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## Administrators' Strategic Thinking, Resistance to Change and the Performance of Saudi Higher Education Institutions

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### Abstract

The government of Saudi Arabia is recently embarking on transforming the entire economic and social system to bring forth socio-economic development. Such change transformation cannot be done without getting considerable change in all ramifications of government activities. The institutions of higher learning are selected as the pivot for implementing such great transformation. The objectives of this article are folds: To examine the direct relationship between strategic thinking and the performance of HEIs in Saudi Arabia and to assess the mediating influence of resistance to change on the relationship between strategic thinking and the performance of HEIs in Saudi Arabia. Two research questions and two corresponding hypotheses were formulated to achieve these objectives. The research used a quantitative method, with a structured questionnaire on a five-point Likert Scale. The findings indicate that strategic thinking is negatively related to the performance of HEIs in Saudi Arabia. Furthermore, the research found that the relationship between strategic thinking and HEIs performance in Saudi Arabia is mediated by resistance to change. Future research can study all the staff in the HEIs, not administrators, as middle and lower cadre staffs are the workers that implement changes. Similarly, future studies can also be carried out using the longitudinal method.

**Keywords:** Strategic Thinking, Resistance To Change, Vision 2030, Transformation

### Introduction

The recent extraordinary urge by the Saudi government for a huge transformation of the entire economic system and beyond has equally called for a sharp shift of the strategic management of the school system to contribute its quota to the significant reform as envisaged in 2030. Such government urges for the changes include, among others, the Saudi government's drive for the transformation of Saudi Arabia from a single-commodity economy to a knowledge economy (Moshashai *et al.*, 2018) to be driven partly by an agile higher

educational sector (Mousa and Ghulam, 2019; Shafique, 2015). Rezny *et al* (2019) argue that the knowledge economy creates fundamental societal transformation to accomplish more remarkable and sustainable economic growth. It is also seen as a means to overcome the difficulty caused by snowballing resource shortages and negative climatic changes". Unfortunately, there has been a critical problem concerning the concept definition of the fundamental construct of strategic thinking and organizational performance among researchers. Furthermore, researchers have found contradictory results in research conducted in this area. For instance, mixed results were reported by (Alatailat *et al.*, 2019; Song *et al.*, 2011). In addition, Clauss *et al* (2019); Wijayanti *et al* (2020) reported no relationship in their studies. The inconsistency in the findings relating to the strategic thinking–performance relationship designates the need for indirect mechanism i.e., by bringing in an interacting variable in this relationship. Thus, this gap will be investigated in this article.

In this regard, the current study addresses the identified problems relating to the strategic thinking and organizational performance constructs earlier stressed. Muzanenhamo (2016); Jelenc (2008) established evidence in an empirical study that the relationship between strategic thinking and the performance of an organization is inconsistent. Some studies have discovered that strategic thinking promotes innovation and improves performance (Kazmi *et al.*, 2016). Thus, this article seeks to determine the relationship between the strategic thinking pattern of Saudi University administrators and their Saudi University performance and address the issue of the inconsistent findings by introducing an intervening variable, i.e., mediator ( resistance to change)

The following research questions were therefore formulated to investigate the problem mentioned above

### **Research Questions**

1. Does any positive relationship exist between strategic thinking and the performance of Saudi HEIs?
2. Can resistance to change mediate the relationship between strategic thinking and the performance of Saudi HEIs?

### **Research Objectives**

To answer the above research questions, the following objectives were developed for the research. The research objectives are:

1. To examine the relationship between strategic thinking and the performance of Saudi HEIs.
2. To find out if resistance to change mediates the relationship between strategic thinking and the performance of Saudi HEIs.

### **Review of Literature and Hypotheses Development**

This research examines the mediating role resistance to change could play in the nexus between strategic thinking and the higher educational institutions (HEIs) Performance in Saudi Arabia. A review of the relevant literature was carried out. Specifically, it focuses on clarification of the four constructs to be investigated in the study and the theoretical grids upon which the study will be carried out.

### Development of Hypotheses

This study investigated the direct relationship between the administrators' strategic thinking ability and the Saudi HEIs' university performance. In addition, examining the mediating influence of resistance to change in the relationship between strategic thinking and the performance of HEIs in Saudi Arabia. Thus, two hypotheses were developed based on the proposed relationships among the research constructs. The indirect pathway relies on the psychological dispositions of senior HEIs officials concerning their strategic thinking ability relative to achieving excellent organizational performance. In other words, when lower strategic thinking capabilities characterize officials of HEIs, they may not resist organizational change and are highly likely to achieve institutional objectives.

