

INFLUENCE OF HUMAN CAPITAL ON PERFORMANCE OF PUBLIC UNIVERSITIES IN WESTERN REGION, KENYA

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Abstract

The study examined the influence of human capital on performance of Public Universities in Western Region, Kenya. The study adopted descriptive and correlational research designs. The study targeted 160 respondents from four public universities in western region Kenya. Stratified and simple random sampling techniques was used. Closed ended questionnaires were used in primary data collection. Both descriptive and inferential statistics was used for data analysis. Findings revealed that Human capital had a positive and significant influence on performance of Public Universities in Western Region, Kenya ($B=0.789$, $p= 0.000$). The study recommends that public universities should always employ competent and adequate staff for effective performance.

Keywords: Human capital, Performance, Public universities.

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1. INTRODUCTION

Human resource management addresses matters pertaining to the personnel (Tracey, 2016). A study conducted by Otoo (2019) revealed that employees' competences had a significant influence on the relationship between human resources and firm success. According to Moustaghfir et al. (2020), human resource management offered a helpful leverage in an organization's quest to attain desired performance. Channar et al. (2015) contended that human resource input performed a vital role in increasing firm competitiveness. According to Alshamsi et al. (2019) employees serve as a crucial channel for generation and implementation of new ideas.

According to Zambon & Dumay (2016), human capital implies the competences and skills, education, training and experience and value features of the organization workforce. According to Simkovic (2013)

human capital is a significant element that improves firm assets and employees so as to enhance productivity as well as sustaining competitive advantage. Albertini & Berger-Remy (2019) noted that it's a combination of knowledge, skills, innovation and employees ability. According to Tran & Vo (2020) investing in human capital is imperative for improving performance at individual, group, firm, and also national levels.

Human capital has been linked to greater productivity and high salaries (Santos-Rodrigues et al., 2010). Backman (2014) demonstrated that human capital cognitive capabilities positively affected company productivity. Githaiga et al. (2023) highlighted the significance of firm-specific HC as a driver of competitive advantage and business sustainability. The present study investigates human capital by analyzing several indicators including staff competency, staff sufficiency, staff experience, staff dedication, and staff learning ability.

According to Jääskeläinen et al. (2022) performance is a measurable outcome for management of operations, procedures, goods and/or services including organizational systems. It could either be results that are qualitative or quantitative. In this study dimensions of performance were Grant revenue, Student enrolment, Institution rating and Employee satisfaction.

1.1 Statement of the problem

Institutions of higher learning are vital for economic as well as social advancement. The present operating structure in Kenya's education industry is characterized by its dynamism and intense competitiveness, facilitated by the proliferation of numerous universities. The privatisation of university education and the implementation of a linear student selection process following the establishment of the Commission of University Education have significantly altered the operational landscape of public universities. Reports indicate that the decrease in private student sponsorship has resulted in reduced revenue generation due to a reduced number of students (Commission for University Education, 2018). These inefficiencies have resulted in university staff expressing dissatisfaction with their inadequate compensation.

Public universities in Kenya have been on the rise yet performance has been cited as a major challenge. The completion rate among learners has been on the lower end. According to the report by Auditor General (2022), eleven public universities in Kenya were found to be facing serious liquidity challenges based on limited organization resources, a position that was worsened by the fact that their current liabilities exceeded their current assets. Akoyo et al. (2022) found that Kenyan universities have shown relatively low performance output in the last ten years compared to other institutions in the region and internationally. Only a small number of universities have achieved high positions in the regional rankings.

Igoki (2022) pointed out that Higher learning institutions were challenged by globalization, rise in student enrollments and the fast pace in knowledge generation. Such pressures demand highly competent and motivated workforce so as to maintain and also enhance institutional performance.

Studies have been done on human capital, however they were done in different contexts and sectors such as Indonesian SMEs (Sembiring, 2016), Kenyan pharmaceutical enterprises (Odhon'g & Omolo, 2015) and Kenyan commercial banks (Mbugua, 2024). To address these gaps the study will focus on the influence human capital has on performance of public universities in Kenya.

1.2 Study objective

The objective of the study is to determine the influence of human capital on performance of Public Universities in Western Region, Kenya.

1.3 Study hypothesis

H₀₁: Human capital has no significant influence on performance of Public Universities in Western Region, Kenya.

