

World Journal on Educational Technology: Current Issues



Volume 13, Issue 2, (2021) 178-187

www.wj-et.eu

Transformational leadership and human capital within the disruptive business environment of academia

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Suggested Citation:

Abu-Rumman, A. (2021). Transformational leadership and human capital within the disruptive business environment of academia. *World Journal on Educational Technology: Current Issues*. *13*(2),178-187. https://doi.org/10.18844/wjet.v13i2.5652

Received from July 15, 2020; revised from; August 15, 2020, accepted from; October 30, 2020. Selection and peer review under responsibility of Prof. Dr. Servet Bayram, Yeditepe University, Turkey. ©2021 Birlesik Dunya Yenilik Arastirma ve Yayincilik Merkezi. All rights reserved.

Abstract

Abstract Purpose – The purpose of this paper is to examine the impact of transformational leadership on the cultivation of human capital in an academic setting from the perspective of university employees Design/methodology/approach – Quantitative data was collected from a range of staff working within three universities located in Jordan using an online questionnaire survey. The focus was on identifying which factors of transformational leadership were perceived as having the greatest potential contribution towards developing human capital and if there was a consensus amongst staff about these factors Results – 131 staff members submitted a completed questionnaire giving a response rate of 93%. Respondents generally had a good understanding of the concepts of human capital and transformational leadership, but the way in which transformational leadership was perceived to impact on human capital differed. Conclusion – Overall, the findings from the survey, consistent with other similar studies, confirmed that there was a correlation between transformational leadership and human capital in the context of academia from the perspective of staff. Research limitations/implications – The study confirms the need for leaders in academia to consider the leadership approach that is adopted to ensure that human capital, which is one of its main assets, is supported and developed appropriately Practical implications – The paper describes implications for leaders in higher education, as well as more broadly for educators who are attempting to develop human capital in their organisations Originality/value – This paper expands upon a developing field in leadership in higher education

Keywords: Transformational Leadership; Human Capital; Academia; Disruptive Business Environment

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1. Introduction

In today's disruptive business environment, academic institutions need to have the ability to adapt and respond quickly to change to ensure they meet the evolving needs of the different communities they serve. This is particularly so, given that academic institutions worldwide are facing unprecedent challenges including responding to an increasingly complex society which demands greater skills and competencies, remaining competitive in the context of rising numbers of for-profit institutions, and managing growing expectations about the offerings from higher education (Chan, 2016). According to Bawany (2019), based on his studies of the needs of next generation leaders, this disruptive business environment, calls for a new paradigm of leadership. He argues that there needs to be a shift from the more traditional forms of transactional leadership towards a more transformational approach, and claims that successful leaders of the future require critical and strategic thinking skills combined with high levels of social and emotional intelligence.

Cetin and Kinik (2015) argue that within academia, traditionally leaders have been chosen based on their academic reputation within their given field, their intellect and their research capabilities. However, they argue that these qualities do not necessarily translate into effective leadership and therefore, perhaps more frequently within this industry as compared to others, academic leadership results in high turnover and burn out rates. In particular, a key challenge of academic leaders is the emphasis on the cultivation of human capital with an increasing recognition of its strong correlation with overall organisational performance (Barbuto and Gottfredson, 2016). Angrist et al. (2019) argue that much of the focus on human capital measurement in the current literature is within advanced economies, and argue that there is a need for future research to focus more on measures used in developing countries which are likely to have more to gain from the cultivation of human capital. This study therefore aims to help fill that gap.

1.1 Context of the Study

This study focused on three universities located in the Arab country of Jordan based in western Asia. It is a middle-income country with a relatively small estimated population of around 6.5 million (Al Hamdan, Manojlovich and Tanima, 2017; Abu-Rumman, 2019). There are approximately 30 public and private universities based in Jordan, which serve a quarter of a million students (Ministry of Higher Education & Scientific Research, 2017). A key strategic objective of the Jordan Chamber of Industry (2018) is to increase competitiveness and innovation within the Jordanian industrial sector and therefore the cultivation of human capital within higher education is a key factor. However, unlike more developed countries, many universities in Jordan still adopt a more traditional approach to leadership and human capital development (Ghatasheh, 2016).

