economy/>
37. Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891. <https://doi.org/10.3758/BRM.40.3.879>
38. Rahat, R., & Abdullateef, A. O. (2018, December). *The conceptual model of perceived impact of aging workforce, higher retirement age, immigration policies on youth unemployment: Evidence from business students*. Paper presented at Australia and New Zealand Business and Social Science Research conference, Auckland, New Zealand.
39. Statista. (2018). *Unemployment rate in the United States from 1990–2018 by age*. Retrieved from <https://www.statista.com/statistics/217882/us-unemployment-rate-by-age/>
40. Statistics New Zealand. (2013). *Workers aged 55+ keen to stay working full-time*. Retrieved from [http://archive.stats.govt.nz/browse\\_for\\_stats/income-and-work/employment\\_and\\_unemployment/workers-aged-55plus-article.aspx](http://archive.stats.govt.nz/browse_for_stats/income-and-work/employment_and_unemployment/workers-aged-55plus-article.aspx)
41. Sundali, J., Westerman, J. W., & Stedman, Y. (2008). The importance of stable income sources in retirement: An exploratory study. *Journal of Behavioral & Applied Management*, 10(1), 18-46. Retrieved from <https://www.questia.com/library/journal/1P3-1563915461/the-importance-of-stable-income-sources-in-retirement>
42. The Swedish National Board of Youth Affairs. (2007). *Young people with attitude*. Retrieved from [https://www.mucf.se/sites/default/files/publikationer\\_uploads/young-people-with-attitude.pdf](https://www.mucf.se/sites/default/files/publikationer_uploads/young-people-with-attitude.pdf)
43. United Nations. (2017). *World population aging. Department of Economic and Social Affairs Population Division*. Retrieved from [http://www.un.org/en/development/desa/population/publications/pdf/aging/WPA2017\\_Report.pdf](http://www.un.org/en/development/desa/population/publications/pdf/aging/WPA2017_Report.pdf)