2. LITERATURE REVIEW

2.1 Theoretical review

The study was premised on Resource based view (RBV) which was proposed by Wernefelt (1984) and Barney (1986). The resource-based approach posits that the performance of a corporation is enhanced by its internal resources. The philosophy of resource-based management emphasizes the resources and capabilities of an organization. Resources encompass financial, human and technological resources. According to RBV, businesses can attain sustainable competitive advantage if they effectively manage their resources effectively (Barney & Hesterly, 2012). Human Capital being an important resource that should be sustained effectively. Field & Mkrtyan (2017) and Goldin (2016) noted that HC has been considered as an intangible asset that is composed of several competencies that individuals have learnt over time, including knowledge, experiences, training as well as skills (Field & Mkrtyan, 2017; Goldin, 2016).

Organizations can have a sustainable competitive advantage if they facilitate development of the workforce's core competencies which should be non-transferable, valuable, unique and non-substitutable. (Barney, 1991). The significance of the theory lies in its ability to illustrate how public universities can optimize their human capital for the goal of achieving desired outcomes. Rahman & Akhter (2021) focused

on factors related to HC investment that influence the performance of banks, including training, education, knowledge including skills as human capital dimensions were found to be positively correlated to bank performance.

2.2 Empirical review

Tran & Vo (2020) conducted a research across various industries and established a positive link between HC efficiency and business performance. Hidayat & Widodo (2022) reviewed literature on human capital and organizational performance and found that there was strong evidence to suggest “human capital in organizations foster greater innovation and corporate performance”. Majumder et al. (2023) demonstrated that human capital impacted positively on profitability.

Vivares et al. (2016) discovered no significant relationship between HRM practices and performance in competitive priorities. Drawing on human capital theory, the research conducted a survey of a representative sample of medium and large industrial companies located in the Colombian coffee region. In this work, the null hypotheses were tested using regression analysis. Given these findings, the study suggests that firms should effectively synchronize individual employee traits, job happiness, and employee performance with the operations strategy in order to enhance corporate performance. Nevertheless, the previous study relied on data collected from major and medium-sized manufacturing companies involved in coffee processing, whereas the present study was centered on public universities.

Semiring (2016) surveyed 179 academicians and support staff members at the University of Debre Brehan in order to determine the effect that HR knowledge and skills had on the performance of SMEs in Medan City, Indonesia. The quantitative study demonstrated that human resources methods such as recruitment and selection, training, evaluations, and compensation exert a substantial correlation with university performance.

Odhon'g & Omolo (2015) sought to assess the effects of human capital investment on the performance of Kenyan pharmaceutical enterprises. Grounded in the theories of human capital, skills learning and sustainable resources. The study used a descriptive research approach. Data was collected using questionnaires from a sample of 200 individuals from pharmaceutical companies in Kenya. Results demonstrated a positive correlation between investment in personnel and company performance.

Using descriptive research design Mbugua (2024) examined how human capital which had education level, number and experience of employees influenced performance of Kenyan commercial banks with regards to agency banking and found that it influenced performance.

Mwaura et al. (2022) looked into the effect of strategic human resource management practices on the performance of public universities in Kenya. The study was anchored on Resource Based Theory. This

study used a descriptive research strategy based on a census approach. A self-administered questionnaire was used to collect data from 31 public universities in Kenya. A statistically significant link was found between the performance of public universities in Kenya and the set of SHRMPs (rigorous recruiting, staff training, reward management, and performance management).

Mutahi & Busienei (2015) investigated the impact of strategic human resource management (HRM) strategies on the performance of public universities in Kenya. Strategic rewards and employee training were identified as being significant. Naitore & Wanyoike (2019) used a descriptive survey of thirteen public universities in Kenya and established that public universities' performance was positively and significantly correlated with strategic human resource management practices, specifically HR planning and staffing. Based on the research reviewed, it is highly certain that strategic human resource management methodologies have a significant and beneficial impact on the performance of public institutions.

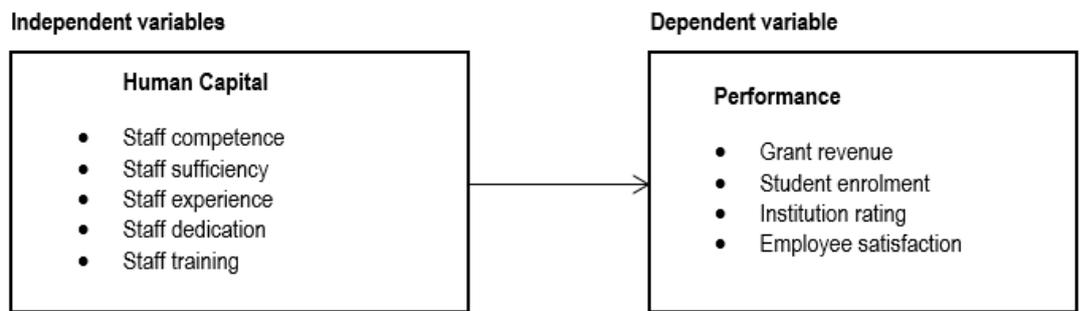


FIGURE 1. CONCEPTUAL FRAMEWORK
Source: Authors' compilation (2024)

