

# Assessing Economic Impact of Delayed Payment of Retired Teachers in Ndola District Zambia

Quintino Chembo., Dr. Saili Mathews., Dr. Sikalumbi Dewin

Post Graduate Student, Zambia

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## ABSTRACT

This article is about financial situations teachers go through when retirement benefits are delayed, Teachers retire at the age of 55, 60 and or 65 years. A research was conducted in Ndola City with teacher population size of 4414 teachers (Ndola Debs office 2025). Teachers face delays in receiving their retirement benefits which create economic hardships that negatively affect their standard of living, therefore the study assessed this economic impact by using a mixed-methods approach which measured the variable to determine the impact. Sample size was 80 respondents, and it was discovered that retired teachers who were in salary scale F experienced the highest economic strain, while scale G is less extreme. Scale H is moderately below average. Retirees are failing to meet or buy clothing which was 26.25%, healthcare 25%, paying water bills was at 17.5% and food 13.75%. energy 11.25% and shelter 6.25%. Shelter was lower because retirees own their homes. Chi-Square Test of Independence was conducted to test the relationship between spending on food, clothing, investment, and healthcare However, since  $6.88 < 16.92$ , the null hypothesis was rejected which stated that delayed payment of retirement benefits to teachers does not reduced their ability to meet basic needs, consumption and financial stress. Therefore, it is recommended that there should be an automated pension processing systems and each organisation should create a contingency welfare fund accessible to affected retirees during pension delays.

**Key Terms:** Permanent income, Transitory income, Pension, Asset depletion, Retired teachers, Economic impact and Delayed payment

## INTRODUCTION

This part of the paper covered information on the objectives, questions, problem statement and the significant. Microsoft Encarta (2009) Retirement refers to leaving a job or career at the usual age for doing so, or the state of having left a job or career. While pension is the benefit given or paid to a retired person, usually by the state or an organisation for the services rendered during his/her work period.

The city under study is Ndola which has 4414 teachers of which 3291 are female and 1,123 males. Each year the Ministry of Education records a number of teachers who retire from active careers. (Ndola Debs office 2025) retirement in Zambian government is pegged at 55 as early retirements 60 as normal retirement and 65 years as late retirements. It covers an area of approximately 10,000 square kilometers and it is the third largest city from Lusaka and Kitwe. (Zambian Census, 2022) the district had a population of 167,938 mostly Lamba people who are the sole owner of the land.

Retirement is the stage in life when one chooses to leave the workforce and live off sources of income or savings that do not require active work and to get the benefit is another issue. The age at which a person retires, their lifestyle during retirement, and the way they fund that lifestyle, will vary from one person to the next, depending on individual preferences and financial planning. It was these disparities which made the researcher to embark on this study.

## Statement Problem

Teachers in Ndola District, particularly those in salary scales F up to I, face delays in receiving their retirement benefits. These delays create economic hardships that negatively affect their standard of living, increase financial insecurity, and deplete personal assets which lead to increased debt, reduced purchasing power, limited access to healthcare, and heightened financial stress. While pension policies and social safety nets exist, their effectiveness in mitigating the impact of delayed payments remains questionable. Additionally, factors such as inflation, financial literacy, and systemic inefficiencies in the pension system may further compound the economic challenges faced by retirees. This study seeks to fill that gap by systematically assessing the economic impact of delayed retirement benefit payments on these educators, providing insights that could inform policy interventions aimed at improving the welfare of retired public servants.

## Research Objectives:

General Objective:

Assessing the economic impact of delayed payment of retirement benefits for retirees.

## Specific Objectives

1. Examine the economic impact of delayed payment whether it varies among retired teachers in different salary scales.
2. Analyse how delayed retirement benefit influences the spending patterns of retired teachers.
3. Determine the extent to which delayed payments affect retired teachers' ability to meet basic needs.

## LITERATURE REVIEW

The review analyze the deficiencies in researches thereby enabling the researcher to identify the knowledge gaps. Delayed payments of benefits affect retired teachers' ability to meet their basic household need and wants.