1.2 Review of the current literature

1.2.1 The disruptive business environment of academia

Operating in a disruption business environment is the new 'normal' rather than just a passing trend and for higher education institutions is the result of a range of factors including rapid advancements in technology, globalization, changing demographics and the preferences of adult learners (Donald, 2018). Furthermore, according to Chan (2016), the higher education sector is facing a plethora of other challenges including increased competition for funding through an increase in the numbers of for-profit institutions, increased cross-border academic mobility, rising demands from industry and society relating to the types of skills and competencies they demand from new graduates, and changes in the learning experience expectations of students (Black, 2015). In addition, Al-Tabbaa and

Ankrah (2016) have noted that these challenges have led to rising costs and a rapid growth in new knowledge, which in turn has led to greater pressure for academic institutions to collaborate more with industry.

1.2.2 The Cultivation of Human Capital

Human capital in the academic context refers to the intangible value that lies within the competencies of an institution's 'people' including the knowledge, skills and expertise of its professors, researchers, technical staff, administrators and students (Secundo et al., 2017; Abu-Rumman, 2018). According to Hülsbeck and Lehmann (2010) and Al-Abbadi *et al.* (2019), it is the most critical resource in university research. They argue that the ability to recruit and retain high calibre academics and students is key to an institution's success in relation to new knowledge creation and transfer rates, as measured by metrics such a number of publications and citations, and commercial outputs. Within the university context, academics play multiple roles in relation to teaching and supervising students, conducting their own research and writing publications and acting in a consultancy and advisory role to industry (De Wan, 2015). However, according to Venkatraman (2010), many universities which are located in developing countries (where more mid-rank universities tend to be based) are hindered by a lack of financial funding and appropriate human resources to support their human capital development and growth.

In their study of human capital measurement in higher education, Zlatea and Enache (2015) categorised human capital into three key domains: professional training and skills; experience and expertise; and creativeness and innovation. It is this categorisation, which guided the development of the methodology for this study as it was felt that these were well aligned to the ideation around human capital in Jordan.

1.2.3 Transformational Leadership and Human Capital Development

Transformational leadership can be defined as the process of building employee loyalty and motivation to deliver organisational visions, missions and objectives as promoted by leaders (Alsayed, Motaghi and Osman, 2012). It has also been described as a leadership approach which effects positive change in followers with a view to developing them themselves into leaders (Christopher, Mena and Van Hoek, 2018). According to Odumeru and Ogbonna (2013) transformational leadership comprises of four critical elements including: idealized influence; intellectual stimulation; inspirational motivation, and individualized consideration. They claim that this form of leadership focuses greatly on the followers' personal outcomes and achievements which in turn inspires followers to pursue additional work to achieve organizational goals; a view supported by Russell et al. (2018). In their study of the impact of transformational leadership, Edwards et al. (2010) identified the same four core components that traditionally conceptualize as transformational domains but added an additional component of empowerment which lends itself well to this study of leadership and human capital in an academic setting.

Transformational leadership models have particularly dominated the debate of leadership within the context of higher education as it lends itself more to many of the fundamental constructs of established within this sector. For example, transformational leadership approaches resonate positively with the higher education sector's focus on human interactions which is in essence its core business. In addition, at an academic level, the 'learner-centred' approach to education is in line with the adaptive concepts of transformational leadership (Amey, 2006). Furthermore, transformational leadership is also perceived to correspond with the challenges of a disruptive business environment

and is considered to be a leadership approach which is more likely to generate innovative solutions which can address those challenges (Black, 2015; Basham, 2012).