3. METHODOLOGY

This study adopted descriptive and correlational research designs. The study targeted four public universities in western region Kenya namely Masinde Muliro University of Science and Technology, Maseno University, Jaramogi Oginga Odinga University of Science and Technology and Kibabii University. The respondents targeted were 160 staff from the university departments responsible for budgeting, procurement, internal auditing, accounting, human resources, and information and communication technology. Both stratified and simple random sampling was used and a sample size of 114 was calculated using Yamane's formula. Primary data was collected by use of structured questionnaires between May and June 2024. Validity was tested using content validity test where the questionnaire was discussed with experts in the area of strategic management who assessed the instruments. Reliability was measured using Cronbach's Alpha test and the results indicated a Cronbach value of 0.703 and 0.871 for human capital and performance respectively. Data was analyzed using descriptive statistics (frequency,

percentage, means and standard deviation) and inferential statistics simple linear regression analysis. The regression model used was:

$$Y = \beta_0 + \beta_1 X_1 + e$$

Y = Performance

β_0 = Constant

β_1 = Beta coefficient

X_1 = human resources

e = the error term

4. RESULTS AND DISCUSSION

4.1 Response rate

A response rate of 77.2% was achieved out of 114 questionnaires that were distributed to the sampled respondents, 88 of these questions were filled out successfully.

4.2 Descriptive analysis results

This study aimed to determine the respondents' degree of agreement on six assertions regarding human capital. A five point Likert Scale was used, where 1=Strongly Disagree (SD), 2=Disagree (D), 3=Fairly agree (FA), 4=Agree (A), and 5=Strongly Agree (SA).

TABLE 1. PERCEPTION ON HUMAN CAPITAL

No	Human capital	Strongly Agree	Agree	Fairly Agree	Disagree	Strongly Disagree	Mean	S D
1	The university employees are competent to perform their duties and responsibilities	21 (23.8)	30 (34.1)	30 (34.1)	7 (8.0)	0 (0)	3.73	1.28
2	The university employees are adequate in relation to the workload in their respective departments	21 (23.9)	39 (44.3)	22 (25)	4 (4.5)	2 (2.3)	3.82	1.40
3	The university employees are well experienced in the field of practice	12 (13.6)	46 (52.3)	0 (0)	28 (31.8)	2 (2.3)	3.04	1.29
4	The university employees are always committed to work and committed to attaining the vision and mission	18 (20.5)	56 (63.6)	0 (0)	13 (14.8)	1 (1.1)	3.72	1.35
5	Training opportunities are available for staff in the university	18 (20.5)	56 (63.6)	0 (0)	13 (14.8)	1 (1.1)	3.77	1.43

Source: Field data (2024)

The results shows that 23.8% of respondents strongly agreed as 34.1% agreed and fairly agreed respectively as 8.0% disagreed that the university employees are competent to perform their duties and responsibilities. The mean score of 3.73 and standard deviation of 1.28 suggest moderate agreement with variability in perceptions. This underscores the importance of competent employees at work.

Furthermore 23.9% strongly agreed as 44.3% agreed whereas 25% fairly agreed that the university employees are adequate in relation to the workload in their respective departments though 4.5% and 2.3% disagreed and strongly disagreed respectively. The mean score of 3.82 and standard deviation of 1.40 suggest moderate agreement with variability in perceptions. This underscores the importance of having adequate workforce.

Regarding whether the university employees are well experienced in the field of practice 13.6% strongly agreed as 52.3% agreed whereas 31.8% and 2.3% disagreed and strongly disagreed respectively. The mean score of 3.04 and standard deviation of 1.290 suggest moderate agreement with variability in perceptions. This underscores the importance of having experienced workforce.

The study ascertained whether the university employees are always committed to work and committed to attaining the vision and mission, 20.5% strongly agreed as 63.6% agreed whereas 14.8% and 1.1% disagreed and strongly disagreed respectively. The mean score of 3.72 and standard deviation of 1.35 suggest moderate agreement with variability in perceptions. This underscores the importance of having committed workforce.

