

Organisational change capacity and performance: the moderating effect of coercive pressure

Organisational
change
capacity and
performance

27

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Abstract

Purpose – To examine three dimensions of organisational change capacity (OCC) which have been proposed sequentially in the following order: OCC for change will affect process capacity for change and develop context capacity for change. Specifically, this study explores the moderating effects of coercive pressure.

Design/methodology/approach – To test the proposed hypotheses, this study conducted survey among middle-level leaders of the 11 top universities (autonomous higher education institutions – AHEIs) in Indonesia. This study used a sample of 92 respondents, deans 21 and vice deans 71 of 11 top Indonesian universities. To test data processing using the SmartPLS 3.0 tool.

Findings – The findings indicate that learning capacity for change is the starting point of OCC, and it influences process capacity and context capacity for change. Coercive pressure strengthens the relationship between learning capacity and context capacity for change. Further, context capacity for change determines organisational performance.

Originality/value – This study empirically examines the OCC construction mechanism as follows: learning capacity for change influences process capacity for change and then has an effect on the OCC for change, which ultimately affects organisational performance.

Keywords Organisational change capacity, Organisational performance, Higher education, Indonesia

Paper type Research paper



1. Introduction

To survive and succeed in making a change, organisations must develop their capacity for change – organisational change capacity (OCC) (Meyer and Stensaker, 2006). An organisation that improves its capacity for change can achieve successful changes faster and more efficiently (Čirjevskis, 2017), and, thus, improve its performance (Heckmann *et al.*, 2016). By having OCC, an organisation will proactively take market opportunities to adapt, learn and innovate (Judge and Elenkov, 2005). OCC itself is considered as a “meta-capability” that enables an organisation to remain competitive in a highly dynamic environment (Judge and Douglas, 2009).

The existing OCC concept asserts as the organisational ability to consistently upgrade and renew existing competencies in a dynamically changing environment (Zhao and Goodman, 2018). Current perspectives tend to prescribe OCC into several dimensions, such as Judge and Elenkov (2005) who proposed eight dimensions that combine managerial and organisational capabilities that enable the organisation to adapt its competencies effectively: trustworthy leadership, trusting followers, capable champions, involved mid-management, innovative culture, accountable culture, systems communications and systems thinking. The second perspective pioneered by Klarner *et al.* (2007, 2008) and Soparnot (2011) proposes that OCC comprises three dimensions, learning, process and context capacity for change and argues that not only should it be able to adapt to the changing environment, but the organisation should be able to implement the change initiatives. The second perspective is relatively new and less explored than the first perspective. How these dimensions interact and form OCC is less discussed and has not been tested empirically, so this study would like to offer such a contribution. According to Soparnot (2011), OCC construction starts from learning capacity, which shapes the process and context capacity for change. The process capacity for change consists of everyday policies, practices, procedures and routines and, from time to time, it impacts the beliefs and values (context) that guide organisations to change (Kavanagh and Askanasy, 2006). Moreover, this perspective suggests that change capacity is a dynamic capacity (Oxtoby *et al.*, 2002), which not only describes a process of continuous learning and adjustment that allows an organisation to cope with unknown future circumstances (Staber and Sydow, 2002) but also describes the ability to implement these changes, making it more appropriate for the organisation in the change process (Klarner *et al.*, 2007). Referring to the same article, Zhao and Goodman (2018) examined the OCC dimension, but still used a qualitative approach.

To date, research related to OCC is still very limited. Studies have been conducted on health sector organisations (Zhao and Goodman, 2018) and the automotive industry Soparnot (2011). This study focuses on universities (HEI). First, in the last 30 years, HEIs have seen dynamic changes in HEIs around the world, especially in the need to adapt to market requirements for ranking competition (Collins and Park, 2016). Hazelkorn (2015) also reports that ranking forces a “deep transformation” among HEIs and makes them more proactive towards challenges (Pollock *et al.*, 2018), especially on indicators adopted and used by global ranking institutions (Brankovic, 2018). Rankings may encourage colleges and universities to spend more, moving resources from educational activities to research, amenities and facilities and administrative expenditures (Kim, 2018). In short, organisational rankings have the potential to reshape HEIs (Dahler-Larsen, 2011), organisational rankings have the potential to reshape HEIs (Dahler-Larsen, 2011) and their success in making changes to become world-class universities depends on their change capacity (Klarner *et al.*, 2008). Second, HEIs are very autonomous and decentralized by nature, many experts in change management reside in HEIs but collegial culture may hinder or slow down the implementation of change initiatives (Bruckmann and Carvalho, 2018), resulting in change capacity that tend to be lower and slower than with commercial institutions (Exter *et al.*, 2013).

Previous studies have examined the factors that influence OCC externally including technological turbulence and intensity of competition (Heckmann *et al.*, 2016). In the context of HEIs, one of which is the institutional pressure (DiMaggio and Powell, 1983;

Rupidara and Darby, 2017) which is coercive, such as pressure related to international accreditation and ranking (Ferlie and Trenholm, 2019) which is quite crucial and has never been discussed. This perspective is relevant in the context of state-owned universities that are coherent through the influence of laws, the influence of accreditation agencies and the influence of operational budgets (Decramer *et al.*, 2012). Studies that examine the relationship of institutional pressure in HEIs are still carried out in Western countries with low power distance (Decramer *et al.*, 2012), but Asian countries with high power distance are relatively less explored (Daniels and Greguras, 2014). Marginson's (2011) study shows that the role of government in Asia Pacific countries is quite strong in the structure and funding of HEIs, including supervision and control compared to Western or North American countries. Therefore, whether coercive pressure can strengthen (moderate) the mechanisms within the OCC in Asian countries is an interesting issue to test empirically.

As the fourth largest populated country and the 10th largest economy in the world (The World Bank, 2019), Indonesia has had a stable economic growth in the last 15 years (The World Bank, 2018) and 52 million people are considered as middle class. A greater number of citizens are willing to spend and earn "positional goods" from reputable HEIs (Hirsch, 1976). According to UNESCO, there are 45,206 Indonesian students who have obtained a degree abroad, mostly in Australia (more than 20,000 students), followed by New Zealand, China and Malaysia, among others (Export gov, 2019). The loss of potential economy and brain drain were part of the government's concerns in starting the initiatives in late 2015 on improving Indonesian HEIs in global rankings. Although the ranking system is debated (Tan and Goh, 2014), the method is taken seriously by the public, HEIs and, particularly, government (Altbach *et al.*, 2010). In the context of Indonesia, since 2015, the government has targeted five HEIs to enter the Top 500 Quacquarelli Symonds World University Ranking (QS WUR), and an additional six HEIs were given the same target in 2018 (in total 11 institutions have been granted autonomous status – AHEIs). These target provides pressures for the management. By taking samples from 11 AHEIs and using SEM-PLS, an empirical test will be carried out whether the coercive pressure strengthens the mechanisms within the OCC that support the performance of Indonesia's AHEI as the second objective of this study.

2. Literature review and hypotheses development

2.1 Organisational change capacity (OCC)

Under a dynamically changing environment, the issue of how organisations develop the capacity for rapid adaptation, innovation and flexibility emerges as a promising new construct (e.g. Klarner *et al.*, 2008). Interestingly, there is no single definition of this concept as presented by Heckmann *et al.* (2016), even though the essence emerges as the capacity of an organisation to continuously change successfully. OCC itself comprises of a series of successful managements of episodic change processes and emphasizes on multiple changes that are executed simultaneously from time to time (e.g. McGuinness and Morgan, 2005). This concept contradicts with the existing literature that predominantly discusses "either-or-consideration" of change (Soparnot, 2011).

The existing OCC concept asserts as the organisational ability to consistently upgrade and renew existing competencies in a dynamically changing environment (Zhao and Goodman, 2018). There are two perspectives on OCC: First, the ability is a combination of managerial and organisational capabilities that enables the organisation to adapt its competencies more quickly and effectively to survive and prosper (Judge and Douglas, 2009). Developed based on resource-based theory (Barney, 1991), the perspective has attracted many scholars to empirically test it, such as Judge *et al.* (2009), Heckmann *et al.* (2016) and Sánchez-Medina (2020) among others. The second perspective based on dynamic capability perspective (Teece *et al.*, 1997) describes not only the organisational ability to learn and adapt

its competencies on the changing environment but also the ability to implement those changes (Soparnot, 2011). Moreover, this perspective proposes that the organisation can respond to the changing environment reactively (by adapting existing competencies) and proactively (initiate or develop totally new competencies). Mostly discussed conceptually, Zhao and Goodman (2018) and Soparnot (2011), among others, employ this perspective in their case study. Since many organisational change initiatives fail – about 70% (e.g. Beer and Nohria, 2000), understanding OCC as the ability to renew existing competencies (reactively) and create new ones (proactively) – ambidexterity (Peng, 2019) as well implementing it to sustain its competitive advantage is important; thus, this study focuses on the second perspective. Further, this study defines OCC as the organisational ability to produce solutions (learning), implement it (processes) and eventually influence the contexts (Soparnot, 2011) that facilitate the move to a more desired future state (Cha *et al.*, 2015).