### Strategic Thinking and HEI Performance

Strategic thinkers are always organizationally aware and continually conscious of the interconnections among the various tasks and functions (Rant, 2018). Also, the responsibilities and units/departments within and between the organization and its stakeholders (Mellon and Kroth, 2013). Strategic thinkers are in high demand at various levels of management and in various industries, including higher education (Niebles *et al.*, 2019). This is because successful strategies do not increase the ability to think strategically and position administrators to maximize organizational resources in pursuit of its objective, thereby positively impacting organizational performance (Ershadi and Dehdazzi, 2019). Empirical studies have also shown that strategic thinking competencies of administrators – in terms of their strategic intent (Muraguri, 2016), reflexivity and critical thinking (van Woerkom, 2004), intelligently opportunistic behaviour (Moon, 2013), insightful consideration of past experiences Ebrahimi and Sabbaghian (2015), scenarios planning and brainstorming Apgar (2015), and effective decision habits (Goldman *et al.*, 2015) – severally and collectively enhances their organization's innovation potential and consequently improve organizational performance (Kazmi and Naaranoja, 2015; Kazmi *et al.*, 2016). Given these empirical suggestions, this study hypothesizes the following

H1: *Strategic thinking positively influences the performance of Saudi HEIs*

### Resistance to Change as a Mediator between Strategic Thinking and Saudi HEIs Performance

An administrator's inclination to maintain things as they are despite the need to explore alternatives is referred to as resistance to change (Hon *et al.*, 2014; Oreg, 2018). Three factors may bring about this resistance: routine seeking, emotional reactions, short-term focus, and cognitive rigidity (Oreg, 2018). A significant portion of the literature on resistance to change treats the construct as a predictor (e.g., Ileri and Arik, 2019; Oreg, 2018; Oreg *et al.*, 2009; Rojas, 2020) or a criterion (e.g., Dorling, 2017; Oreg, 2006; Oreg and Berson, 2011; van Dam *et al.*, 2008) variable. The few exceptions include the recent work of Rafferty and Jimmieson (2017), who studied the mediating influence of affective, behavioural, and cognitive resistance to change in the relationship between transformational change and psychological well-being.

In this study, therefore, the researcher elects to investigate the construct as a critical mediator explaining the relationship between strategic thinking and the performance of Saudi HEIs. Some studies have shown that strategic thinking has a consequential effect on organizational performance (Ibrahim and Elumah, 2016; Jaffar *et al.*, 2019; Niebles *et al.*,

2019) as well as on resistance to change (Zhiren and Yanqing, 2016), and resistance to change on performance (Amarantou *et al.*, 2018). Notwithstanding the previous arguments, resistance to change can be positive (Stoica and Mihalcioiu, 2013). Thus, resistance to change can be negative or positive, and each of these dual types consists of two sub-types. The negative type consists of active and passive resistance, and the positive variant comprises active and passive support (Stoica and Mihalcioiu, 2013). Thus, the discussion of resistance to change in this study broadly follows the duality conceptualized in the literature, including (Bridgman, 2018; Busse and Doganer, 2018)

However, despite the argument that strategic thinking has a direct influence on both organizational performance and resistance to change, it is equally plausible to argue strategic thinking can indirectly impact organizational performance based on the assumptions of mediation advanced in Baron and Kenny's (1986) seminal work. In other words, although strategic thinking may influence organizational performance, it may equally affect resistance to change by ameliorating its adverse influences, thereby enhancing organizational performance. By extension, therefore, the study also asserts that resistance to change can mediate between each of the five components of strategic thinking and the performance of organizations. Accordingly, the researcher expects an indirect relationship between strategic thinking (as well as its five components) and the performance of HEIs. To test these expectations, the researcher, therefore, advances the following hypotheses

H5: *Resistance to change mediates the impact of strategic thinking on the performance of Saudi HEIs.*

### Conceptual Framework

Fig.1 below depicts the frame of this recent study, which shows a relationship between strategic thinking and the performance of HEIs as found in various extant literature. However, several other studies, as stated earlier, presented inconsistent results. Thus, in this new study frame, the relationship between the two main constructs is subjected to mediation to get a more prominent position in such a relationship. The two constructs, therefore, have been examined by the interaction of the resistance to change as a mediating variable.

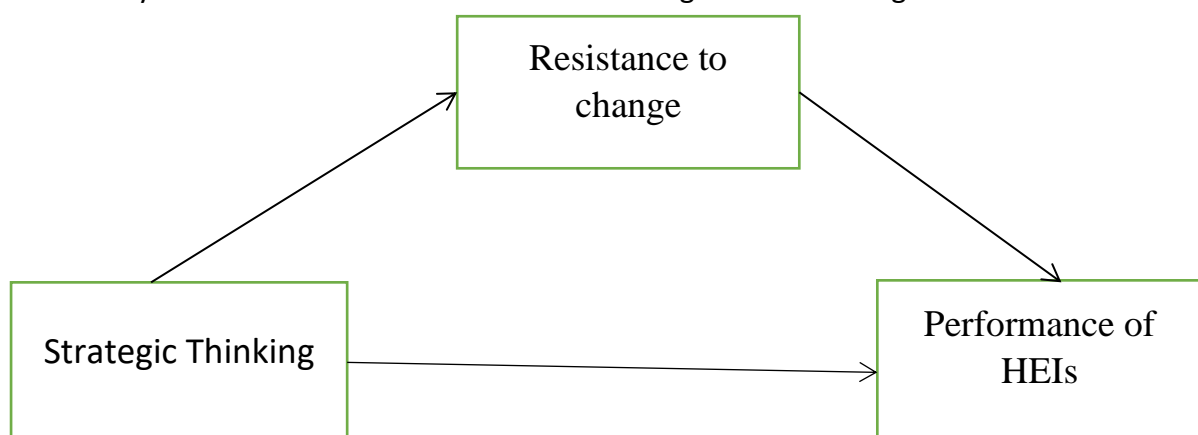


Fig.1 Conceptual Frame of the Study

### Research Methodology

In this section, the researcher explains the methods, techniques, and tools applied in collecting and analyzing the data to answer the study's focal questions and achieve the stated