Similarly, Gill et al. (2018), in their study of human capital management, argue that transformational leadership can be influential in promoting effective knowledge creation practices and dynamic collaboration in teams for constructive knowledge acquisition which is a key objective in an academic setting.

Birasnav, Rangnekar and Dalpati (2011) argue that a transformational leadership approach is essential for organisations wanting to achieve sustained competitive advantage through capitalising on human capital. However, leadership roles and approaches in academic institutions face a number of specific challenges. Firstly, academic leadership roles differ from those found in other types of sector as they have a number of anomalies such as being transitory in nature (for example on a rotational basis), or allocated on an 'honorary' basis based more on academic success as opposed to leadership skills or competencies (Black, 2015). Similarly, many senior roles combine many functions including those of teacher, researcher, mentor, external advisor and project manager; all of which hold some level of leadership responsibility.

Using social identity theory, and located in the context of a developing country, Raja et al. (2018) found that there was a relationship between transformational leadership and what they termed as 'person-organization fit', which they argued in turn contributes to the cultivation of human capital and organisational social capital. In addition, Khan, Sentosa and Salman (2018) argue that the way transformational leadership can impact on the effectiveness of human capital, is through its ability to transform knowledge management systems. Similarly, from their study of transformational leadership and human capital, Birasnav, Rangnekar and Dalpati (2011) argue that transformational leaders have most impact on human capital through changing their employees' perceptions of human capital benefits by involving them in knowledge management processes, establishing organizational culture, and encouraging communication.

From the review of the literature presented above, it is clear that there is strong evidence to support the view that transformational leadership can impact positively on the development of human capital within an academic context. This study therefore aims to build on this evidence, and examine in further detail the ways in which transformational leadership can impact on human capital in universities operating in a disruptive environment in a developing country.

1.3 Aim

To identify from the perspective of University employees if transformational leadership impacts on the cultivation of human capital, and if so, which components of transformational leadership have most impact

2. Method

This study focused on the impact of transformational leadership on the cultivation of human capital from the perspective of a range of academic employees working within three different universities based in Jordan. The sample included lecturers, researchers, administrators and managers. The emphasis was on which factors of transformational leadership were perceived as having the greatest potential contribution to make towards developing human capital and if these views were shared by different staff groups or if they were divided.

A pragmatic quantitative approach was taken to completing the study, which involved a quantitative survey of a sample of staff working within each of the identified Universities using an online

questionnaire. 200 University staff members were invited to take part via an email explaining the purpose and aims of the study after gaining approval from the respective organisations in order to adhere to ethical principles. The questionnaire itself was anonymous to further ensure the study was ethically compliant.

The questionnaire was developed to address the study aims, problem statement, and hypotheses to determine the impact of an endogenous construct on an exogenous construct. The questionnaire was separated into two parts. The first part consisted of three demographic constructs, i.e. gender, age, and length of time working within the University, which used nominal and ordinal scales.

The second part asked questions which were developed based on the categorisation and measurement of human capital developed by Zlatea and Enache (2015), and were presented in the current study by three main dimensions: professional training and skills; experience and expertise; and creativeness and innovation, with each one having five items.

Transformational leadership, as proposed by Edwards et al. (2010), was presented by four main dimensions: idealized influence; intellectual stimulation; inspirational motivation; and individualized consideration, again with each one of them having five items.

The conceptual framework for this study is illustrated in Figure 1 shows the independent and dependent variable and the main dimension of each one.

According to the conceptual framework illustrated in Figure 1, the hypothesis developed is that there is a causal impact of transformational leadership on the cultivation of human capital. SPSS Amos was used to test this relationship and prove the underling hypothesi

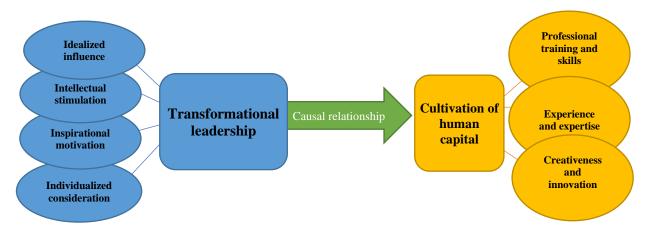


Figure 1 Conceptual Framework

3. Results

Out of the 200 questionnaires distributed via email to staff members in each of the sample Universities, 3 were undelivered and 11 were incomplete (missing responses). Thus, a total of 186 responses were used for subsequent analysis, giving a response rate of 94% (Table 1).