The second perspective of OCC consists of three dimensions: learning, process and context capacity for change (Klarner *et al.*, 2007, 2008). Based on case studies conducted by Soparnot (2011) and Zhao and Goodman (2018), the three dimensions have been proposed sequentially with the following order: learning capacity will influence the organisational process capacity for change and develop context capacity for change simultaneously. However, the sequence of OCC dimensions lacks of empirical testing, particularly on organisational performance (*performance*). Since the OCC is considered as a source of long-term organisational dynamism (Klarner *et al.*, 2007) to sustain competitive advantage, it is thus necessary to conduct study to empirically test it.

2.2 Institutional pressure (IP)

The institutional pressure proposes that organisations will adopt management practices to gain legitimacy and therefore the resources necessary from institutional bodies to ensure their survival (DiMaggio and Powell, 1983). Many companies must initiate organisational change that is driven by the enormous pressure arising from an unprecedented shift in social, legal and economic institutions (Zhang *et al.*, 2015). DiMaggio and Powell (1983) looked at institutional isomorphism, identifying three main mechanisms, in mimetic, normative and coercive pressure. Mimetics represent pressures arising from perspectives to reduce uncertainty (Davidsson *et al.*, 2006). Normative represents the pressure that arises from professionalisation, which socialises personnel in organisations to see certain types of structures and processes as legitimate (DiMaggio and Powell, 1983). Coercive pressure mostly represents formal or official institutions of law and regulation. Coercive pressure can also be informal demands on or expectations of the organisation. Certain technical dimensions and standards influence one person's strength more than others, for example, informal coercive pressure. Drivers for the above behaviour are political power and institutional legitimacy rather than competition, as people tend to think (DiMaggio and Powell, 1991). In the context of HEIs, one of which is the institutional pressure (DiMaggio and Powell, 1983; Rupidara and Darby, 2017) which is coercive, such as pressure related to international accreditation and ranking (Ferlie and Trenholm, 2019).

2.3 Organisational performance (OP)

Higher education as a non-profit organisation is also charged with improving the qualities that make them capable of competing in the global market (Chen *et al.*, 2009). Higher quality can be achieved through a process of continuous performance improvement even though the measurement of higher education performance is not easy (Angiola *et al.*, 2018). This is because there are many conflicts of interest and their performance indicators are usually directly related to strategic plans and business functions (Ball and Wilkinson, 1994). The management of higher education has now begun to shift from collegialism to managerialism. This affects how its performance is measured from a wider stakeholder perspective through increasing their status at the international level (Camilleri, 2020). Previous research on higher education performance has used indicators that are more related

to efficient teaching and research costs (Lu, 2012), patents and publications (Aghion *et al.*, 2010) and teaching and research (Tee, 2016). This study uses ranking issues as a guideline for improvement, so, then, the universities achieve a level of performance that allows them to survive in the global market (Hazelkorn, 2015). A performance appraisal using the international ranking indicators is focused on teaching and research (Tee, 2016). The Indonesian government uses the World University Quacquarelli Symonds (QS) to evaluate higher education quality, which includes research quality, graduate employability, teaching quality and the international outlook (QS World University Ranking – Methodology, 2019).

2.4 Hypotheses development

2.4.1 Learning capacity for change, process capacity for change and performance. In the capacity for change, learning capacity for change refers to the ability of an organisation to continually investigate its practice to improve and update it (Zhao and Goodman, 2018) based on improvement through experience (Soparnot, 2011), while process capacity refers for change management methods which are structured around a set of practices that facilitate the change process: transformational leadership, visibility creation and a change process that is built collectively (Soparnot, 2011). The ability of the organisation to accumulate knowledge from external conditions or internal experiences and make it a shared knowledge will encourage the involvement of organisational members Crossan *et al.* (1999), especially the presence of a transformative leader (Abbasi and Miandashti, 2013).

One form of process capacity for change is transformative leader behaviour that plays an important role in the change process (Stouten and Rousseau, 2018). Transformational leadership is a process that consciously influences individuals or groups to make changes to the overall functioning of the organisation (Bass, 1997). Transformational leadership is influenced by leadership competencies that are built through training or learning (Lam and Schaubroeck, 2000). Change leaders with competence have been shown to make an important contribution to change (Battilana *et al.*, 2010), and it develops based on their individual capacity for change (Crossan *et al.*, 1999) and increases through their accumulation of experiences (Zhao and Goodman, 2018).

Crossan *et al.* (1999) also stated that there is a process of developing mutual understanding between individuals that occurs in the learning process. This is the collective support of organisational members for change through negotiation and discussion between all members of the organisation or collective learning (Zhao and Goodman, 2018). In the context of HEIs, the continuous learning they practice over time will make the change process successful when the leader is transformational, able to make change more visible and collectively build the change process through a series of discussions, which are important in implementing change in public organisations (Cunningham and Kempling, 2009). In short, learning capacity for change that is built through the accumulation of information and knowledge will increase the organisation's ability to support a change process driven by leaders and involving organisational members. Therefore,

H1a. Learning capacity for change will positively influence process capacity to change.

Context capacity for change is forces or conditions within an organisation's external and internal environments that can enable or hinder change (e.g. Armenakis and Bedeian, 1999). This context capacity for change is indicated by the conditions that facilitate the success of change (Klarner *et al.*, 2007), including the value of change and cultural cohesiveness. Values are part of the organisational culture, which determines how the organisation carries out its activities (Barney, 1991). Schein (2010) also states that the culture of a group becomes cohesive when it becomes a shared pattern that is learned and can solve problems in the process of external adaptation and internal integration. In other words, a cohesive organisational culture as a shared way of understanding, thinking, and solving problems in an organisation is built through a learning process between members.

In a changing environment, knowledge gained from outside or experience will always change. Organisations that have a learning capacity, institutionalize the process of acquiring knowledge (Crossan *et al.*, 1999). The process of institutionalizing learning ensures that routine actions occur as a repeating pattern (Felin *et al.*, 2012). Thus, institutionalized repeated learning means that there will always be new things that will emerge in the organisation that are understood together, so that the organisation becomes open to change. In the context of HEIs, learning abilities enable them to build and update changing practices that shift organisational values, norms and behaviours into new equilibrium that suits the changing environment. Therefore, we propose the following hypothesis:

H1b. Learning capacity for change will positively influence context capacity for change.

In the context of dynamic capabilities, the learning capacity for change arises from a series of related processes (Zollo and Winter, 2002), which include knowledge creation and acquisition (Morales *et al.*, 2007). The learning capacity that generates and shares knowledge will increase the capacity of organisational members to apply learning materials correctly (Huber, 1991). The ability to recognize the value of new information, assimilate it and apply it to organisational goals, or what is called absorption capacity, has a positive effect on performance (Kotabe *et al.*, 2017). Organisations that learn quickly acquire greater strategic capabilities, which enable them to maintain their position of competitive advantage and improve their results (Senge, 2000). In addition, organisations that learn continuously have certain codified and tacit knowledge that facilitate and accelerate change initiatives (Klarner *et al.*, 2008). In the context of HEI, the creation and dissemination of knowledge can have a direct and positive effect on improving performance (Abbasi and Miandashti, 2013). However, Meister-Scheytt and Scheytt (2005) say that HEI is not a learning organisation, but a knowledge organisation, even though the facts contained in it require learning activities. Therefore,

H1c. Learning capacity for change will have a positive effect on organisational performance.

2.4.2 Learning capacity for change and coercive pressure. DiMaggio and Powell (1983) state that formal and informal rules determine socially acceptable patterns and organisational actions so that they occur isomorphic. There are three mechanisms of isomorphic change, namely, coercive, mimetic and normative isomorphism. Coercive isomorphism is the result of pressure exerted by an organisation on other organisations that depend on it, which is the focus of this research. According to Decramer *et al.* (2012), the pressure mechanism in the context of higher education can be in the form of legislative influence, the influence of accreditation agencies and the quality or influence of research funding.

In the Indonesian context, AHEI is granted management autonomy based on Law no. 12 of 2012. However, because 80% of HEI lecturers and employees are government employees, the government still provides funding. The government is still intervening, for example through the Ministry of Research, Technology and Higher Education (MRTHE), and has a 35% vote in the election of the HEI Chancellor, including AHEI (Regulation of Ministry of Research, Technology and Higher Education (MRTHE), 2017, No. 19/2017). The Indonesian government has issued various policies to encourage changes to AHEI in order to become world class, including policies for a number of funds for 11 AHEI which are targeted towards the top 500 of the world, such as regulation number 17/2013 juncto number 46/2013 which regulates the function of lecturers and credit to obtain promotion, including the obligation of professors to carry out international publications.