objectives. These issues are presented against the backdrop of the research philosophy adopted as the overall guide concerning the ontological, epistemological, and methodological decisions made. The research philosophy is positivism which informs the selection of the research design (cross-sectional survey), which in turn determines both the nature of the data (quantitative) and the methods of analysis (correlational), and these issues were explained in the following.

The population of this study consists of all the universities in Saudi Arabia. There are 30 public and 13 private universities in Saudi Arabia (Ministry of Education, 2020). The focus of this research is on public universities. The reason for targeting public universities is that Vision 2030 overwhelmingly relies on public universities as agents of change that spearhead the transformation of the Saudi economy (Alsharari, 2019b). In this light, Saudi Arabia's public universities have been given the frontline mandate in articulating and implementing the sweeping changes in the country. Hence, the focus is placed on public universities. A two-stage sampling strategy was used in collecting data from the 30 public universities in Saudi Arabia. Bryman (1989) suggests that "two levels of access are required: to the firm and the individuals" (p. 86). The probability-stratified sampling technique (Keskintürk and Er, 2007) was applied in the first stage, while the non-probability purposive sampling technique (Tongco, 2007) was employed in the second stage. Stratification was used to ensure that the final sample of higher education administrators selected to form the study respondents' pool is representative of the Saudi public HEIs. The purposive sampling technique was used to ensure that only respondents with the appropriate characteristics relevant to this study were selected for the sample.

A total of 328 respondents were selected for the study, the two steps described earlier. Only 277 questionnaires representing 84.45%, were returned, and 51, i.e., 15.55%, were not returned. Also, 12 representing 3.66% of all the returned questionnaires, were not filled completely or accurately. Hence, the analysis was run on 265 numbers of respondents. In any quantitative research, as low as one hundred (100) respondents are satisfactory to generate enough data and work out reliable and valid analysis (Hair et al., 2010). This means the data generated are adequate for this study. See Table 3.1 below. The questionnaire was designed in a five-point Likert scale rating form having '1 strongly disagree through to 5 strongly agree' employed to generate the primary data. The questionnaire contains closed questions.

### **Descriptive Statistics**

The respondents' personal information, e.g., age, gender, marital status, and so on, shows that 210 respondents represent males, which is 79.2%. Females are 55 and 20.8%. Regarding educational level, diploma holders are 13, i.e., 4.9%; Basic degree holders are 36 representing 13.6%. Master degree holders are 137, which stands for 51.7%, and PhD holders are 79 in number and equivalent to 29.8%. For the number of years of experience, 1-5 years is 27, 10.2%, 6-10 is 72, 27.1%, 11-15 is 98, 37%, and 16 and above is 68, which represents 25.7%. See Table 1 below

Table 1

*Response Rate*

Items	Frequency	Percentage
Questionnaires Distributed	328	100%
Returned questionnaire	277	84.45%
Useable Questionnaires Returned	265	80.79%
Questionnaires not returned	51	15.55%
Returned Unusable questionnaires	12	3.66%

Table 2

*Demographic Information*

Variable	Frequency	Percentage
<b>Gender:</b>		
Male	210	79.2
Female	55	20.8
<b>Total</b>	<b>265</b>	<b>100</b>
<b>Education:</b>		
Diploma	13	4.9
Bachelor Degree	36	13.6
Master Degree	137	51.7
PhD	79	29.8
<b>Total</b>	<b>265</b>	<b>100</b>
<b>Experience:</b>		
1-5	27	10.2
6-10	72	27.1
11-15	98	37.0
16 and above	68	25.7
<b>Total</b>	<b>265</b>	<b>100</b>

**Analysis and Discussions of Findings**

The research data gathered through the questionnaire administered were analyzed using SPSS 24 and PLS-SEM 0.3 application. Firstly, analysis was started by conducting a pilot test to test for the reliability and validity of this research instrument adopted from past studies. The statistical techniques applied to achieve the reliability and validity of the constructs are Cronbach's Alpha test, composite reliability, and average variance expected, all in the Structural equation modeling (SEM) technique. See Table 3 below.