The sample size was considered to be sufficient and the response rate obtained was comparable to several previous studies in the same area. According to Mugenda and Mugenda (2003), 50% is adequate, 60% is good, and 70% and over is excellent. Table 1 provides a summary of the response rate.

Table 1: Summary of Response Rates

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Questionnaire administered	200			
Undelivered	3			
Uncompleted	11			
Number of responses	186			
Response rate (186/197)	94%			

Table 2 illustrates a breakdown of the overall demographic profile of the respondents in terms of gender, age and length of time working within the university:

Table 2 Respondents' Demographic Profile

Characteristic		Percentage	
		(n=186)	
Gender	Male	69%	
	Female	31%	
Age	18 – 25	2%	
	26 – 35	30%	
	36 – 45	35%	
	46 – 55	23%	
	56 – 65	10%	
Length of time	Less than a year	0%	
working within	1-2 years	15%	
the University	3-4 years	22%	
	5-6 years	20%	
	7-8 years	11%	
	9 or more years	32%	

Figure 2 presents the factor loading for questionnaire items, and all items factor loading achieved the required level (higher than 0.6).

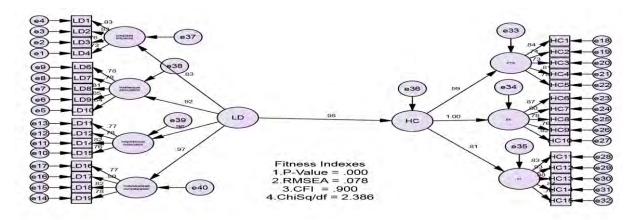


Figure 2 Standardized Estimation

As shown in Figure 3 below the fitness indexes achieved the required level, while P-value is 0.000, RMSEA 0.078, CFI 0.90, and ChiSq/df 2.386.

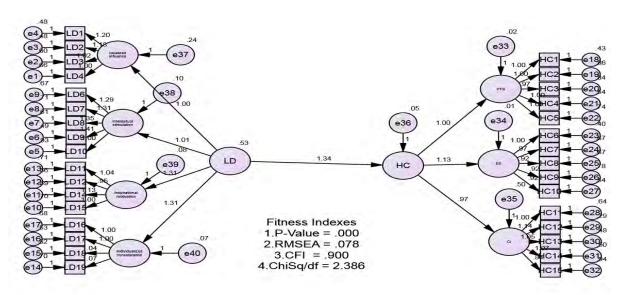


Figure 3 Regression Weight

For hypothesis test the Regression Weights was concerned, according to Table 3 the estimate was 1.338, C.R. 10.524, and P-value ***.

Table 3: Regression Weight

	Estimate	S.E.	C.R.	Р	Result	
HC < LD	1.338	.127	10.524	***	supported	
Hypothesis supported according to the result presented in this table						

4. Discussions and Recommendations

In support of the evidence in the current literature, the study has confirmed that there is a causal effect of transformational leadership on human capital. Within the study sample there was a good understanding of the concepts of human capital and transformational leadership which would be expected given the academic context in which the respondents work. The extent to which the different components of transformational leadership were perceived to exist in the different Universities differed. In University A, transformational leadership was perceived to be much less well embedded than in the other two Universities.