Senge (2000) argues that change in public educational institutions is more difficult than in business organisations, but Resnick and Hall (1998) argue that learning brings about change in education. HEI as a learning community can encourage educators to acquire knowledge

and skills from various sources (Sackney and Walker, 2006). By forcing AHEI to be included in the Top 500 QS WUR, the government hopes that leaders can accelerate their learning capacity for change to increase process capacity for change process through various policies that support change. The effect is even higher when the government uses its powers, such as budget and regulations, to make AHEI support their policies. Therefore,

H2a. The positive influence of the learning capacity for change on the process capacity for change will strengthen when coercive pressure is high.

HEIs are learning communities (Sackney and Walker, 2006). The learning capacity that occurs in tertiary institutions can be obtained between lecturers and from outside and institutionalized through the Tridharma of Higher Education (teaching, research and community service) (PP No. 19 of 2005). Surprisingly, prior to 2015, most lecturers and professors emphasized teaching activities, and universities in Indonesia seem to understand this because of the heavy burden in producing graduates. As a result, Indonesia's research performance is below that of neighbouring countries. Government is involved, as suggested by Decramer *et al.* (2012), through new regulation no. 20/2017, which requires Indonesian professors to publish articles to get professional incentives (Sandy and Shen, 2019). Furthermore, the Regulation of the Minister of State Number 17 of 2013 in conjunction with Number 46 of 2013 by the Ministry of State Apparatus regulates that lecturers must publish scientific papers to achieve a certain amount of credit to get a promotion. Government pressure is what encourages the development of a research culture in which there is a value of openness and innovation in AHEIs as the basis for the conditions of a learning society (Patricia *et al.*, 2010). Organisational learning capacity for change encourages context capacity for change through a culture of research, when there is coercive pressure. Therefore,

H2b. The positive effect of the learning capacity for change on the context capacity for change will be strengthened when coercive pressure is high.

2.4.3 Process capacity for change, context capacity for change and performance. Leadership has an important role in the change process (Stouten and Rousseau, 2018), especially of transformational leaders (Klarner *et al.*, 2007). Transformational leaders have a transparent and comprehensive view and influence their culture and changes in the organisation and can manage it consciously (Bass, 1997). This happens because leaders have effective communication with organisational members and carry out an understanding process so that a cohesive culture occurs (Busari *et al.*, 2019). The leadership literature also shows that managers with transformational leadership styles are better at encouraging employee commitment to organisational change (Battilana *et al.*, 2010). The ability to understand and work with culture is one of the most important talents of a transformational leader (Abbasi and Miandashti, 2013). Transformational leaders can also make necessary changes and innovations by changing or modifying employees' beliefs, values and motivation to innovate, so as to create a positive and collaborative climate that is conducive to change and innovation (Le, 2020). They can move employees so that they want to be involved in the change process will more easily change the organisational culture by understanding the current culture together, rearranging the organisational culture with new visions, assumptions, values and norms (Bass, 1997). In short, the change process leads to transformational leadership and cohesiveness among organisational members to create an organisational culture that supports the capacity for organisational change. Therefore,

H3a. The process capacity for change will positively affect the context capacity for change.

According to Klarner *et al.* (2007), the process capacity for change includes actions that can be taken during the period of change, including leadership practices. Leaders who intend to

develop an organisation are characterized by behaviours that include good cooperation and coordination, high creativity, open communication, high commitment and interpersonal skills and involve others in the change process (Beer *et al.*, 1990). Empowerment of leaders can also take the form of training and supporting employees to solve problems, enabling them to participate (Judson, 1991) and removing barriers to change (Beer *et al.*, 1990). Leaders who empower their teams will improve team performance which in turn affects overall performance (Stouten and Rousseau, 2018). Thus, it is expected that organisational change supported by transformational leaders in the process will produce the expected performance. This argument is also in line with Abbasi and Miandashti (2013) which states that the influence of transformational leaders (processes capacity for change) affects the performance of HEI. Therefore,

H3b. The process capacity for change will positively affect organisational performance.

2.4.4 Context capacity for change and performance. The management of higher education has now begun to shift from collegialism to managerialism. This affects how its performance is measured from a wider stakeholder perspective through increasing their status at the international level (Camilleri, 2020). The context of capacity to change is indicated by the value of change and a cohesive culture (Klarnar *et al.*, 2008). Organisations that have a value of openness to change will produce employee behaviour that is also change-oriented, such as adaptive behaviour and innovative behaviour (Nguyen *et al.*, 2019). These organisations achieve their change goals more quickly and more efficiently and can take advantage of or react to external or internal changes (Lawler and Worley, 2006). In the context of AHEIs, openness to change is reflected in the many studies and publications that are produced, which in turn results in increasing the academic reputation score as one of the QS ranking assessments. Therefore,

H4. The context capacity for change will have a positive effect on organisational performance.

3. Research methods

3.1 Participants and procedures

Research participants in this study were deans and vice deans of 11 AHEI in Indonesia. which since 2015, the Government of Indonesia through the Ministry of Research, Technology and Higher Education (MRTHE) has been pushed into the world ranking through the World Class University (WCU) program. The government mandate is 11 AHEI to enter the Top 500 QS WUR. Every year, the government allocates a budget to the 11 AHEIs to create a work program to improve their ranking according to the criteria of QS WUR (Sukoco *et al.*, 2021). The sampling method used was a census, where all deans and vice deans of the AHEIs were sampled (Hair *et al.*, 2006). The questionnaire was distributed to middle leaders, which included: dean (146) and vice dean (292). According to Tabrisi (2014), middle level managers not only manage gradual change, they lead it by moving the power levers up and down in the organisation. The strategic goals which are developed by top managers will not successfully be achieved when the middle managers are not performing well. The dean participation rate was as many as 21 people (22.8%), and vice deans as many as 72 people (77.2%).

The dean is the leader of the Faculty or School who is responsible to the president of the university. The dean and vice dean, called “dekanat”, are one entity and collegial decision. Deans have the duties and responsibilities to lead and govern the academic, research and community services in the faculty or school, including improving academic, research, community service qualities, building cooperation with strategic partners in the community, raising funds and administrative matters. The dean, in carrying out the task, is assisted by the vice dean (see Government Regulation of the Republic of Indonesia Number 30 Year

2014 Universitas Gadjah Mada's statute). The number of vice deans vary depending on AHEIs policy, such as the first vice dean supports on academic and students' affairs, the second vice dean supports on human resources and financial affairs and the third vice dean supports on cooperation and research affairs. Those responsibilities are very important to attain the university's goals, thus they become respondents in this study.

To avoid CMB, because all data collected are perceptual and from one source at the same time, we also test general method biases. First, the order of the questionnaire was arranged randomly. Second, we follow the Harman single factor method (Podsakof *et al.*, 2003) to test general method biases. The results showed that the first construct accounted for 39.668% of the variance. Hence, the results are unlikely to be contaminated by common method bias. This study uses the Goodness-of-Fit (GoF) statistical support method. The GoF represents an operational solution to this problem as it may be meant as an index for validating the PLS model globally (Henseler and Sarstedt, 2013). To validate the overall structural model GoF is used. The GoF index is a single measure to validate the combined performance of the measurement model and structural model. This GoF value is obtained from the square root of the average communalities index multiplied by the average value of the R^2 model. GoF values range from 0 to 1 with interpretations of values: 0.1 (small Gof), 0.25 (moderate GoF) and 0.360 (large GoF). *GoF calculation results obtained an average of $R^2 = 0.755$ and the average communalities index = 0.530, so the GoF value is 0.616 (which can be interpreted as a large GoF value).*

This research was conducted using quantitative methods with the help of a closed-ended questionnaire. Questionnaires online were distributed through Google form or email. The questionnaires distributed offline were sent by post. The accumulated response of the dean and vice deans questionnaire reached 21%. Respondents were distributed to 19 faculties (Table 1). As many as 55.400% of respondents were male, 54.300% respondents were 50–60 years old. Respondents with dean structural positions (deanship) were 21 people (22.800%) and vice deans 72 people (77.200%). The academic position of the majority respondents is the head lector of 52 (56.500%). Judging from the length of work, respondents with a length of work > 20 years reached 60 people or 65.200%. The average respondents serving in administration position <10 years were 71 people (77.200%) and there were 90 (97.800%) respondents with a tenure <5 years.

3.2 Measurement

3.2.1 Organisational capacity for change. This study adapted the items developed by Zhao and Goodman (2018) on operationalising three dimensions of OCC: *Learning capacity for change*, *Process capacity for change* and *Context capacity for change*.