The study ascertained whether there was availability of training opportunities for staff, 20.5% strongly agreed as 63.6% agreed whereas 14.8% and 1.1% disagreed and strongly disagreed respectively. The mean score of 3.77 and standard deviation of 1.43 suggest moderate agreement with variability in perceptions. This underscores the importance of training staff.

TABLE 2. PERCEPTION ON PERFORMANCE

No	Performance	Strongly Agree	Agree	Fairly Agree	Disagree	Strongly Disagree	Mean	S D
1	The amount of revenue from grants generated by the university has increased in the past three years	10 (11.4)	46 (52.3)	30 (34.1)	2 (2.3)	0 (0)	4.22	0.80
2	The number of students enrolled has increased in the past three years	18 (20.5)	56 (63.6)	0 (0)	13 (14.8)	1 (1.1)	3.89	1.21
3	The university ranking has improved in the past three years	12 (13.6)	46 (52.3)	0 (0)	28 (31.8)	2 (2.3)	3.85	1.18
4	The university employee satisfaction and morale has improved in the past three years	21 (23.9)	39 (44.3)	22 (25)	4 (4.5)	2 (2.3)	3.54	1.27

Source: Field data (2024)

From Table 2, a substantial portion, comprising 11.4%, who strongly agreed and 52.3% and 34.1% who agreed and fairly agreed respectively that the amount of revenue from grants generated by the university had increased the previous three years though 2.3% disagreed, as reflected in the relatively high mean score of 4.22 and a standard deviation of 0.80, suggesting a moderate level of agreement.

Similarly, regarding on whether the number of students enrolled had increased in the previous three years, respondents exhibited mixed responses. While 20.5% strongly agreed and 63.6% agreed, though 14.8% disagreed as 1.1% strong disagreement. This variation is reflected in the mean score of 3.89, with a relatively high standard deviation of 1.21, indicating a moderate level of agreement.

Regarding on whether the university ranking has improved in the past three years, respondents exhibited mixed responses. While 13.6% strongly agreed and 52.3% agreed, a notable proportion 31.3% disagreed as 2.3% strongly disagreed. This variation is reflected in the mean score of 3.85, with a relatively high standard deviation of 1.18, indicating a wider range of opinions among respondents.

Similarly, regarding on whether the university employee satisfaction and morale has improved in the past three years, respondents exhibited mixed responses. While 23.9% strongly agreed and 44.3% agreed, a notable proportion 25% fairly agreed though 4.5% disagreed as 2.3% strong disagreement. This variation is reflected in the mean score of 3.54, with a relatively high standard deviation of 1.27, indicating a wider range of opinions among respondents.

4.3 Inferential analysis

Simple Linear regression analysis results

The study examined the influence of human capital on performance of Public Universities in Western Region, Kenya.

H_{01} : Human capital has no significant influence on performance of Public Universities in Western Region, Kenya.

Table 3 shows that the R-squared value was 0.317, which means that the performance of Public Universities in Western Region, Kenya is influenced by human capital to portion of 31.7% of the variation in performance. The model is significant at the 95.0% confidence level, as shown by the ANOVA result, which has a value of $F(1.86) = 39.873$, $P(0.00) < 0.05$.

As for the coefficient results a one-unit change in human capital results to a 0.789 change in performance. Thus Human capital has a positive and significant influence on performance. Thus the null hypothesis is rejected. Thus the equation $Y = \beta_0 + \beta_1 X_1 + e$ is substituted as

$$Y = 0.666 + 0.789 \text{ human capital}$$

TABLE 3. REGRESSION RESULTS OF HUMAN CAPITAL AND PERFORMANCE

Model Summary									
"Model	R	R ²	Adjusted R ²	Std. Error of the Estimate	Change Statistics				
					R ² Change	F Change	df1	df2	Sig. F Change
1	.563 ^a	.317	.309	.71017	.317	39.873	1	86	.000
a. Predictors: (Constant), Human capital									
ANOVA ^a									
Model				Sum of Squares	Df	Mean Square	F	Sig.	
1	Regression			20.109	1	20.109	39.873	.000 ^b	
	Residual			43.373	86	.504			
	Total			63.482	87				
a. Dependent Variable: Performance									
b. Predictors: (Constant), Human capital									
Coefficients ^a									
Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.			
	B	Std. Error	Beta						
1	(Constant)	.666	.463		1.438	.154			
	Human resources	.789	.125	.563	6.314	.000			
a. Dependent Variable: Performance"									

Source: Field Data (2024)

The study agrees with Tran & Vo (2020) who established a positive link between human capital efficiency and business performance. Similarly the findings align with those of Hidayat & Widodo (2022) who found that human capital in organizations fostered greater innovation and corporate performance. Similarly Mbugua (2024) revealed that human capital was significantly upheld in agency banking amongst Kenyan commercial banks. The findings reinforce other studies by Naitore & Wanyoike (2019) and Mwaura et al. (2022) who demonstrated that strategic human resource management practices influenced Performance of Public Universities in Kenya.