### Global Perspective

According to (Alley & Crimmins, 2017). These demographic and labor force change patterns are also demonstrated by data from other countries and regions e.g., Western Europe, Japan, China, and India as cited in (Tyers & Shi, 2017), suggesting retirement is an area of global significance. Furthermore, retirement poses significant adjustment challenges for older employees (Quick & Moen, 2018). Maladjustment to retirement has been shown to lead to increased alcohol use (Perreira & Sloan, 2001) makes retirees not to afford basic goods and services, thus increased appetite to borrow money for their survive and decreased mental health (Wang, 2017). The U.S. Department of Commerce (2015) also reported that the private saving rates have been decreasing over the past two decades and reached an all-time low since the great depression and retirees find it difficult to save as a result they finish their benefit within two to three years of being paid.

According to (Gruber and Wise 2015) note that many nations have advantage structures that debilitate work by bringing lifetime benefits down to individuals who work longer. There are high incentives to retire built into the U.S. Government backed retirement framework just as numerous private benefits than in Africa.

According to (Indian Times 2025) Across multiple Indian states, retired teachers face financial and emotional stress due to delayed pension and retirement-related payouts. Delays in Pension Payments affected University Professor like Sinha from Chapra and colleagues in Gopalganj and Patna, waiting months without pension, resorting to savings or borrowing to meet daily needs and medical bills, equally Patliputra & JP Universities has hundreds of retirees who have not received pensions for several months, some resort to loans from moneylenders or relatives. Professor Sinha noted that family pensioners "are being helped by close relatives" (Times of India 2025).

## **African Perspective**

In Africa retirement from service is a typical phase of helping lifecycle because benefits are prepared so that it can sustain the retired person. According to (Victor Oluwole 2019) in Nigeria benefit delays and financial stress are unfortunately widespread, but some countries stand out due to the severity of the issue many retirees wait months or even years to access their pensions, leading to severe financial hardship. Over 80% of the workforce, is largely in Africa is delayed to get their benefits (Birati & Tziner, 1995; Feldman, 2025),

According to (Rix, 2019), in Zimbabwe hyperinflation has eroded the value of pensions, making them nearly worthless in real terms. Retirees often receive payouts equivalent to just a few US dollars, forcing many to return to informal work or rely on family support.

According to (Michelle Reyers 2025) South Africa has a state-funded older persons grant, the benefit level is still below the ideal replacement ratio. The system is under pressure due to a growing elderly population, and delays in processing new applications can occur.

Uganda & Ghana have limited pension coverage, especially for informal workers. Retirees often face delays and insufficient benefits, leading to continued work in old age or reliance on family because on their own the cost of living becomes unbearable.

## **Local Or Zambian Perspective**

In Zambia most retired personal especially Teachers with lower ranks ends up being destitute when a salary stops flowing in. An employee in Zambia can retire upon attain the age of fifty-five (55) years, this is termed as early retirement, sixty (60) years known as normal retirement and the last one is where one retires at the age of Sixty-five (65) years this is known as rate retirement and it is only applicable to employees with special skills such as surgeons in the medical field and other specialized individual with unique talents and skills. (Labour office 2025)

The context within which employees retire has changed significantly in the past 20 years. For example, employees before then, used to contribute to Public Service Pension Fund (PSPF) which pays retirement benefit as lump sum, but in 2000 the employees started contributing to National Pension Scheme Authority (NAPSA) the entity now responsible to pay benefits additionally, it put investment at risks on the employees' side because retirees cannot get lump sum but monthly salary. (Cahill, Giandrea, & Quinn, 2024) which leaves retirees in perpetual poverty income reduce and the assert depletion is pronounced more than before.

According to (Milazi Kabamba Museya 2014) argued that delayed pension payments were a universal challenge, but economic impact varied significantly by salary scales. (e.g., primary school teachers) experienced greater financial vulnerability, often relying on informal income sources like roadside vending or subsistence farming. Those from higher salary scales had more diversified coping strategies, such as rental income or small businesses, though they too faced stress due to delayed access to lump-sum benefits. He further said that psychosocial toll including anxiety, social exclusion, and loss of dignity was more pronounced among lower-income retirees.