3.2.2 Learning capacity for change. We define learning capacity for change as the organisational ability to continuously investigate its practices to improve and renew it based on their accumulated experiences (Klarner *et al.*, 2008). There are eight items that we used to represent learning (Table 2).

3.2.3 Process capacity for change. We define process capacity as the method of change management that is structured around a set of practices: transformational leadership, creation of visibility and collectively built change processes (Soparnot, 2011). Twelve items were used to operationalise it.

3.2.4 Context capacity for change. Context capacity for change refers to organisational shared beliefs shaped by the changes of learning and process as well as catalysing the changes (Klarner *et al.*, 2008), and eight items were used to operationalise it.

3.2.5 Organisational performance. Organisational performance is the organisational ability to achieve organisational goals, which is the world class university status (topuniversities.com, 2019). Five items were used to represent it, by comparing the

Variable	Category	<i>n</i>	Percentage of total sample
Faculty	Faculty of Agriculture	6	6.50
	Faculty of Marine Technology	6	6.50
	Faculty of Civil Engineering	2	2.20
	Faculty of Engineering	3	3.30
	Faculty of Mathematics and Natural Sciences	11	12.00
	Faculty of Vocational	2	2.20
	Faculty of Psychology	4	4.30
	Faculty of Veterinary	4	4.30
	Faculty of Pharmacy	5	5.40
	Faculty of Social and Political Sciences	3	3.30
	Faculty of Public Health	3	3.30
	Faculty of Medicine	5	5.40
	Faculty of Law	2	2.20
	Faculty of Dentistry	6	6.50
	Faculty of Humanities	4	4.30
	Faculty of Economics and Business	6	6.50
	Faculty of Nursing	4	4.30
Faculty of Postgraduate	1	1.10	
Others	15	16.30	
Gender	Male	51	55.40
	Female	41	44.60
Age	<40 Years	4	4.30
	40–50 Years	36	39.10
	50–60 Years	50	54.30
	>60 Years	2	2.20
Structural position	Dean	21	22.80
	Vice Dean	71	77.20
Academic position	Assistant Lecturer	2	2.20
	Lecturer (Assistant Professor)	18	19.60
	Senior Lecturer (Associate Professor)	52	56.50
	Professor	20	21.70
Years working	<5 Years	2	2.20
	6–10 Years	3	3.30
	10–20 Years	27	29.30
	>20 Years	60	65.20
Years in structural experience	<10 Years	71	77.20
	6–10 Years	18	19.60
	10–20 Years	2	2.20
	>20 Years	1	1.10
Years in current position	<5 Year	90	97.80
	6–10 Years	2	2.20

Table 1.
Descriptive statistics
participants

performance a focal AHEI to its direct competitor based on the criteria used by QS World University Ranking (QS-WUR), the ranking institution adopted by the Indonesian government (Walter., Auer., Ritter., 2006). Coercive *institutional pressure*. Finally, we use the number of grants given by the government compared to the total revenue obtained by AHEIs in measuring *coercive pressure* as used by Barman and Macindoe (2012). The same statement was conveyed Piña and Avellaneda (2018), oleh Coercive institutional pressure defined as the percentage of funds received by tertiary institutions from the government divided by the total funds raised by tertiary institutions. Expressed as a percentage (%).

All items were assessed on a 5-point Likert Scale (strongly disagree-strongly agree). To avoid CMB, because all data collected are perceptual and from one source at the same time, we

Research variables	Factor loadings	Composite reliability	AVE
I <i>Learning capacity</i>			0.614
Is the Dean at the faculty level?			
(a) Aligning the Rector, lecturers and support staffs at the Faculty (College) level effectively	0.824		
(b) Demonstrate commitment to organisational well-being	0.833		
(c) Balance the change initiative while completing the work done	0.775	0.927	
(d) Conduct discussion of criticism and input constructively	0.770		
(e) Understand the consequences of their actions	0.765		
(f) Meet deadlines and honor resource commitments	0.834		
(g) Accept responsibility for completing work	0.688		
(h) Has a clear role, who should do what	0.770		
II <i>Change process</i>			0.570
Does the Dean as a leader who... ?			
(a) Give respect to all parts of the organisation	0.812		
(b) Having good interpersonal ability	0.795		
(c) Willing to challenge the status quo	0.779		
(d) Having the creativity to bring change	0.864		
(e) Recognize the implications of the interdependency among work units on change	0.740	0.940	
(f) Recognize the importance of institutionalizing change	0.748		
(g) Recognize the need to readjust incentives to the desired changes	0.781		
(h) Assess the causes and not the symptoms of the problem	0.726		
(i) Protect core values while encouraging change	0.645		
(j) Consistently articulating the vision and mission of the University that inspires in the future	0.682		
(k) Show courage in supporting change initiatives	0.736		
(l) Demonstrate humility while working hard to pursue vision	0.726		
III <i>Organizational context</i>			0.609
Are lecturers and education staff?			
(a) Open up to consider changes towards WCU	0.791		
(b) Have the opportunity to voice their concerns about change	0.832		
(c) Knowing how the changes will help the overall performance of the university	0.768	0.925	
(d) Knowing the Dean as trustworthy	0.706		
(e) Receive the information effectively from the university's management	0.811		
(f) Think that the distributed information is always real time	0.817		
(g) Think that the information distributed equally across work units	0.813		
(h) Think that the information given from students are objective	0.691		
IV <i>Institutional (Coercive) pressures</i>			
<i>Institutional (Coercive) pressures</i> is measured by the percentage of grants received by AHEI from the government. Data was obtained from financial statements published in 2018			

Table 2. Research items, factor loadings, composite reliability, and AVE
(continued)

Research variables	Factor loadings	Composite reliability	AVE
V <i>Organisational performance</i>			0.573
Enlist 3 universities (higher education institutions) which are direct competitors of your subject (such as Economics or Medicine)			
1. ...			
2. ...			
3. ...			
Compared to competitors number 1 above, in the past year, how was your university's performance related to ...			
(a) Academic reputation	0.849		
(b) The reputation of the graduate user	0.839		
(c) Employee reputation	0.776	0.868	
(d) National ranking	0.725		
(e) International ranking	0.558		

Table 2.

also test general method biases. First, the order of the questionnaire was arranged randomly. Second, we follow the Harman single factor method (Podsakof *et al.*, 2003) to test general method biases. The results showed that the first construct accounted for 39.668% of the variance. Hence, the results are unlikely to be contaminated by common method bias.

This study uses the GoF statistical support method. The GoF represents an operational solution to this problem as it may be meant as an index for validating the PLS model globally (Henseler and Sarstedt, 2013). To validate the overall structural model GoF is used. The GoF index is a single measure to validate the combined performance of the measurement model and structural model. This GoF value is obtained from the square root of the average communalities index multiplied by the average value of the R^2 model. GoF values range from 0 to 1 with interpretations of values: 0.1 (small GoF), 0.25 (moderate GoF) and 0.360 (large GoF). *GoF calculation results obtained an average of $R^2 = 0.755$ and the average communalities index = 0.530, so the GoF value is 0.616 (which can be interpreted as a large GoF value).*

To test the research instrument, this study used a similar procedure used by Kleijnen *et al.* (2007), using reflective indicators on all constructs. Reliability testing uses composite scale reliability and average variance extracted/AVE (Chin, 1998). Based on the results of processing, the cutoff value is above 0.700, and AVE is more than the 0.500 cutoff value (Fornell and Larcker, 1981). In addition, convergent validity was evaluated by examining standardised loading of actions in each construct (Chin, 1998), and all actions showed standardised loading that exceeded 0.500. Furthermore, discriminant validity of actions is assessed. As suggested by Fornell and Larcker (1981), the AVE for each construct is greater than the correlation of the latent squared factor between the construct pairs. Therefore, the determinant is that all constructs show satisfying discriminant validity (Table 3).

4. Results

4.1 Learning capacity for change on process capacity for change (H1a)

As seen in Figure 1 and Table 4, the details are as follows: Learning capacity for change positively and significantly influences process capacity for change ($\beta = 0.848, t = 23.896$), so H1a is supported. The results of this test indicate that there is an influence of learning capacity for change on the process capacity for change. Learning capacity for change appears from how organisations, to continuously improve and renew their practices (Zhao and Goodman, 2018), influence the change method applied by the AHEIs middle managers and collectively build change processes effectively (Soparnot, 2011).