In this University, the component of 'Inspirational Motivation' was perceived as being the best embedded. In University B and C this component was also perceived as being well established, but the component of 'Empowerment' was also perceived as being significant which is something that was not prominent in the results for University A. Unlike the traditional conceptualisations of the domains of transformational leadership, Edwards et al. (2010) added the domain of empowerment. Further research into how this particular domain impacts on the development of human capital would be beneficial.

In relation to the elements of human capital, there did not appear to any particular consistency in terms of which element was perceived as being most well established. For University A, the element of 'experience and expertise' was perceived as being the element that was most in existence. This was the same for University C alongside 'professional training and skills'. University B also identified 'professional training and skills' as being the most well embedded element of human capital, but unlike the other two universities, also identified 'creativeness and innovation' as being a key embedded element of human capital. Further investigation into what characteristics of organisations impact on the development of human capital would be beneficial to understand this phenomenon better.

Whilst the findings from the study have made a useful contribution in adding to the body of evidence in this field, the study sample was limited to only three academic organisations and used only a quantitative methodological approach. A wider sample incorporating a qualitative lens may uncover further depth of understanding of the phenomena of the impact of transformational leadership on human capital.

5. Conclusion

Overall, the results of this study, consistent with the findings from other studies, found a correlation between the perceived existence of human capital and the impact of transformational leadership. The study confirmed the need for leaders in academia to give real consideration to the leadership approach that is adopted to ensure that human capital, which is one of its main assets, is supported and developed appropriately. This is particularly important given the disruptive business environment in which academia operates.

References

Abu-Rumman, A. (2019). Challenging tradition: Exploring the transition towards university entrepreneurialism. *Academy of Entrepreneurship Journal*, 25(2), 1-15.

- Abu-Rumman, A. (2021). Transformational leadership and human capital within the disruptive business environment of academia. World Journal on Educational Technology: Current Issues. 13(2),178-187. https://doi.org/10.18844/wjet.v13i2.5652
- Abu-Rumman, A. (2018). Gaining competitive advantage through intellectual capital and knowledge management: an exploration of inhibitors and enablers in Jordanian Universities. *Problems and Perspectives in Management*, 16(3), 259-268.
- Al-Abbadi, L.H.M., Almomani, R.Z.Q., Rumman, A.R.A.A.A., Abu-Rumman, A. and Khraisat, A.M.I. (2019). Impact of Human Capital Development and Human Capital Isolation Mechanisms on Innovative Performance: Evidence from Industrial Companies in Jordan. *European Journal of Business and Management*, 11(15), 200-209.
- AlHamdan, Z., Manojlovich, M. and Tanima, B. (2017). Jordanian nursing work environments, intent to stay, and job satisfaction. *Journal of Nursing Scholarship*, 49(1), 103-110.
- Alsayed, A.K., Motaghi, M.H. and Osman, I.B. (2012). The use of the multifactor leadership questionnaire and communication satisfaction questionnaire in Palestine: A research note. *International Journal of Scientific and Research Publications*, 2(11), 1-9.
- Al-Tabbaa, O. and Ankrah, S. (2016). Social capital to facilitate 'engineered' university—industry collaboration for technology transfer: A dynamic perspective. *Technological Forecasting and Social Change*, 104, 1-15.
- Amey, M. J. (2006). Leadership in Higher Education. Change: The Magazine of Higher Learning, 38, 55-58.
- Angrist, N., Djankov, S., Goldberg, P.K. and Patrinos, H.A. (2019). *Measuring Human Capital*, World Bank Group, Policy Research Working Paper 8742.
- Barbuto Jr (Jay), J.E. and Gottfredson, R.K. (2016). Human capital, the millennial's reign, and the need for servant leadership. *Journal of Leadership Studies*, 10(2), pp.59-63.
- Basham, L.M. (2012). Transformational leadership characteristics necessary for today's leaders in higher education. *Journal of International Education Research*, 8(4), 343-347.
- Bawany, S. (2019). Transforming the Next Generation Leaders: Developing Future Leaders for a Disruptive, Digital-Driven Era of the Fourth Industrial Revolution (Industry 4.0). Business Expert Press.
- Birasnav, M., Rangnekar, S. and Dalpati, A. (2011). Transformational leadership and human capital benefits: The role of knowledge management. *Leadership & Organization Development Journal*, 32(2), 106-126.
- Black, S. A. (2015). Qualities of Effective Leadership in Higher Education, Open Journal of Leadership, 4, 54-66.
- Cetin, M.O. and Kinik, F.S.F. (2015). An analysis of academic leadership behavior from the perspective of transformational leadership. *Procedia-Social and Behavioral Sciences*, 207, 519-527.
- Chan, R.Y. (2016). Understanding the purpose of higher education: An analysis of the economic and social benefits for completing a college degree. *Journal of Education Policy, Planning and Administration*, *5*, 1-40.
- Christopher, M., Mena, C. and Van Hoek, R. (2018). *Leading procurement strategy: driving value through the supply chain*. Kogan Page Publishers.
- Da Wan, C. (2015). Is there a 'Mid-Rank Trap' for Universities? *Journal of International and Comparative Education (JICE)*, 52-66.
- Donald, L.A.N.G. (2018). Business disruption is here to stay—what should leaders do? In *employee experience—an* answer to the deficit of talents, in the fourth industrial revolution, 19, p.35.
- Edwards, J.R., Knight, D.K., Broome, K.M. and Flynn, P.M. (2010). The development and validation of a transformational leadership survey for substance use treatment programs. *Substance use & misuse*, *45*(9), 1279-1302.
- Ghatasheh, N. (2016). The University as Technology-Focused Center on Entrepreneurship in the Middle East: Case of Jordan. *European Journal of Business and Management*, 8(15), 27-33.