Table 3

*Construct Reliability and Validity*

Variables	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Focused Intent	<b>0.902</b>	<b>0.904</b>	<b>0.932</b>	<b>0.773</b>
Hypothesis-Driven	<b>0.963</b>	<b>1.027</b>	<b>0.972</b>	<b>0.898</b>
Intelligent Opportunism	<b>0.960</b>	<b>0.961</b>	<b>0.971</b>	<b>0.893</b>
Performance of HEIs	<b>0.991</b>	<b>0.999</b>	<b>0.991</b>	<b>0.860</b>
Resistance to Change	<b>0.992</b>	<b>0.992</b>	<b>0.993</b>	<b>0.888</b>
System Perspective	<b>0.960</b>	<b>0.964</b>	<b>0.971</b>	<b>0.892</b>
Thinking in Time	<b>0.957</b>	<b>0.972</b>	<b>0.969</b>	<b>0.886</b>

**Discriminant Validity**

The Fornell and Lacker (1981) philosophies emphasize that the discriminant validity in a model suggests examining on or after every measurement model analysis. Considerable discriminant validity occurs when the AVEs' square roots of such a model surpass the correlations between measures of interest and all other existing measures. Hence, this study investigated the discriminant validity for all constructs. The outcomes of these analyses indicate that the entire roots of the AVE of all the constructs lying diagonally on top in each column were larger than every other entry within the corresponding column and row they belong. Find the diagonal entries already bold in Table 4 showing the square roots of the AVE and remaining values presenting the inter-correlation of values between the constructs considered in this research. Thus, this fulfils Fornell and Lacker's criteria. By this, the discriminant validity has satisfactorily been attained for all the study constructs examined in the measurement model. Therefore, the structural model can now be run, and hypotheses can be tested.

Table 4

*The Discriminant Validity (Fornell-Larker Criterion)*

Variables	Focused Intent	Hypothesis-Driven	Intelligent Opportunism	Performance of HEIs	Resistance to Change	System Perspective	Thinking in Time
Focused Intent	<b>0.879</b>						
Hypothesis-Driven	0.003	<b>0.948</b>					
Intelligent Opportunism	0.520	-0.024	<b>0.945</b>				
Performance of HEIs	0.048	-0.038	-0.015	<b>0.927</b>			
Resistance to Change	0.521	0.063	0.505	0.012	<b>0.942</b>		
System Perspective	0.312	-0.148	0.377	-0.042	0.291	<b>0.944</b>	
Thinking in Time	0.399	0.170	0.218	0.008	0.345	0.049	<b>0.941</b>



Table 4 above indicates that all constructs meet their threshold of being the larger value in their entire respective column, which runs diagonally. For instance, focus intent has got 0.879 which appears in the first row and first column. This value is the largest value if considered whether horizontally or vertically. This position is the same for the correlation values of all the latent constructs. This means that discriminant validity is established for all the constructs. Hence, the structural model in this section is presented, having completed the measurement model.

### Structural Model Assessment

In this regard, the direct hypotheses considered are hypotheses H1a to H1e which are shown on the model as having five dimensions but were stated as "*the strategic thinking will positively influence the performance of Saudi HEIs*". This hypothesis was assessed using five dimensions of strategic thinking. The hypothesis is rejected as all the strategic thinking dimensions except focus intent have negative Beta values, with all the t-values not reaching the minimum threshold of 1.96 at 0.05 p-values, as seen in the direct effect analysis figure and path coefficient table 5.

Table 5  
*Direct Effect Analysis*

	Beta Value	T Statistics ( O/STDEV )	P Values
<b>Focused intent -&gt; Performance of HEIs</b>	0.085	0.987	<b>0.324</b>
<b>Hypothesis-Driven -&gt; Performance of HEIs</b>	-0.054	0.803	<b>0.422</b>
<b>Intelligent Opportunism -&gt; Performance of HEIs</b>	-0.053	0.746	<b>0.456</b>
<b>Resistance to change -&gt; Performance of HEIs</b>	-0.011	0.143	<b>0.887</b>
<b>System Perspective -&gt; Performance of HEIs</b>	-0.048	0.693	<b>0.489</b>
<b>Thinking in time -&gt; Performance of HEIs</b>	-0.028	0.374	<b>0.708</b>

Furthermore, one of the indirect effects of this article is the mediation effect of resistance to change on the relationship between strategic thinking and Saudi HEIs' performance. In this section, hypothesis H5 states that "*resistance to change mediates the impact of strategic thinking on the performance of Saudi HEIs*". The result in Table 6 reveals significant indirect negative effects for strategic thinking measures by its dimensions and the performance of HEIs in Saudi. All the dimensions have negative beta values, and two of them, i.e., hypothesis-driven and system perspective, both have less than the required t-value and higher p-value. This makes the relationship insignificant. But the thinking in time, intelligent opportunism, and focus intent have t-value of greater than 1.96 required thresholds with a p-value of less than 0.05 as shown in Table 6. Thus, this suggests a significant negative relationship between strategic thinking and the performance of the HEIs in Saudi.