Research variables	Mean	SD	1	2	3	4	5	6	7	8
Process capacity for change	4.06	0.62	<i>0.57</i>	0.74	0.71	0.03	0.00	0.00	0.00	0.00
Learning capacity for change	3.99	0.62	0.86**	<i>0.61</i>	0.74	0.05	0.00	0.01	0.00	0.00
Context capacity for change	4.01	0.62	0.84**	0.86**	<i>0.61</i>	0.06	0.01	0.03	0.00	0.00
Institutional (Coercive) pressure	37.79	3.77	0.19	0.22*	0.25*	1.00	0.02	0.00	0.01	0.01
Organisational performance	4.37	0.55	-0.03	-0.00	0.09	0.14	0.57	0.08	0.00	0.02
Academic position	2.67	0.85	-0.06	-0.08	0.17	0.08	0.29**	<i>n.a</i>	0.02	0.02
Tenure	4.29	1.00	0.06	-0.02	0.02	-0.12	0.01	0.12	<i>n.a</i>	0.02
Experience	1.27	0.56	-0.04	-0.01	-0.06	0.12	0.15	0.13	0.15	<i>n.a</i>

Note(s): Values on the diagonal and italicized are AVE. Values below the diagonal are inter-factor correlation. Value above the diagonal is square of the correlation value; *correlation values are significant at $p < 0.05$; **correlation values are significant at $p < 0.01$

Table 3. Descriptive statistics and matrix correlations

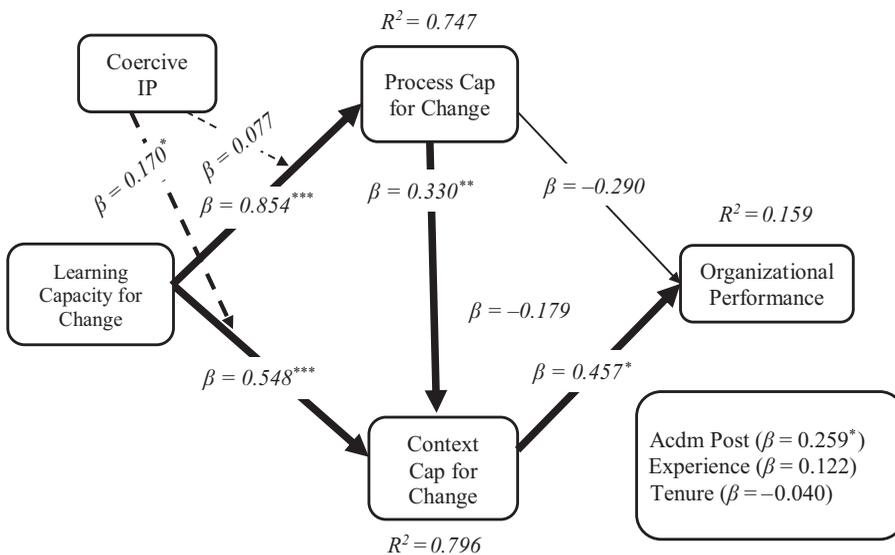


Figure 1. Research model and hypotheses testing

The learning cycle scheme illustrates how learning will eventually be able to support the process capacity for change in organisations. Organisational learning will lead to detect changes that are considered important, interpreted, and adjusted to the needs of the organisation. Learning will also identify external signals that are considered capable of bringing positive change, and the process of change will be continued in the process of experimentation and searching. The results of experiments and learning will produce knowledge articulation and codification of knowledge and, if deemed beneficial for organisational change, feedback and iteration will be raised (Zollo and Winter, 2002).

Path/Hypothesis		Path coefficient	Results
Learning cap for change (CC) → Process CC	H1a	0.854 ^{***}	Supported
Learning CC → Context CC	H1b	0.548 ^{***}	Supported
Learning CC → Organisational performance	H1c	-0.179	Not supported
Moderating effect 1 → Process CC	H2a	0.077	Not supported
Moderating effect 2 → Context CC	H2b	0.170 [*]	Supported
Process CC → Organisational performance	H3a	-0.290	Not supported
Process CC → Context CC	H3b	0.330 ^{**}	Supported
Context CC → Organisational performance	H4	0.457 [*]	Supported
Coercive IP → Process CC		0.028	
Coercive IP → Organisational performance	-	0.107	
Exp → Organisational performance	-	0.122	
AP → Organisational performance	-	0.259 [*]	
Tenure → Organisational performance	-	-0.040	

Table 4. Standardized path coefficients
Note(s): Only the hypotheses tested based on individual path magnitudes (H1–H4) are listed here; ^{*}*p* < 0.05 (statistically significant); ^{**}*p* < 0.01 (statistically highly significant); ^{***}*p* < 0.001 (statistically extremely significant)

4.2 Learning capacity for change on context capacity for change (H1b)

Further results indicate that learning capacity for change positively and significantly influences context capacity for change ($\beta = 0.548, t = 4.689$), so H1b is confirmed. The finding indicates that learning capacity for change significantly affects context capacity for change, which is consistent with Popper and Lipshitz (1998) that productive organisational learning capacity for change can lead to the right organisational culture. The process of intuiting, interpreting, integrating, and finally institutionalising through updating SOP and best practices will shape the organisational culture (Crossan *et al.*, 1999). In addition, Lee and Chen (2015) argue that continuous learning by integrating and transforming internal and external knowledge could develop the productive culture in the organisation.

4.3 Learning capacity for change on organisational performance (H1c)

The statistical result exhibits that learning capacity for change has no direct positive and significant influence on organisational performance ($\beta = -0.179, t = 0.763$), so H1c is not supported. The findings indicate that learning capacity for change is the starting point in building OCC. The findings support Soparnot (2011) that learning capacity for change plays a central role in formatting and structuring the components of the change capacity of the organisation. By learning, organisational members' cognition and behaviour are reshaped (Crossan *et al.*, 1999), and followed by using their collective intelligence, ability to learn, and creativity to change existing systems (Bierema, 1998).

As a starting point, the results of this study indicate that the OCC mechanism measured by learning capacity for change can influence the formation of processes capacity for change. The results of this study are consistent with Morales *et al.* (2007), who state organisational learning is a dynamic process of knowledge creation and acquisition, dissemination and sharing of knowledge, and application of knowledge. In the context of dynamic capabilities, organisational learning mechanisms emerge from a series of related processes (Zollo and Winter, 2002).

4.4 Coercive pressure moderates learning capacity for change on process capacity for change and the context capacity for change (H2)

The results show that there is no moderating effect of IPc on the influence effect of learning capacity for change on process capacity for change ($\beta = 0.077, t = 0.615$). However, there is a

moderating effect on influence effect of learning capacity for change on organisational context for change ($\beta = 0.170, t = 2.218$), so H2a is not supported, but H2b is supported. These results are in concordance with previous research (Huang and Yang, 2014) which states that regulatory pressures do not strengthen the learning relationship and the process capacity for change. Since 11 AHEIs have greater readiness for change and their position as the top 11 universities in Indonesia, they might not feel pressured by the government targeting them enter the Top 500 WUR. They might think that other external stakeholders create greater pressures that need performance (Bui and Baruh, 2011), such as the real pressure coming from competitors, not only at the national level, but also regionally and even globally. Especially, when the real data of competitiveness provided by the ranking institutions are publicly available (Altbach *et al.*, 2010). However, in relation to the ability to build contexts that support change, government pressure strengthens these relationships. HEI is a learning community (Sackney and Walker, 2006). The accumulation of knowledge from learning outcomes will be a process of reflection which then produces changes routinely (Hodges, 2017).

Following Aiken and West's (1991) procedure, Figure 2 illustrates the moderating effect of IPC. Hypothesis 2 states that the effect of learning capacity for change on organisational context for change is strengthened when they perceive strong IPC rather than vice versa. The results showed that high learning capacity for change resulted in a superior context ($\bar{X} = 3.852$) when strong institutional coercive pressure was felt but decreased significantly when learning capacity for change was low ($\bar{X} = 2.389$). The results also showed that low learning capacity for change resulted in a better context ($\bar{X} = 2.515$) when IPC was felt to be weak, but increased significantly when learning capacity for change was high ($\bar{X} = 3.271$). It can be said that, when the learning capacity for change was high, it resulted in a better context, both for strong and weak IPC. Interestingly, when the learning capacity for change was low, weak IPC produced a better organisational context for change than when IPC was strong.