## **Theoretical Literature**

This section gives the theory that explains how the retirees get affected by the dwindling income due to retirement and it is related to the objective as they try to provide the solution to the stated objective as well as the problem at hand

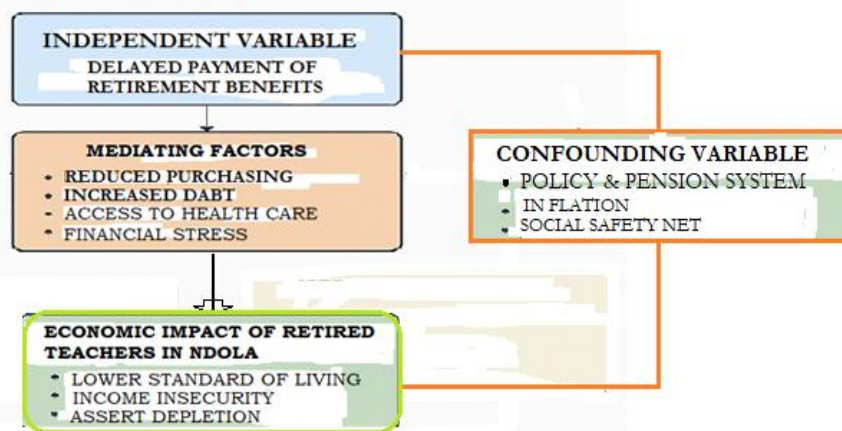
## **Life Cycle Hypothesis (Lch) And Consumption Smoothing.**

Economists (Franco Modigliani and Richard Brumberg 1973 in Theo 2021) developed a theory that individuals plan their consumption and saving behavior over their entire lifetime, aiming to smooth consumption in anticipation of changes in income. Retirement is a critical phase in this planning process. Meaning, instead of letting their spending rise and fall dramatically with changes in income, they try to maintain a stable standard of

living from youth through retirement but delayed in retirement benefits impacts them loudly because they keep their spending constant thus reducing the asset by selling them and contract debt which lead to financial stress.

## Conceptual Framework

FIGURE 3.1 CONCEPTUAL FRAMEWORK



(SOURCE: AUTHORS DATA SET 2025)

The relationship between delayed payment of retirement benefits and the economic impact on retired teachers in Ndola, while considering both mediating and moderating variables.

### Independent variable:

Delayed Payment of Retirement Benefits is the primary factor being studied. It represents the failure to provide retirees with their entitled pension benefits on time perhaps if it is paid on time it may change the narrative.

### Mediating factors

These are the mechanisms through which the delayed payments affect retired teachers. They help explain how or why the independent variable impacts the outcome that is the dependable variable. For example, reduced purchasing power makes retirees not to afford goods and services, because of survival retirees are forced to borrow thus, increased debt, Access to health care delayed funds limits retirees access to medical care and services and Lack of money causes emotional and psychological strain in retirees, this is depicting as (financial stress).

### Dependent variable (DV)

Economic impact on retired Teachers in Ndola, this is the outcome being measured it also includes: Lower standard of living which varies among retired teachers in different salary scales, income insecurity and asset depletion make them unable to meet basic needs. These reflect the negative economic consequences retirees face due to the delayed payments.

### Confounding Variable

These factors influence the strength or direction of the relationship between delayed payments and their economic impact. They can either worsen or soften the effect for example policy and pension system secondly the structure and efficiency of the retirement system these make soften the hardship if policies are made in such a way that there is efficiency in retirement payment of course without forgetting inflation in which rising prices can reduce the value of late payments, Social safety net where the government or community support can help retirees and finally financial literacy in which knowledge of retirees can help them manage limited funds.

The delayed payment of retirement benefits (independent variable) leads to mediating factors like financial stress and reduced purchasing power which contribute to the economic impact on retired teachers (dependent variable),

such as income insecurity and asset depletion these including the moderating variables (e.g., pension system, inflation) affect how strongly the delayed payment influences economic outcomes.

### **Null Hypothesis Only.**

1H<sub>0</sub>. Delayed payment of retirement benefits impact does not vary among teachers in different salary scale.

2H<sub>0</sub>. Delayed payment of retirement benefits to teachers does not lead to a shift in intertemporal consumption preferences.

3H<sub>0</sub>. Delayed payment of retirement benefits to teachers does not leading to reduced purchase of basic needs thus financial stress.