Table 6

*Mediating Effect of Resistance to Change on Performance of HEIs*

	Beta value	T value	P Values
Intelligent Opportunism -> Resistance to Change -> Performance of HEIs	-0.047	1.991	<b>0.047</b>
Thinking in Time -> Resistance to Change -> Performance of HEIs	-0.045	2.177	<b>0.030</b>
Hypothesis-Driven -> Resistance to Change -> Performance of HEIs	-0.003	0.295	<b>0.768</b>
Focused Intent -> Resistance to Change -> Performance of HEIs	-0.052	1.984	<b>0.048</b>
System Perspective -> Resistance to Change -> Performance of HEIs	-0.024	1.622	<b>0.105</b>

### Discussion of Findings

As mentioned in the previous chapter, strategic thinking is measured via its five popular dimensions: Focused Intent, Hypothesis-Driven, Intelligent Opportunism, System Perspective, and thinking time. Thus, it consists of five sub-hypotheses numbered H1a to H1e, as presented in Table 5. These hypotheses were designed to explore the direct relationship between the strategic thinking construct and the dependent variable, which is the performance of Saudi HEIs. The main hypothesis states that "strategic thinking will positively influence the performance of Saudi HEIs". However, the analysis found that strategic thinking does not positively influence Saudi HEIs' performance. The outcome of this study is in contrast with the empirical studies on the strategic thinking perspective that it enhances an organization's innovation and will improve its performance (Kazmi and Naaranoja, 2015; Kazmi *et al.*, 2016). This finding is also in contrast with the results of a study that strategic intent is one of the essential factors that enhances the performance of universities (Muraguri, 2016). However, the study's finding is consistent with many other findings that reported a negative or no relationship between strategic thinking and performance (Clauss *et al.*, 2019; Wijayanti *et al.*, 2020). As is the case with these findings, many studies also reported mixed relationships regarding dimensions of strategic thinking and performance (Alatailat *et al.*, 2019; Song *et al.*, 2011).

The findings from the analysis on resistance to change as a mediator in the relationship between strategic thinking and performance of Saudi HEIs using the PLS-SEM indicated support for the hypothesis that presented a significant negative relationship. The major objective of this section is to examine if resistance to change mediates the nexus between strategic thinking and Saudi HEIs' performance. However, the current study intends to find out what happens to Saudi HEIs' performance when staff's thinking ability is impacted by employees' resisting change in their organizations. The findings indicate support for the proposed hypothesis by impacting negatively on the relationship between strategic thinking and the Saudi HEIs performance, which did not correspond with the research findings of many researchers (e.g., Ibrahim and Elumah, 2016; Jaffar *et al.*, 2019; Niebles *et al.*, 2019; Amarantou *et al.*, 2018).

### **Conclusion**

A series of debates exist in the extant literature about the theories of strategic thinking and HEIs performance relationships. The situation remains unclear if the performance of HEIs is influenced to a certain extent by the strategic thinking capacity of the HEIs managers. This issue gingered the researcher's interest to investigate and find out the influence of the strategic thinking of HEIs administrators on their institutional performance in Saudi Arabia. Essentially, it is worth noting that the Saudi Arabian government is presently adopting transformation agenda to actualize its vision for 2030. This has prompted this study as innovation is a critical factor in the transformation agenda for the actualization of Vision 2030. This article found a low level of influence of strategic thinking among HEIs administrators in Saudi Arabia. Therefore, the consciousness of the administrators of HEIs about the importance of accepting positive changes and not resisting improves the performance of the organizations. The administrators of HEIs in Saudi Arabia need to be opened minded and well tolerant of positive changes, which prepares them to interact perfectly with the volatility in organizational management arising from globalization. Therefore, administrators strategizing their thinking about the management and administration of the Saudi HEIs are prerequisites to boosting the HEIs' performance in the recent volatile organizational appearance globally.

### **Recommendation**

Based on the study's findings, the study recommends generating resistance to changes among Saudi Arabian HEIs administrators. The administrators of the Saudi HEIs do not readily accept changes brought into the organization. Such a situation is brought about by the culture and tradition in Saudi Arabia's level of awareness concerning societal volatility and dynamism stemming from globalization and technological advancement. Thus, there is a need for the employees to change their mindset to be accepting positive changes.

### **Limitations of the Research and Suggestions for Further Study**

There are several limitations in this study. First, the current study was not focused on all the employees, irrespective of their rank, to assess the overall views of the employees holistically. The staff that directly execute any introduced changes in the organization are those in the lower and middle cadre. But the current study only targeted the administrators. Thus, there is also a need to study the middle and lower-position staff. Second, this study used the cross-sectional survey method, which can hardly disclose the considerable total influence of the resistance to changes as it may impact the Saudi HEIs' performance since it is a one-time assessment. Therefore, further research can use a different method, particularly the longitudinal approach, which will enable the researcher to observe and assess the situation for a certain time frame, for one and a half years or two years. Finally, a comprehensive study of the Saudi HEIs, including universities and other colleges, is recommended to assess the overall influence of the staff's resistance to changes on their performance. This current study does not encompass all tertiary institutions. It was restricted to universities only. Therefore, further research is encouraged to investigate the possibility of all the higher institutions investigating their influence on Saudi HEIs' performance.