4.5 Process capacity for change on organisational performance (H3a)

Further results exhibit that the process capacity for change has no significant influence on performance ($\beta = -0.290, t = 1.236$), so that H3a is not supported. The negative sign of the

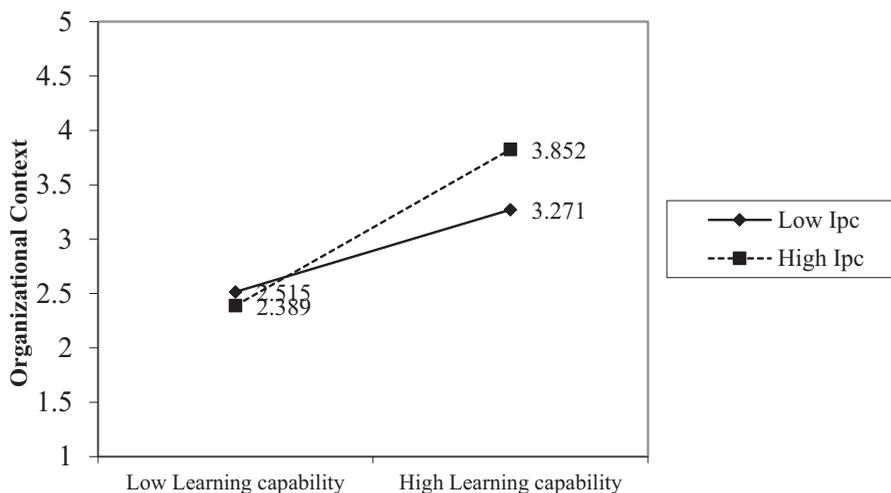


Figure 2.
The moderating effect
of institutional coercive
pressure (IPC)

process capacity for change is due to the change in need of the process, so that, during the process, there is still an adaptation to achieve targeted performance. The trial-and-error process causes the performance to have to experience adjustments and even be negative. The negative coefficient is identical to the results of Ashmos *et al.*'s (2000) research, in which the response of organisational process capacity for change has a tendency of negative influence on performance. In addition, Donaldson (2000) argued that organisational change will lead to success in the long term, but can cause gradual decline in performance in the short term.

4.6 Process capacity for change on context capacity for change (H3a)

The result indicates that the process capacity significantly influences context capacity for change ($\beta = 0.330$, $t = 2.802$), so that H3b is supported. The process capacity for change that takes place will produce best practice, which is then integrated with the existing value. The finding is consistent with the framework of Crossan *et al.* (1999). Integration is a process of changing collective understanding at the group level while building bridges for the organisation level. Institutionalisation is the process of institutionalising learning processes within organisations by relating them to organisational systems, structures, routines and practices. These two processes represent the change process, which will shape the organisational culture.

4.7 Organisational context for change on organisational performance (H4)

Finally, there is a positive and significant effect of context capacity for change on organisational performance ($\beta = 0.457$, $t = 2.030$), so that H4 is supported. By having change-oriented culture, organisational members embody adaptive and innovative behaviour, which makes organisations easily accept flexible practices and structures (Kuo and Tsai, 2017). Members are easily adapting and adopting new practices by improving improvement through experience and renewal through experiments to take advantage of or react to environmental dynamism (Zhao and Goodman, 2018). Consequently, the organisation operates effectively and efficiently (Lawler and Worley, 2006).

Additional findings exhibit that there are no direct effects of learning capacity for change and the process capacity for change on performance. Interestingly, this study offers the sequence among OCC dimensions that previous studies conceptually proposed. The learning capacity for change is the starting point of OCC, which will influence the process capacity for change and the organisational context for change. The process capacity for change is eventually mediated by the change context before having influence on performance.

The results of testing the control variables show that only demographic variables from academic positions (professors and non-professors) have a significant influence as control variables. This is consistent with the results of independent sample *t*-test testing which shows that the dean and vice dean with the academic position of professor perceive organisational performance (4.750) which is better than that of the dean and vice dean with non-professor academic positions (4.416). There is a significant difference in the process of change between deans and vice deans who are male and female. Male respondents received a change process (4.272) which was better than female respondents (3.948). There are no other variables that differ by gender. There is no influence of variables based on years of service and tenure on perceived organisational performance. This means that the perceived performance is not influenced by years of service and tenure, but by the focal variables studied.

5. Discussion and implications

Based on the results of hypothesis testing, some managerial implications are offered: First, the OCC mechanism must be considered as follows: Learning capacity for change is a way to

achieve knowledge that will drive capacity and capacity drives sustainable competitive advantage (Zollo and Winter, 2002). The results of this research can be used as a basis for making public policies, in the form of national policies using the OCC framework. AHEIs needs to make capacity building efforts related to learning capacity for change, increasing process capacity for change and the capacity for context for change (culture). Thus, AHEIs needs to be more responsive in responding to Regulation of Ministry of Research, Technology and Higher Education (MRTHE), number 2 of 2017 which requires lecturers (professors and associate professors) to carry out international publications, for example through international journal publication training as an effort to acquire new knowledge which is part of the learning capacity for change. In increasing the process capacity for change, the Dean as the middle manager needs to formulate procedures that support change, so that the organisation is open to the dynamics of change towards WCU. Second, the test results show that IPc can strengthen the effect of learning capacity to context capacity for change. This is an opportunity for the government to help build the AHEIs culture through the allocated funding capacity. Higher education institutions still need higher pressure, in the form of an increase in the government budget for AHEIs which is able to achieve a more comprehensive WCU program.

We offer some academic contributions: First, empirically testing the mechanism that forms OCC, namely learning capacity for change as a starting point that influences process and context capacity for change and which has never been tested empirically (Soparnot, 2011). Learning capacity for change is the main ability of an organisation and is an important resource in today's business environment to facilitate competitiveness (Muneeb *et al.*, 2019). Second, this study examined institutional pressure as a moderator variable in the mechanisms that make up the OCC (Ferlie and Trenholm, 2019). This study extends the idea that coercive institutional pressure (DiMaggio and Powell, 1983) is very important in the mechanism of the OCC dimension relations (e.g. Zhao and Goodman, 2018). Finally, this study examines the influence of OCC and the performance of higher education organisations in the context of a developing country, namely Indonesia, which has a different cultural context (Daniels and Greguras, 2014). Communities and organisations in Asia tend to have a high power distance compared to European or American societies, so they tend to adjust to government policies and regulations (Marginson, 2011). Therefore, the results of this study can be generalized to developing countries, especially in Asia, which have similar culture.

6. Conclusion

This study examines how the mechanisms between the three dimensions build OCC (learning capacity for change, processes capacity for change and context capacity for change). Second, this study also shows how coercive pressure strengthens the effect of learning capacity on the process capacity and the context capacity for change on organisational performance. The findings exhibit that learning capacity for change is the starting point of OCC and influences process capacity and context capacity for change. Coercive pressure strengthens the relationship between learning capacity and context capacity for change. Further, context capacity for change determines organisational performance.

The results of this study must be considered in the light of several limitations. First, the use of cross-sectional data in organisational change research may not be able to capture the real capacity of change. Therefore, future studies with a qualitative approach will increase the depth of the study. This research emphasises three sequential OCC constructs, future studies can consider non-recursive models using longitudinal data. Second, this study also has a low response rate, so future research in AHEIs needs to find methods that involve the authorities (government) to increase response rates. Multilevel sources are necessary for future studies. In addition, this study does not investigate the competitive pressures among

HEIs due to ranking/status competition. Future studies might consider the use of dyadic source of competition (Chen, 1996), which might depict that the degree of change might be affected by the competitive tension perceived by each TMTs of HEIs. Third, in the context of AHEIs in Indonesia, definitive organisational culture has yet to be discovered. Considering non-stop ranking and imitation pressure in the higher education sector, which is driven by performance, might be able to offset this pressure; future research can be conducted relating to culture at the state, organisation (AHEIs), team and individual level. Fourth, this study has not included the element of time in looking at the influence of learning capacity for change, process capacity for change and context capacity for change on organisational performance. Future studies can use longitudinal data to be able to see the effect of OCC on more optimal organisational performance.

References

- Abbasi, E. and Miandashti, N. (2013), "The role of transformational leadership, organizational culture and organizational learning in improving the performance of Iranian agricultural faculties", *Higher Education*, Vol. 66 No. 4, pp. 505-519.
- Aghion, P., Dewatripont, M., Hoxby, C., Mas-Colell, A. and Sapir, A. (2010), "The governance and performance of universities: evidence from Europe and the US", *Economic Policy*, Vol. 25 No. 61, pp. 7-59.
- Aiken, L.S. and West, S.G. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Sage Publications, Newbury Park, CA, 0 8039 3605 2.
- Altbach, P.G., Reisberg, L. and Rumbley, L.E. (2010), *Trends in Global Higher Education: Taking an Academic Revolution*, Sense Publishers, Rotterdam.
- Angiola, N., Bianchi, P. and Damato, L. (2018), "Performance management in public universities: overcoming bureaucracy", *International Journal of Productivity and Performance Management*, Vol. 67 No. 4, pp. 736-753.
- Armenakis, A.A. and Bedeian, A.G. (1999), "Organizational change: a review of theory and research in the 1990s", *Journal of Management*, Vol. 25 No. 3, pp. 293-315.
- Ashmos, D.P., Duchon, D. and McDaniel, R.R. Jr (2000), "Organizational responses to complexity: the effect on organizational performance", *Journal of Organizational Change Management*, Vol. 3 No. 6, pp. 577-595.
- Ball, R. and Wilkinson, R. (1994), "The use and abuse of performance indicators in UK higher education", *Higher Education*, Vol. 27 No. 4, pp. 417-427.
- Barman, E. and Macindoe, H. (2012), "Institutional pressures and organizational capacity: the case of outcome measurement", *Sociological Forum*, Vol. 27 No. 1, pp. 70-93.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Bass, B.M. (1997), "Does transactional–transformational paradigm transcend organizational and national boundaries?", *American Psychologist*, Vol. 52 No. 2, pp. 130-139.
- Battilana, J., Gilmartin, M., Sengul, M., Pache, A. and Alexander, J. (2010), "Leadership competencies for implementing planned organizational change", *Leadership Quarterly*, Vol. 21 No. 3, pp. 422-438.
- Beer, M. and Nohria, N. (2000), "Cracking the code of change", *Harvard Business Review*, Vol. 78, pp. 133-141.
- Beer, M., Eisenstat, R.A. and Spector, B. (1990), "Why change programs don't produce change", *Harvard Business Review*, Vol. 68, pp. 158-66.
- Bierema, L.L. (1998), "The process of the learning organization: making sense of change", *National Association of Secondary School Principals*, Vol. 83 No. 1, pp. 46-57.