## **METHODOLOGY**

### **Research Design**

This study adopts a mixed-methods approach, combining quantitative and qualitative strategies. This design allows for a comprehensive assessment of the economic effects of delayed retirement payments, addressing both measurable outcomes and personal experiences.

### **Study Area and Target Population**

The study area was Ndola District on the Copperbelt province of Zambia with a reasonable number of retired public-sector educators. The choice of this setting was because of (mirror newspaper 2022) that local retirees are sleeping in the cold because of delayed retirement benefits. Nevertheless, the National Pension Scheme Authority (NAPSA) and Public Service Pension Fund (PSPF) are available in Ndola that justifies the choice of the study area. The target population was 4,414 teachers in Ndola District of which between 80 and 100 teachers retire yearly. In 2024 a total number of 88 teachers retired (DEBs Office 2025). The population includes retired teachers in salary scales F to I who have been affected by delayed pension disbursements.

### **Sampling Technique and Sample Size**

A purposive sampling technique was used to identify participants who meet the inclusion criteria. According to (James and Higgins 2023) For the quantitative survey, a sample size of approximately 80–120 may be targeted for statistical validity. Cochran's (1977) also "noted that for many survey-based studies, sample sizes in that range can be statistically acceptable". For this paper a researcher has 88 the actual number of retired teachers. For qualitative interviews, 15 in-depth participants were selected to ensure thematic saturation.

### **Data collection methods and data analysis**

For quantitative instruments structured questionnaires were used and for qualitative instruments semi-structured interviews were used. Quantitative data was analyzed using descriptive statistics (means, frequencies) and inferential tests (t-tests, regression) using software SPSS or Excel. Qualitative data was coded thematically using content analysis, identifying recurring patterns linked to economic behavior and income expectations.

### **Ethical Considerations**

Informed consent was obtained from all participants. Anonymity and confidentiality were ensured. The research asked for approval from the appropriate ethical authority before data collection begins.

## **FINDINGS**

Out of the 88 targeted retirees only 80 were approached and interviewed five of them have died and three have relocated to far places. However, the ratio was 1 female to 3 males and five were certificate holders sixteen had diplomas and the rest had degrees. It is noticed that none of these have gotten their benefit package except two



who retired at the beginning of last year, simply shows that delay in payment of retirees' benefit is real. It is also confirmed by the research question which said: How long after retirement did you receive your pension payment? The answer was *Not yet received* for all of them except two.

Table 5.1 Comparing Salary Scale and Economic Impact

Salary Scale	Reduced Consumption	Borrowing	Asset Sale	Health Care Cutback
F	29	30	33	40
G	24	28	28	26
H	18	16	16	12
I	9	6	3	2
Total	80	80	80	80

(SOURCE: Author data set 2025)

#### Group Means (per salary scale):

- **F:**  $(29 + 30 + 33 + 40) / 4 = 33.0$
- **G:**  $(24 + 28 + 28 + 26) / 4 = 26.75$
- **H:**  $(18 + 16 + 16 + 12) / 4 = 15.5$
- **I:**  $(9 + 6 + 3 + 2) / 4 = 5.0$

#### Grand Mean (overall average): = 20.63

Salary scales F (33.0) and G (26.75) are well above the grand mean (20.63). This signals higher reliance on coping mechanisms (consumption cuts, borrowing, asset sales, healthcare cutbacks) than those in salary Scales H (15.50) and I (5.0) are below the grand mean. Therefore, scale F experiences the highest economic strain, while scale G is also above average, though less extreme. Scale H is moderately below average, with far fewer coping behaviors.

Table 5.2 Descriptive Analysis on Affordability of Basic Needs

Basic Need	Frequency	Percentage (%)	Cumulative (%)
Food	11	13.75	
Water	14	17.5	31.25
Energy	9	11.25	42.5
Healthcare	20	25	67.5
Clothing	21	26.25	93.75
Shelter	5	6.25	100

(Source: Author data set 2025)

**Most affected needs:** *Clothing* (26.25%) and *Healthcare* (25%) top the list. This suggests that delayed payments are forcing retirees to cut back on essential personal and medical expenses this is a critical indicators of financial strain. **Moderately affected:** *Water* (17.5%) and *Food* (13.75%) are also significantly impacted, which is alarming since these are core survival needs. **Least affected:** *Shelter* (6.25%) and *Energy* (11.25%) may be lower either because retirees own their homes or prioritize keeping a roof over their heads despite other sacrifices.