## References

- Aaltola, P. (2019). Strategic Thinking and Accounting: Potentials and Pitfalls from a Managerial Perspective. *Journal of Management Control*, 30(3), 323-351. doi:10.1007/s00187-019-00285-w
- Abd Rabou, A. (2016). Democracy as Student Mobilization. In E. Mohamed, H. R. Gerber, and S. Aboulkacem (Eds.), *Education and the Arab Spring: Resistance, Reform, and Democracy* (pp. 51-67). Rotterdam, The Netherlands: Sense Publishers.
- Ailliet, L., Knol, D. L., Rubinstein, S. M., de Vet, H. C., Van Tulder, M. W., and Terwee, C. B. (2013). Definition of the Construct to Be Measured Is a Prerequisite for the Assessment of Validity. The Neck Disability Index as an Example. *Journal of Clinical Epidemiology*, 66(7), 775-782. doi:10.1016/j.jclinepi.2013.02.005
- Al-Alawi, A. I., Abdulmohsen, M., Al-Malki, F. M., and Mehrotra, A. (2019). Investigating the Barriers to Change Management in Public Sector Educational Institutions. *International Journal of Educational Management*, 33(1), 112-148. doi:10.1108/ijem-03-2018-0115
- Al-Khathlan, M. B. Z. B. I. (2020). A Proposal to Achieve Financial Independence in Prince Sattam Bin Abdulaziz University in Accordance with the New System of Universities and Vision 2030. *International Journal of Higher Education*, 9(3), 15-27. doi:10.5430/ijhe.v9n3p15
- Al-Suliman, A., Siddiqui, K., and Abu-Riash, M. (2017). Translation and Adaptation of English Language Questionnaire into Arabic for Implementation of a Large Survey on Assessing the Symptoms of Bleeding Disorders in Saudi Arabia. *Journal of Applied Hematology*, 8(4), 156-158. doi:10.4103/joah.joah\_70\_17
- Al-Tuwayjiri, H. A. (2018). *The Role of Heads of Department in Achieving Quality: A Case Study of a High-Ranking University in the Kingdom of Saudi Arabia*. (PhD Thesis), University of Warwick, Warwickshire, England.
- Al Jalfan, Z. (2019). *Investigating the Strategic Alignment of Talent Management and Organisation Sustainability in the Saudi Higher Education Sector*. (PhD Thesis), Brunel University London, United Kingdom.
- Alamri, M. (2011). Higher Education in Saudi Arabia. *Journal of Higher Education Theory and Practice*, 11(4), 88-91.
- Alatailat, M., Elrehail, H., and Emeagwali, O. L. (2019). High Performance Work Practices, Organizational Performance and Strategic Thinking. *International Journal of Organizational Analysis*, 27(3), 370-395. doi:10.1108/ijoa-10-2017-1260
- Alsharari, A. (2019a). *Achieving the 2030 Vision Tatweer Higher Education Policies in the Kingdom of Saudi Arabia: Challenges and Accomplishments in the Higher Education Information Technology Infrastructure*. (PhD Dissertation), Atlanta University,
- Alsharari, M. R. M. (2019b). Evaluating Universities' Readiness in Qualifying Graduates to Achieve Saudi Vision 2030: A Constructive Analysis of Baldrige Scale. *Education and Urban Society*, 52(5), 800-842. doi:10.1177/0013124519877152
- Alshehhi, A. G. (2018). *Strategic Thinking and Strategic Planning: A Conceptual Exposition through a Case Study of the Police Force in the UAE*. (PhD Thesis), University of Manchester, Manchester, England.
- Alyami, R., and Floyd, A. (2019). Female School Leaders' Perceptions and Experiences of Decentralisation and Distributed Leadership in the Tatweer System in Saudi Arabia. *Education Sciences*, 9(1). doi:10.3390/educsci9010025
- Alzahrani, M. A., Suleiman, E. S. and Mahar, S. (2020). Mapping Empirical Research on Strategic Planning and Performance in Saudi SMEs. *Science International*, 31(1), 13-20.