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- Brankovic, J. (2018), "Between world culture and local context: the university as an empowered actor in national higher education governance", *Acta Sociologica*, Vol. 6 No. 4, pp. 374-388.
- Bruckmann, S. and Carvalho, T. (2018), "Understanding change in higher education: an archetypal approach", *Higher Education*, Vol. 76 No. 4, pp. 629-647.
- Bui, H.T.M. and Baruch, Y. (2011), "Learning organizations in higher education: an empirical evaluation within an international context", *Management Learning*, Vol. 43 No. 5, pp. 515-544.
- Busari, A.H., Khan, S.N., Abdullah, S.M. and Mughal, Y.H. (2019), "Transformational leadership style, followership, and factors of employees' reactions to organizational change", *Journal of Asia Business Studies*, Vol. 14 No. 2, pp. 181-209.
- Camilleri, M.A. (2020), "Using the balanced scorecard as a performance management tool in higher education", *Management in Education*, Vol. 35 No. 1, pp. 10-21.
- Cha, K.J., Hwang, T. and Gregor, S. (2015), "An integrative model of IT-enabled organizational transformation", *Management Decision*, Vol. 53 No. 8, pp. 1755-1770.
- Chen, M.J. (1996), "Competitor analysis and interfirm rivalry: toward a theoretical integration", *The Academy of Management Review*, Vol. 21 No. 1, pp. 100-134.
- Chen, S.H., Wang, H.H. and Yang, K.J. (2009), "Establishment and application of performance measure indicators for universities", *TQM Journal*, Vol. 21 No. 3, pp. 220-235.
- Chin, W.W. (1998), "The partial least squares approach for structural equation modeling", in Marcoulides, G.A. (Ed.), *Modern Methods for Business Research*, Lawrence Erlbaum Associates, London, pp. 295-236.
- Čirjevskis, A. (2017), "Unbundling dynamic capabilities in successful Asian-Pacific shipping companies", *Journal of Asia Business Studies*, Vol. 11 No. 2, pp. 113-134.
- Collins, F.L. and Park, G.S. (2016), "Ranking and the multiplication of reputation: reflections from the frontier of globalizing higher education", *Higher Education*, Vol. 72 No. 1, pp. 115-129.
- Crossan, M.M., Lane, H.W. and White, R.E. (1999), "Learning from intuition to framework: from intuition to institution", *Academy of Management Review*, Vol. 24 No. 3, pp. 522-537.
- Cunningham, B. and Kempling, J. (2009), "Implementing change in public sector organizations", *Management Decision*, Vol. 47 No. 2, pp. 330-344.
- Dahler-Larsen, P. (2011), *The Evaluation Society*, Stanford University Press, Stanford, CA.
- Daniels, M.A. and Greguras, G.J. (2014), "Exploring the nature of power distance: implications for micro- and macro-level theories, processes, and outcomes", *Journal of Management*, Vol. 40 No. 5, pp. 1202-1229.
- Davidsson, P., Hunter, E. and Klofsten, M. (2006), "Institutional forces – The invisible hand that shapes ventures ideas", *International Small Business Journal*, Vol. 24 No. 2, pp. 115-131.
- Decramer, A., Smolders, C., Vanderstraeten, A. and Christiaens, J. (2012), "The impact of institutional pressures on employee performance management systems in higher education in the low countries", *British Journal of Management*, Vol. 23 No. 1, pp. S88-S103.
- DiMaggio, P.J. and Powell, W.W. (1983), "The iron cage revisited: institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48 No. 1, pp. 147-160.
- DiMaggio, P.J. and Powell, W.W. (Eds) (1991), *The New Institutionalism in Organizational Analysis*, University of Chicago Press, Chicago, IL.
- Donaldson, L. (2000), "Organizational portfolio theory: performance driven organizational change", *Contemporary Economic Policy*, Vol. 18 No. 4, pp. 386-396.
- Exter, N., Grayson, D. and Maher, R. (2013), "Facilitating organizational change for embedding sustainability into academia: a case study", *Journal of Management Development*, Vol. 32 No. 3, pp. 319-332.

- Export gov (2019), "UNESCO student mobility number: Indonesia has 45,206 students studying abroad", available at: <https://www.export.gov/apex/article2?id=Indonesia-Education-and-Training> (accessed 26 September 2019).
- Felin, T., Foss, N.J., Heimeriks, K.H. and Madsen, T.L. (2012), "Microfoundations of routines and capabilities: individuals, processes, and structure", *Journal of Management Studies*, Vol. 49 No. 8, pp. 1351-1374.
- Ferlie, E. and Trenholm, S. (2019), "Exploring new organisational forms in English higher education: a think piece", *Higher Education*, Vol. 77, pp. 229-245.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Hair, J.F. Jr, Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, L.R. (2006), *Multivariate Data Analysis*, Pearson International Edition, New Jersey.
- Hazelkorn, E. (2015), *Rankings and the Reshaping of Higher Education: The Battle for World-Class Excellence*, 2nd ed., Palgrave MacMillan, London.
- Heckmann, N., Steger, T. and Dowling, M. (2016), "Organizational capacity for change, change experience, and change project performance", *Journal of Business Research*, Vol. 69 No. 2, pp. 777-784.
- Henseler, J. and Sarstedt, M. (2013), "Goodness-of-fit indices for partial least squares path modeling", *Computational Statistics*, Vol. 28, pp. 565-580.
- Hirsch, F. (1976), *Social Limits to Growth*, Harvard University Press, Cambridge.
- Hodges, J. (2017), "Building capabilities for change: the crucial role of resilience", *Development and Learning in Organizations*, Vol. 31 No. 1, pp. 5-8.
- Huang, Y.C. and Yang, M.L. (2014), "Reverse logistics innovation, institutional pressures and performance", *Management Research Review*, Vol. 37 No. 7, pp. 615-641.
- Huber, G. (1991), "Organizational learning: the contributing processes and the literature", *Organization Science*, Vol. 2 No. 1, pp. 88-115.
- Judge, W. and Douglas, T. (2009), "Organizational change capacity: the systematic development of a scale", *Journal of Organizational Change Management*, Vol. 22 No. 6, pp. 635-649.
- Judge, W. and Elenkov, D. (2005), "Organizational capacity for change and environmental performance: an empirical assessment of Bulgarian firms", *Journal of Business Research*, Vol. 58 No. 7, pp. 893-901.
- Judge, W.Q., Naoumova, I. and Douglas, T. (2009), "Organizational capacity for change and firm performance in a transition economy", *International Journal of Human Resource Management*, Vol. 20 No. 8, pp. 1737-1752.
- Judson, A. (1991), *Changing Behaviour in Organizations: Minimizing Resistance to Change*, Basil Blackwell, Cambridge, MA.
- Kavanagh, M.E. and Ashkanasy, N. (2006), "The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger", *British Journal of Management*, Vol. 17, No. S1, pp. S81-S103.
- Kim, J. (2018), "The functions and dysfunctions of college rankings: an analysis of institutional expenditure", *Research in Higher Education*, Vol. 59 No. 1, pp. 54-87.
- Klärner, P., Probst, G. and Soparnot, R. (2007), "From change to the management of organizational change capacity: a conceptual approach", *Working Paper*, University of Geneva.
- Klärner, P., Probst, G. and Soparnot, R. (2008), "Organizational change capacity in public services: the case of the world health organization", *Journal of Change Management*, Vol. 8 No. 1, pp. 57-72.
- Kleijnen, M.A., de Ruyter, K. and Wetzels, M. (2007), "An assessment of value creation in mobile service delivery and the moderating role of time consciousness", *Journal of Retailing*, Vol. 83 No. 1, pp. 33-46.