All the responses were coded as 1,2,3,4 up to five, they were assigned values to the responses as shown below:

Strongly Agree (SA) = 5, Agree (A) = 4, Neutral (N) = 3, Disagree (D) = 2, Strongly Disagree (SD) = 1

Table 5.3 Descriptive Statistics of Likert Data

Row	SA	A	N	D	SD	N	Mean ( $\bar{x}$ )	SD ( $\sigma$ )	Interpretation
1	4	3	1	2	1	11	3.636	1.370	Moderate spread, some disagreement pay delay
2	5	4	0	3	2	14	3.500	1.320	Responses varied in relation to each retirees
3	3	2	0	1	3	9	3.111	1.565	Wider variability around neutral
4	5	7	3	4	1	20	3.550	1.389	Moderate spread
5	5	5	1	5	4	20	3.048	1.577	Higher diversity in responses
6	2	1	0	1	2	6	3.400	1.140	Limited sample, decent consistency on delay

Note:  $n=80$ . (Source: Author data set 2025)

### Descriptive Statistics

Mean scores range from ~3.048 to ~3.636, hovering around the “Neutral” to “Agree” midpoint. Compute overall (pooled) mean: Mathematica Total weighted sum  $\approx 42.1$ . Lower SD (rows 1, 2, 4, 6): Responses cluster near the mean  $\rightarrow$  more consensus. Higher SD (rows 3, 5): Responses scattered from strong agreement to disagreement  $\rightarrow$  mixed views of the total respondents = 80

Therefore, most responses indicating agreement on this survey statements that row 5 (3.048) is closest to neutral. Rows 1 and 6 show the strongest agreement (~3.636). Finally, no row dips below 3, so general sentiment is not negative.

Table 5.4 Chi-square test to assess the association between delay group and spending category.

### Observed Frequencies (O) and Expected Frequencies (E)

Category	A	B	C	D	Row Total
Food	32	31	33	37	133
Clothing	24	28	21	26	99
Investment	19	17	16	12	64
Healthcare	5	4	10	5	24
Column Totals	80	80	80	80	320

For each cell:  $E = (\text{Row Total} \times \text{Column Total}) / \text{Grand Total}$

- For Food–A:  $(133 \times 80) / 320 = 33.25$
- For Clothing–A:  $(99 \times 80) / 320 = 24.75$
- For Investment–A:  $(64 \times 80) / 320 = 16$
- For Healthcare–A:  $(24 \times 80) / 320 = 6$

**Chi-Square Formula**  $\chi^2 = \sum (O - E)^2 / E$

Computation:

- Food–A:  $(32 - 33.25)^2 / 33.25 \approx 0.047$
- Clothing–A:  $(24 - 24.75)^2 / 24.75 \approx 0.023$
- Investment–A:  $(19 - 16)^2 / 16 = 0.5625$
- Healthcare–A:  $(5 - 6)^2 / 6 \approx 0.167$

**Total  $\chi^2 \approx 6.88$**  (rounded from full calculation) **Degrees of Freedom** =  $(\text{rows} - 1) \times (\text{columns} - 1) = (4 - 1) \times (4 - 1) = 9$ . At  $df = 9$ , the critical value at  $\alpha = 0.05$  is **16.92**.

Since **6.88 < 16.92**, we **reject the null hypothesis**. There's **no statistically significant association** between spending category and group (A–D). In other words, **spending patterns don't differ enough across groups** to suggest a strong effect from delayed payments while the impact is felt by every category.

### Effect of Delayed Payments on Spending Patterns

To explore whether delayed pension payments significantly influenced spending behavior among retired teachers, a Chi-Square Test of Independence was conducted. The test examined the relationship between spending categories on **food, clothing, investment, and healthcare** and group classifications, which represented varying degrees of pension payment delays (Groups A to D). Nonetheless, a closer look at raw frequencies shows a tendency for lower spending in healthcare and investment which signals the change downwards in spending among groups possibly due to delay in payment of the benefits.