- Amarantou, V., Kazakopoulou, S., Chatzoudes, D. and Chatzoglou, P. (2018). Resistance to Change: An Empirical Investigation of Its Antecedents. *Journal of Organizational Change Management*, 31(2), 426-450. doi:10.1108/jocm-05-2017-0196
- Apar, D. (2015). The False Promise of Big Data: Can Data Mining Replace Hypothesis-Driven Learning in the Identification of Predictive Performance Metrics? *Systems Research and Behavioral Science*, 32(1), 28-49. doi:10.1002/sres.2219
- Arnestad, M. N., Selart, M., and Lines, R. (2019). The Causal Effects of Referential Vs Ideological Justification of Change. *Journal of Organizational Change Management*, 32(4), 397-408. doi:10.1108/jocm-11-2018-0323
- Asif, M., and Searcy, C. (2014). A Composite Index for Measuring Performance in Higher Education Institutions. *International Journal of Quality & Reliability Management*, 31(9), 983-1001. doi:10.1108/ijqrm-02-2013-0023
- Bagheri, J. S., Soveini, F. M., and Ghorbani, M. H. (2020). The Effect of Strategic Thinking Skills on the Effectiveness of Strategy Creation Process in Sport Federations. *Journal of New Studies in Sport Management*, 1(1), 45-52.
- Ball, R., and Halwachi, J. (1987). Performance Indicators in Higher Education. *Higher Education*, 16(4), 393-405. doi:10.1007/bf00129112
- Ballard, P. J. (2013). *Measuring Performance Excellence: Key Performance Indicators for Institutions Accepted into the Academic Quality Improvement Program (AQIP)*.
- Barreiro, C. A., and Treglown, L. (2020). What Makes an Engaged Employee? A Facet-Level Approach to Trait Emotional Intelligence as a Predictor of Employee Engagement. *Personality and Individual Differences*, 159, 109892-109899. doi:10.1016/j.paid.2020.109892
- Barrett, B. (2017). *Globalization and Change in Higher Education: The Political Economy of Policy Reform in Europe*. Cham, Switzerland: Palgrave Macmillan.
- Belgard, W. P., and Rayner, S. R. (2004). *Shaping the Future: A Dynamic Process for Creating and Achieving Your Company's Strategic Vision*. New York, NY: AMACOM: American Management Association.
- Belgrave, L. L., and Seide, K. (2019). Grounded Theory Methodology: Principles and Practices. In P. Liamputtong (Ed.), *Handbook of Research Methods in Health Social Sciences* (pp. 299-316). Singapore: Springer Singapore.
- Bonn, I. (2001). Developing Strategic Thinking as a Core Competency. *Management Decision*, 39(1), 63-70.
- Bonn, I. (2005). Improving Strategic Thinking: A Multilevel Approach. *Leadership & Organization Development Journal*, 26(5), 336-354. doi:10.1108/01437730510607844
- Borrego, M., and Henderson, C. (2014). Increasing the Use of Evidence-Based Teaching in Stem Higher Education: A Comparison of Eight Change Strategies. *Journal of Engineering Education*, 103(2), 220-252. doi:10.1002/jee.20040
- Bouhali, R., Mekdad, Y., Lebsir, H., and Ferkha, L. (2015). Leader Roles for Innovation: Strategic Thinking and Planning. *Procedia - Social and Behavioral Sciences*, 181, 72-78. doi:10.1016/j.sbspro.2015.04.867
- Bridges, D. (2017). *Philosophy in Educational Research: Epistemology, Ethics, Politics and Quality*. Cham, Switzerland: Springer International Publishing AG.
- Bridgman, T. (2018). Overcoming Compliance to Change: Dynamics of Power, Obedience, and Resistance in a Classroom Restructure. *Management Teaching Review*. doi:10.1177/2379298118791106

- Broadway-Horner, M. (2017). Compare and Contrast Two Different Ontological Perspectives That Might Apply to Qualitative Research in Psychology Evaluating the Impact on Epistemology and Choice of Data Collection Method in Studying Straight Men Who Sleep with Men (Msm). *International Journal of Culture and Mental Health*, 1-5. doi:10.1080/17542863.2017.1343860
- Burgher, J., and Hamers, H. (2020). A Quantitative Optimization Framework for Market-Driven Academic Program Portfolios. *International Journal of Educational Management*, 34(1), 1-17. doi:10.1108/ijem-03-2018-0099
- Burton, R. M. (2015). Extraordinary Survival from Ordinary Resources – How So? *Management and Organization Review*, 11(3), 413-417. doi:10.1017/mor.2015.38
- Busse, R., and Doganer, U. (2018). The Role of Compliance for Organizational Change: Qualitative Evidence from German SMEs. *Journal of Organizational Change Management*, 31(2), 334-351. doi:10.1108/Jocm-05-2017-0163
- Cochran, J. A. (2019). The Rise in Power of Crown Prince Mohammed Bin Salman. *Digest of Middle East Studies*, 28(2), 369-385. doi:10.1111/dome.12195
- Creswell, J. W. and Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Fifth ed.). Thousand Oaks, California SAGE Publications,
- Dhir, S. and Dhir, S. (2020). Modeling of Strategic Thinking Enablers: A Modified Total Interpretive Structural Modeling (Tism) and Micmac Approach. *International Journal of System Assurance Engineering and Management*, 11(1), 175-188. doi:10.1007/s13198-019-00937-z
- Dorling, J. L. (2017). Impact of Psychological Capital on the Resistance to Change During Post-Merger Integration. *Journal of Organizational Change Management*, 30(6), 936-956. doi:10.1108/jocm-11-2015-0199
- Ershadi, M. J. and Dehdazzi, R. E. (2019). Investigating the Role of Strategic Thinking in Establishing Organizational Excellence Model. *The TQM Journal*, 31(4), 620-640. doi:10.1108/TQM-05-2018-0062
- Etikan, I., Musa, S. A. and Alkassim, R. S. (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. doi:10.11648/j.ajtas.20160501.11
- Fawzy, M. F. (2019). Measurement of Employees Resistance to Change Using Balanced Scorecard: A Case Study of the Central Correspondence Department at Jeddah Municipality. In *Proceedings of the International Conference on Industrial Engineering and Operations Management*. Riyadh, Saudi Arabia, November 26-28, 2019.
- Fernandez-Sanchez, G. and Fernandez-Heredia, A. (2018). Strategic Thinking for Sustainability: A Review of 10 Strategies for Sustainable Mobility by Bus for Cities. *Sustainability*, 10(11). doi:10.3390/su10114282
- Fu, J. S. and Lai, C. H. (2020). Determinants of Organizational Performance in Disaster Risk Reduction: A Preliminary Study of Global Humanitarian NGOs. *Journal of Contingencies and Crisis Management*, 1-16. doi:10.1111/1468-5973.12346
- Koziarski, J. and Kalyal, H. (2021). Resistance to Evidence-Based Policing: Canadian Police Executives' Perceptions as to Which Level of Canadian Policing Is Most Resistant. *Police Practice and Research*, 22(1), 763-776. doi:10.1080/15614263.2020.1786690
- KSA. (2016a). KSA Vision 2030: Strategic Objectives and Vision Realization Programs. Retrieved from <http://www.vision2030.gov.sa/download/file/1319>
- KSA. (2016b). National Transformation Program 2020. Retrieved from [http://vision2030.gov.sa/sites/default/files/NTP\\_En.pdf](http://vision2030.gov.sa/sites/default/files/NTP_En.pdf)