- Abu-Rumman, A. (2021). Transformational leadership and human capital within the disruptive business environment of academia. World Journal on Educational Technology: Current Issues. 13(2),178-187. https://doi.org/10.18844/wjet.v13i2.5652
- Hülsbeck, M. and Lehmann, E. (2010). The role of regional knowledge production in university technology transfer: Isolating coevolutionary effects, UO Working Paper Series, No. 01-10.
- Khan, M.S., Sentosa, I. and Salman, F. (2018). Exploring the role of transformational leadership in human capital effectiveness: Empirical evidence from the Malaysian healthcare sector. *World Journal of Entrepreneurship, Management and Sustainable Development*, 14(2), 191-204.
- Ministry of Higher Education & Scientific Research. (2017). Annual Statistical Report 2017/16, MOHE.
- Odumeru, J.A. and Ogbonna, I.G. (2013). Transformational vs transactional leadership theories: evidence in literature. *International Review of Management and Business Research*, 2(2), 355-361.
- Raja, U., Bouckenooghe, D., Syed, F. and Naseer, S. (2018). Interplay between PO fit, transformational leadership and organizational social capital. *Personnel Review*, 47(4), 913-930.
- Russell, Z. A., Steffensen, D. S., Ellen, III, B. P., Zhang, L., Bishoff, J. D. and Ferris, G. R. (2018). High performance work practice implementation and employee impressions of line manager leadership. *Human Resource Management Review*, 28(3), 258-270.
- Secundo, G., Perez, S.E., Martinaitis, Ž. and Leitner, K.H. (2017). An Intellectual Capital framework to measure universities' third mission activities. *Technological Forecasting and Social Change*, *123*, pp.229-239.
- Venkatraman, S. (2010). Beyond university rankings: A review of key indicators for improving quality provision of higher education. In K. Sarjit, S. Morshidi and W. G. Tierney (Eds.) *Quality Assurance and University Rankings in Higher Education in the Asia Pacific: Challenges for universities and nations*. Penang: Universiti Sains Malaysia Press, 56-80.
- Zlate, Ş. and Enache, C. (2015). The interdependence between human capital and organizational performance in higher education. *Procedia-social and behavioral sciences*, *180*, 136-143.