## CONCLUSION

F-value of 56.52 is extremely high, suggesting a statistically significant difference in economic impact across salary scales. This means that the economic burden from delayed payments varies significantly depending on the salary scale. Those in scale F are clearly more affected than those in scale I although their spending pattern is not very much different.

Out of 80 retirees or respondents it was noticed that spending was reduced due to delayed payment of retirement benefits. This data clearly supports the hypothesis that delayed pension payments significantly impair retirees' ability to meet basic needs, especially in areas like healthcare, investment and clothing. Further statistical testing or qualitative follow-up has also proved that because it gave analytical insight into that hypothesis.

A Chi-square statistic of 6.88 was calculated with 9 as a degrees of freedom, which is below the critical value of 16.92 at  $\alpha = 0.05$  significance level. Therefore, the test rejects the null hypothesis. This suggests that there is no statistically significant association between payment delay group and spending category, meaning that changes in spending patterns were relatively consistent across different levels of pensioners but dwindles as the delay persist.



In a thematic analysis it was discovered that most retirees did mention that “I often skip BP drugs due to insufficient fund to buy drugs”. The other statement which occurred more was that “I sold my asset in order to finance school fees, or medical bills or waters bills or just feeding at home.” This diminishes their quality of life and may increase long-term health risks and household insecurity. Therefore, the economic impact of delayed payment to retirees is robust because the figure 6.88 was below the critical value meaning that delayed in retirees benefit payment impact retirees negatively.

## RECOMMENDATION

- Prioritize lower-income pensioners (like those in scale F) in disbursement hierarchies or provide supplementary monthly allowances.
- Mandatory pre-retirement financial literacy workshops for teachers which can influence the spending patterns of retired teachers.
- Support the formation of retired teachers’ cooperatives or mutual aid networks to mitigate the extent of the impact.
- Implement automated and time-bound pension processing systems to minimize delays.
- Create a contingency welfare fund accessible to affected retirees during pension delays.

## REFERENCE

1. AARP. (2015). The business case of workers age 50+: Planning for tomorrow’s talent needs for today’s competitive environment. Washington, DC: Author.
2. Adams, G. A. (2019). Career-related variables and planned retirement age: An extension of Beehr’s model. *Journal of Vocational Behavior*, 55: 221-235.
3. Adams, G., & Rau, B. (2014). Job seeking among retirees seeking bridge employment. *Personnel Psychology*, 57:719-744.
4. Ajzen, I. (2019). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50: 179-211.
5. Alley, D., & Crimmins, E. (2007). The demography of aging and work. In K. S. Shultz & G. A. Adams (Eds.), *Aging and work in the 21st century*: 7-23. New York: Psychology Press.
6. Anderson, C. E., & Weber, J. A. (2013). Preretirement planning and perceptions of satisfaction among retirees. *Educational Gerontology*, 19: 397-406.
7. Anson, O., Antonovsky, A., Sagy, S., & Adler, I. (2019). Family, gender, and attitudes toward retirement. *Sex Roles*, 20: 355-369.
8. Appold, S. J. (2014). How much longer would men work if there were no employment dislocation? Estimates from cause-elimination work life tables. *Social Science Research*, 33: 660-680.
9. Ashforth, B. (2011). *Role transitions in organizational life: An identity-based perspective*. Mahwah, NJ: Lawrence Erlbaum.
10. Atchley, R. C. (2016). Continuity theory, self, and social structure. In C. D. Ryff & V. W. Marshall (Eds.), *Families and retirement*: 145-158. Thousand Oaks, CA: Sage.
11. Atchley, R. C. (2018). A continuity theory of normal aging. *The Gerontologist*, 29: 183-190.
12. Atchley, R. C., & Robinson, J. L. (2019). Attitudes toward retirement and distance from the event. *Research on Aging*, 4: 299-313.
13. Baltes, P. B. (2021). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as foundation of developmental theory. *American Psychologist*, 52: 366-380.
14. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
15. Barnes-Farrell, J. L. (2023). *Beyond health and wealth: Attitudinal and other influences on retirement decision making*. New York: Springer.
16. Barnes-Farrell, J. L. (2015). Older workers. In J. Barling, E. K., Kelloway, & M. Frone (Eds.), *Handbook of work stress*: 431-454. Thousand Oaks, CA: Sage.