- KSA. (2016c). Saudi Vision 2030. Retrieved from [vision2030.gov.sa/download/file/fid/417](http://vision2030.gov.sa/download/file/fid/417)
- Kunze, F., Hertel, B. I. J. M. V. D. H. G., Boehm, S., and Bruch, H. (2013). Age, Resistance to Change, and Job Performance. *Journal of Managerial Psychology*, 28(7/8), 741-760. doi:10.1108/jmp-06-2013-0194
- Sun, L. (2019). Perceived Organizational Support: A Literature Review. *International Journal of Human Resource Studies*, 9(3). doi:10.5296/ijhrs.v9i3.15102
- Supino, E., Barnabe, F., Giorgino, M. C., and Busco, C. (2019). Strategic Scenario Analysis Combining Dynamic Balanced Scorecards and Statistics. *International Journal of Productivity and Performance Management*. doi:10.1108/ijppm-09-2018-0326
- Surty, S., and Scheepers, C. B. (2020). Moderating Effect of Environmental Dynamism on Leadership Practices and Employees' Response to Change in South Africa. *Management Research Review, ahead-of-print*(ahead-of-print), 1-24. doi:10.1108/mrr-03-2019-0094
- Talat, U. (2017). *Emotion in Organizational Change: An Interdisciplinary Exploration*. Cham, Switzerland: Palgrave Macmillan.
- Talebzadeh, N., and Karatepe, O. M. (2019). Work Social Support, Work Engagement and Their Impacts on Multiple Performance Outcomes. *International Journal of Productivity and Performance Management, ahead-of-print*(ahead-of-print), 1-19. doi:10.1108/ijppm-05-2018-0195
- Tang, H.-h. H., and Chau, C.-f. W. (2019). Knowledge Exchange in a Global City: A Typology of Universities and Institutional Analysis. *European Journal of Higher Education*, 1-20. doi:10.1080/21568235.2019.1694424
- Tavakoli, I., and Lawton, J. (2005). Strategic Thinking and Knowledge Management. *Handbook van Woerkom, M. (2004). The Concept of Critical Reflection and Its Implications for Human Resource Development. Advances in Developing Human Resources*, 6(2), 178-192. doi:10.1177/1523422304263328
- Vos, J. F. J., and Rupert, J. (2018). Change Agent's Contribution to Recipients' Resistance to Change: A Two-Sided Story. *European Management Journal*, 36(4), 453-462. doi:10.1016/j.emj.2017.11.004
- Waithaka, P., and Mathinji, P. K. (2019). Strategic Thinking and Performance of Milk Processing Firms in Nyeri County, Kenya. *International Journal of Current Aspects*, 3(V), 227-251. doi:10.35942/ijcab.v3iV.72
- Wang, F., Zhang, M., Das, A. K., Weng, H., and Yang, P. (2020). Aiming at the Organizational Sustainable Development: Employees' Pro-Social Rule Breaking as Response to High Performance Expectations. *Sustainability*, 13(1), 267-283. doi:10.3390/su13010267
- Wentzel, E. L. (2020). *Resistance to Mandated Organizational Change in the Healthcare Industry*. (PhD Dissertation), North Carolina State University, Raleigh, North Carolina.
- Whiteley, S. (2016). Creating a Coherent Performance Indicator Framework for the Higher
- Zhang, L. F. (2000). Relationship between Thinking Styles Inventory and Study Process Questionnaire. *Personality and Individual Differences*, 29(5), 841-856. doi:10.1016/s0191-8869(99)00236-6
- Zhiren, Z., and Yanqing, X. (2016). A Review of Institutional Reform over the Past 30 Years from the Perspective of Change Management. *Social Sciences in China*, 37(1), 57-74. doi:10.1080/02529203.2015.1088623