- Kotabe, M., Jiang, C.X. and Murray, J.Y. (2017), "Examining the complementary effect of political networking capability with absorptive capacity on the innovative performance of emerging-market firms", *Journal of Management*, Vol. 43 No. 4, pp. 1131-1156.
- Kuo, T. and Tsai, G.Y. (2017), "Total quality management and business excellence the effects of employee perceived organisational culture on performance: the moderating effects of management maturity", *Total Quality Management and Business Excellence*, Vol. 30 Nos 7/8, pp. 1-17.
- Lam, S. and Schaubroeck, J. (2000), "A field experiment testing frontline opinion leaders as change agents", *Journal of Applied Psychology*, Vol. 85 No. 6, pp. 987-995.
- Lawler, E.E. and Worley, C.G. (2006), *Built to Change: How to Achieve Sustained Organization-At Effectiveness*, Jossey-Bass, San Francisco.
- Le, P.B. (2020), "How transformational leadership facilitates radical and incremental innovation: the mediating role of individual psychological capital", *Asia-Pacific Journal of Business Administration*, Vol. 12 Nos 3/4, pp. 205-222.
- Lee, Y.D. and Chen, S.H. (2015), "An empirical research in the relation between corporate organizational learning and organizational culture: a case study of insurance industry in Taiwan Region", *Problems and Perspectives in Management*, Vol. 13 No. 1, pp. 35-44.
- Lu, W.M. (2012), "Intellectual capital and university performance in Taiwan", *Economic Modelling*, Vol. 29 No. 4, pp. 1081-1089.
- Marginson, S. (2011), "Higher education in East Asia and Singapore: rise of the Confucian model", *Higher Education*, Vol. 61 No. 5, pp. 587-611.
- McGuinness, T. and Morgan, R.E. (2005), "The effect of market and learning orientation on strategy dynamics: the contributing effect of organisational change capability", *European Journal of Marketing*, Vol. 39 Nos 11/12, pp. 1306-1326.
- Meister-Scheytt, C. and Scheytt, T. (2005), "The complexity of change in universities", *Higher Education Quarterly*, Vol. 59 No. 1, pp. 76-99.
- Meyer, C.B. and Stensaker, I.G. (2006), "Developing capacity for change", *Journal of Change Management*, Vol. 6 No. 2, pp. 217-231.
- Ministry of Research, Technology and Higher Education (MRTHE) (2017), Available at: <http://www.dikti.go.id> (accessed 20 September 2019).
- Morales, G., Montes, L. and Jover, A. (2007), "Influence of personal mastery on organizational performance through organizational learning and innovation in large firms and SMEs", *Technovation*, Vol. 27 No. 9, pp. 547-568.
- Muneeb, D., Khong, K.W., Ennew, C. and Avvari, M. (2019), "Building an integrated conceptual model of competitive learning capability: a strategic management perspective", *Asia-Pacific Journal of Business Administration*, Vol. 11 No. 3, pp. 267-287.
- Nguyen, V.T., Siengthai, S., Swierczek, F. and Bamel, U.K. (2019), "The effects of organizational culture and commitment on employee innovation: evidence from Vietnam's IT industry", *Journal of Asia Business Studies*, Vol. 13 No. 4, pp. 719-742.
- Oxtoby, B., McGuinness, T. and Morgan, R. (2002), "Developing organisational change capability", *European Management Journal*, Vol. 20 No. 3, pp. 310-320.
- Patricia, V.F., Rodríguez, J.A.C. and Franco, J.S. (2010), "Students academic climate perception of the school of business of a Mexican university", *American Journal of Business Education*, Vol. 3 No. 7, pp. 11-16.
- Peng, H. (2019), "Organizational ambidexterity in public non-profit organizations: interest and limits", *Management Decision*, Vol. 57 No. 1, pp. 248-261.
- Podsakof, P.M., MacKenzie, S.B., Lee, J.Y. and Podsakof, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.

- Pollock, N., D'Adderio, L., Williams, R. and Leforestier, L. (2018), "Conforming or transforming? How organizations respond to multiple rankings", *Accounting, Organizations and Society*, Vol. 64, pp. 55-68.
- Popper, M. and Lipshitz, R. (1998), "Organizational learning mechanisms: a structural and cultural approach to organizational learning", *Journal of Applied Behavioral Science*, Vol. 34 No. 2, pp. 161-179.
- QS World University Ranking – Methodology (2019), available at: <https://www.topuniversities.com/qs-world-university-rankings/methodology> (accessed 3 February 2019).
- Resnick, L.B. and Hall, M.W. (1998), "Learning organizations as sustainable education reform", *Daedalus*, Vol. 127 No. 4, pp. 89-118.
- Rupidara, N.S. and Darby, R. (2017), "Institutional influences on HRM in the Asian business environment: the case of Indonesia", *Journal of Asia Business Studies*, Vol. 11 No. 3, pp. 262-277.
- Sackney, L. and Walker, K. (2006), "Canadian perspectives on beginning principals: their role in building capacity for learning communities", *Journal of Educational Administration*, Vol. 44 No. 4, pp. 341-358.
- Sánchez-Medina, P.S. (2020), "Organizational capability for change and performance in artisanal businesses in Mexico", *Journal of Organizational Change Management*, Vol. 33 No. 2, pp. 415-431.
- Sandy, W. and Shen, H. (2019), "Publish to earn incentives: how do Indonesian professors respond to the new policy?", *Higher Education*, Vol. 77 No. 1, pp. 247-263.
- Schein, E.H. (2010), *Organizational Culture and Leadership*, Jossey Bass, San Francisco.
- Senge, P.M. (2000), "Systems change in education", *Reflections*, Vol. 1 No. 1, pp. 52-59.
- Soparnot, R. (2011), "The concept of organizational change capacity", *Journal of Organizational Change Management*, Vol. 24 No. 5, pp. 640-661.
- Staber, U. and Sydow, J. (2002), "Organizational adaptive capacity – a structuration perspective", *Journal of Management Inquiry*, Vol. 11 No. 4, pp. 408-424.
- Stouten, J. and Rousseau, D.M. (2018), "Successful organizational change: integrating the management practice and scholarly literatures", *Academy of Management Annals*, Vol. 12 No. 2, pp. 752-788.
- Sukoco, B.M., Mudzakkir, M.F., Ubaidi, A., Nasih, M., Dipojono, H.K., Ekowati, D. and Tjahjadi, B. (2021), "Stakeholder pressure to obtain world-class status among Indonesian universities", *Higher Education*, forthcoming.
- Tabrizi, B. (2014), "The key to change is middle management", available at: <https://hbr.org/2014/10/the-key-to-change-is-middle-management/> (accessed 1 December 2015).
- Tan, Y.S. and Goh, S.K. (2014), "International students, academic publications and world and responses of a Malaysian public university", *Higher Education*, Vol. 68 No. 4, pp. 489-502.
- Tee, K.F. (2016), "Suitability of performance indicators and benchmarking practices in UK universities", *Benchmarking: An International Journal*, Vol. 23 No. 3, pp. 584-600.
- Teece, D.J., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533.
- The World Bank (2018), "Indonesia continues to build on solid economic growth", available at: <https://www.worldbank.org/en/news/press-release/2018/03/27/indonesia-continues-to-build-on-solid-economic-growth> (accessed 19 September 2019).
- The World Bank (2019), "The World Bank in Indonesia", available at: <https://www.worldbank.org/en/country/indonesia/overview> (accessed 26 September 2019).
- Zhang, J., Jiang, Y. and Shabbir, R. (2015), "How perceived institutional pressures impact market orientation an empirical study of Chinese manufacturing firms", *Asia Pacific Journal of Marketing and Logistics*, Vol. 27 No. 2, pp. 267-293.

- Zhao, X. and Goodman, R.M. (2018), "Western organizational change capacity theory and its application to public health organizations in China: a multiple case analysis", *The International Journal of Health Planning and Management*, Vol. 34 No. 1, pp. 1-27.
- Zollo, M. and Winter, S.G. (2002), "Deliberate learning and the evolution of dynamic capabilities", *Organization Science*, Vol. 13 No. 3, pp. 339-351.

Further reading

- Argote, L. and Miron-Spektor, E. (2011), "Organizational learning: from experience to knowledge", *Organizational Science*, Vol. 22 No. 5, pp. 1123-1137.
- Chan, J.I.L. and Muthuveloo, R. (2020), "Vital organisational capabilities for strategic agility: an empirical study", *Asia-Pacific Journal of Business Administration*, Vol. 12 Nos 3/4, pp. 223-236.
- Ouakouak, M.L., Ouedraogo, N. and Mbengue, A. (2014), "The mediating role of organizational capabilities in the relationship between middle managers involvement and firm performance: a European study", *European Management Journal*, Vol. 32, pp. 305-318.

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