17. Beach, L. R., & Frederickson, J. R. (2019). Image theory: An alternative description of audit decisions. *Accounting, Organizations, and Society*, 14: 101-112.
18. Becker, G. (2015). A theory of the allocation of time. *Economic Journal*, 75, 493-517.
19. Beehr, T. A. (2016). The process of retirement: A review and recommendations for future investigation. *Personnel Psychology*, 39: 31-56.
20. Beehr, T. A., & Bennett, M. M. (2017). Examining retirement from a multi-level perspective. In K. S. Shultz & G. A. Adams (Eds.), *Aging and work in the 21st century*: 277-302. New York: Psychology Press.
21. Beehr, T. A., Glazer, S., Nielson, N. L., & Farmer, S. J. (2022). Work and no work predictors of employees' retirement ages. *Journal of Vocational Behavior*, 57: 206-225.
22. Belgrave, L. L., & Haug, M. R. (2015). Retirement transition and adaptation: Are health and finances losing their effects? *Journal of Clinical Geropsychology*, 1: 43-66.
23. Bidwell, J., Griffin, B., & Hesketh, B. (2016). Timing of retirement: Including delay discounting perspective in retirement model. *Journal of Vocational Behavior*, 68: 368-387.
24. Birati, A., & Tziner, A. (2015). Successful promotion of early retirement: A quantitative approach. *Human Resource Management Review*, 5: 53-62.
25. Bosse, R., Aldwin, C. M., Levenson, M. R., & Workman-Daniels, K. (2019). How stressful is retirement? Findings from the Normative Aging Study. *Journals of Gerontology: Psychological Sciences*, 46B: P9-P14.
26. Brougham, R. R., & Walsh, D. A. (2017). Image theory, goal incompatibility, and retirement intent. *International Journal of Aging and Human Development*, 63: 203-229.
27. Cahill, K. E., Giandrea, M. D., & Quinn, J. F. (2006). Retirement patterns from career employment. *The Gerontologist*, 46: 514-523.
28. Calasanti, T. M. (2016). Gender and life satisfaction in retirement: An assessment of the male model. *Journals of Gerontology: Social Sciences*, 51B: S18-S29.
29. Chirikos, T., & Nestel, G. (2018). Occupation, impaired health, and the functional capacity of men to continue working. *Research on Aging*, 11: 174-205.
30. Caplan, R. D. (2017). Person-environment fit theory: Commensurate dimensions, time perspectives, and mechanisms. *Journal of Vocational Behavior*, 31: 248-267.
31. Cron, W. L., Jackofsky, E. F., & Slocum, J. W. (2019). Job performance and attitudes of disengagement stage salespeople who are about to retire. *Journal of Personal Selling & Sales Management*, 13: 1-13.
32. Davis, M. A. (2013). Factors related to bridge employment participation among private sector early retirees. *Journal of Vocational Behavior*, 63: 55-71.
33. Dendinger, V. M., Adams, G. A., & Jacobson, J. D. (2021). Reasons for working and their relationship to retirement attitudes, job satisfaction and occupational self-efficacy of bridge employees. *International Journal of Aging and Human Development*, 61: 21-35.
34. DeVaney, S. A., & Kim, H. (2013). Older self-employed workers and planning for the future. *Journal of Consumer Affairs*, 37: 123-142.
35. Doeringer, P. B. (2020). *Bridges to retirement*. Ithaca, NY: Cornell University Press.
36. Doeringhaus, H. I., & Feldman, D. C. (2021). Early retirement penalties in defined benefit pensions. *Journal of Managerial Issues*, 13: 273-287.
37. Dorfman, L. T., & Heckert, D. A. (2018). Egalitarianism in retired rural couples: Household tasks, decision making, and leisure activities. *Family Relations*, 37: 73-78.
38. Dormann, C., & Zapf, D. (2004). Customer-related social stressors and burnout. *Journal of Occupational Health Psychology*, 9: 61-82.