5. CONCLUSIONS AND RECOMMENDATIONS

This study investigated the influence of human capital on the performance of Public Universities in the Western Region of Kenya. The performance of Public Universities in the Western Region of Kenya was positively and significantly influenced by human capital.

In regards to Human capital the study recommends that public universities should always employ competent and adequate staff for effective productivity. Furthermore staff should have adequate experience and always be committed to work. Universities should also make training opportunities available to ensure adequate staff learning.

6. LIMITATIONS AND FUTURE DIRECTIONS

This study focused on the direct influence of Human capital on performance. Future studies could expand on this by examining potential moderators such as organizational culture and external environment. Moreover, the study was done in public universities in western region. Future studies could be done in public universities in other regions and also in private universities. Additionally in the present study data was collected using structured questionnaires. Future studies could employ use of unstructured questionnaires and interviews for triangulation purposes so as to get a deeper insight on the influence of human capital on performance. The present study has highlighted the importance of human capital in enhancing performance. Future research could build on these findings by examining other factors that can influence performance of universities such as financial resources, technological resources amongst others.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

DECLARATION OF GENERATIVE AI AND AI-ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

The authors declare that they have not used any Generative AI and/or AI-Assisted technologies during the preparation of this work.

REFERENCES

- Akoyo, S. I., Bula, H. & Wambua, P. (2022). Effect of e-reassign system on performance of chartered universities in Kenya. *International Journal on Economics, Commerce and Management*, X(10), 91–103.
- Albertini, E., & Berger-Remy, F. (2019). Intellectual capital and financial performance: a meta-analysis and research agenda. *Management*, 22(2), 216–249. <https://doi.org/10.3917/mana.222.0216>
- Alshamsi, S., Isaac, O., & Bhaumik, A. (2019). The effects of intellectual capital on organizational innovation within Abu Dhabi Police in UAE. *International Journal on Emerging Technologies* 10(1a), 50–58.
- Backman, M. (2014). Human capital in firms and regions: Impact on firm productivity. *Papers in Regional Science*, 93(3), 557–575. <https://doi.org/10.1111/pirs.12005>
- Barney, J., & Hesterly, W. S. (2012). *Strategic Management and Corporate Competitive Advantage: Concepts*. Upper Saddle River, NJ: Prentice Hall.
- Channar, Z. A., Talreja, S., & Bai, M. D. (2015). Impact of human capital variables on the effectiveness of the organizations. *Pakistan Journal of Commerce and Social Sciences*, 9(1), 228–240.
- Commission for University Education (2018). *University statistics 2017/2018*.

- Dixon, N. M., (2017). *The Organizational Learning Cycle: How we can Learn Collectively*. London: Routledge.
- Field, L. C., & Mkrtychyan, A. (2017). The effect of director experience on acquisition performance. *Journal of Financial Economics*, 123(3), 488–511. <https://doi.org/10.1016/j.jfineco.2016.12.001>
- Githaiga, P. N., Soi, N., & Buigut, K. K. (2023). Does intellectual capital matter to MFIs' financial sustainability? *Asian Journal of Accounting Research*, 8(1), 41–52. <https://doi.org/10.1108/AJAR-06-2021-0080>
- Goldin, C. (2016). Human capital. In C. Diebolt & M. Hauptert (Eds.), *Hand book of cliometrics* (pp. 55–86). Springer. https://doi.org/10.1007/978-3-642-40406-1_3
- Hidayat, M. T., & Widodo, A. P. (2022). The influence of human capital on organizational performance. *Jurnal Ilmu Ekonomi dan Manajemen*, 13(2), 195–205. <https://doi.org/10.30996/die.v13i2.7301>
- Igoki, C. (2021). An assessment of emotional intelligence relationship with employee engagement for public universities in Kenya. *The International Journal of Business & Management* 9(7), 303–307. <https://doi.org/10.24940/theijbm/2021/v9/i7/BM2107-053>
- Jääskeläinen, A., Tappura, S., & Pirhonen, J. (2022). The path toward successful safety performance measurement. *Journal of Safety Research*, 83, 181–194. <https://doi.org/10.1016/j.jsr.2022.08.014>
- Majumder, M. T. H., Ruma, I. J., & Akter, A. (2023). Does intellectual capital affect bank performance? Evidence from Bangladesh, LBS. *Journal of Management & Research*, 21(2), 171–185. <https://doi.org/10.1108/LBSJMR-05-2022-0016>
- Mbugua, M. N. (2024). Strategic drivers and performance of agency banking in commercial Banks in Kenya. Unpublished PhD Thesis (Business Administration). Jomo Kenyatta university of Agriculture and Technology.
- Moustaghfir, K., El Fatih, S. & Benouarrek, M. (2020), Human resource management practices, entrepreneurial orientation and firm performance: what is the link? *Measuring Business Excellence*, 24(2), 267–283. <https://doi.org/10.1108/MBE-12-2019-0119>
- Munene, I. (2016). University branch campuses in Kenya. *International Higher Education*, 86(Summer), 22–23. <https://doi.org/10.6017/ihe.2016.86.9370>
- Mutahi, N., & Busienei, J. R. (2015). Effect of human resource management practices on performance of public universities in Kenya. *International Journal of Economics, Commerce and Management*, III(10), 696–736.
- Mwaura, R. S. N., Kiruja, E. K., & Sagwa, E. V. (2022). Influence of strategic human resource management practices on performance of public universities in Kenya. *Journal of Human Resource and Leadership*, 7(2), 1–19. <https://doi.org/10.47604/jhrl.1679>
- Naitore, D., & Wanyoike, R. (2019). Strategic human resource management practices on performance in selected public universities in Kenya. *International Academic Journal of Human Resource and Business Administration*, 3(5), 1-19. http://www.iajournals.org/articles/iajhrba_v3_i5_1_19.pdf
- Odhon'g, E. A., & Omolo, J., (2015). Effects of human capital investment on the performance of Kenyan pharmaceutical enterprises. *Global Journal of Human Resource Management*, 3, 1–29.
- Otoo, F. N. K. (2019). Human resource management (HRM) practices and organizational performance: The mediating role of employee competencies, *Employee Relations*, 41(5), 949–970.
- Piowar-Sulej, K. (2021). Core functions of sustainable human resource management. A hybrid literature review with the use of H-classics methodology. *Sustainable Development*, 29, 671–693. <https://doi.org/10.1002/sd.2166>

- Santos-Rodrigues, H., Dorrego, P. F., & Jardon, C. F. (2010). The influence of human capital on the innovativeness of firms. *International Business and Economics Research Journal*, 9(9), 53–63. <https://doi.org/10.19030/iber.v9i9.625>
- Saunders, M, Lewis, P., & Thornhill, A. (2012). *Research Methods for Business Students*, 6th edition. Pearson.
- Sembiring, R. (2016). Impact of human resources' knowledge and skills on SMEs' in Medan City, Indonesia. *International Journal of Management, Economics and Social Sciences*, 5(3), 95–104. Retrieved from SSRN: <https://ssrn.com/abstract=2869940>
- Simkovic, M. (2013). Risk-based student loans. *Washington and Lee Law Review*, 70(1), 527. Retrieved from SSRN: <http://dx.doi.org/10.2139/ssrn.2110497>.
- Sonn, I. K., Plessis, M. D., Van Vuuren, C. D., Marais, J., Wagener, E., & Roman, N. V. (2021). Achievements and challenges for higher education during the COVID-19 pandemic: A rapid review of media in Africa. *International Journal of Environmental Research and Public Health*, 18(24), 12888.
- Tracey, W. R. (2016). *The human resources glossary: The complete desk reference for HR executives, managers, and practitioners*. Florida: CRC Press.
- Vivares, J. A., Sarache, W. A., & Naranjo, J. C. (2016). Impact of human resource management on performance in competitive priorities. *International Journal of Operations & Production Management*, 36(2), 114–134.
- Wernerfelt, B. (1984). A Resource Based View of the Firm. *Strategic Management Journal*, 5(2), 171–180.
- Zambon, S., & Dumay, J. (2016). A critical reflection on the future of intellectual capital: from reporting to disclosure. *Journal of Intellectual Capital* 17(1), 168–184. <https://doi.org/10.1108/JIC-08-2015-0072>