

The 6th International Conference of Information Science

Avillion Port Dickson, Negeri Sembilan, Malaysia, 27-28 Jan 2025

Organiser: School of Information Science, College of Computing, Informatics and Mathematics, Universiti Teknologi MARA, Shah Alam, Malaysia

Antecedents of Individual's Creativity among Academicians at Higher Learning Institutions in Malaysia: A Partial Least Squares Equation Modelling (PLS-SEM) Approach

Nur Ainatul Mardiah Mat Nawi*, Mohamad Rahimi Mohd Rosman, Noor Arina Md Arifin,
Siti Aishah Mokhtar, Huda Hamidon, Salliza Md Radzi

**Corresponding Author*

Information Science Studies, Universiti Teknologi MARA Kelantan Branch, Machang, Malaysia

ainatulmardiah@uitm.edu.my, rahimimr@uitm.edu.my, arina848@uitm.edu.my, aishah835@uitm.edu.my, huda685@uitm.edu.my, salliza@uitm.edu.my
Tel: 0145152921

Abstract

Creativity among academicians is essential for promoting innovation in higher education. This study examines the antecedents of individual creativity among academicians in higher learning institutions (HEIs) in Malaysia. The study focuses on the influence of four organisational culture dimensions: adhocracy, clan, market, and hierarchy. This study adopts the quantitative approach to answer the research questions. Data collected from 100 academicians were analysed using PLS-SEM. The study's findings identify that clan and market cultures significantly predict individual creativity. The study contributes to theoretical and practical development in encouraging the individual's creativity.

Keywords: organisational culture, individual creativity, higher learning institutions

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open-access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer review under the responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers).

DOI: <https://doi.org/10.21834/e-bpj.v10iSI27.6817>

1.0 Introduction

Organisations in the era of globalisation are facing certain changes in their atmosphere, and they have to be innovative in technology and developments as well as in market structures, customers, suppliers, and competitors. Technology-driven organisations have been forced to develop methods for improving their performance to achieve a competitive edge in the market, as there is always increasing competition worldwide. This leads to changes in individual and their behaviour as long as the organisation's social environment is designed to guarantee the endurance of the organisation itself. The continuous existence of an organisation depends on innovation and creativity (Martins et al., 2004). Adapting to these changes occurs in all organisations, including business companies, government agencies, and higher learning institutions. Individual creativity is an organisational ability to recognise the value of new knowledge, which depends on the dynamic interaction process between organisations and external environments, and members' behaviour when using knowledge for innovation.

According to Zhao et al. (2021), organisational creativity is a complex sum of individual creativity. The effectiveness of individual creativity on organisational innovation performance must be divided into two parts. One is to directly affect organisational innovation

eISSN: 2398-4287 © 2025. The Authors. Published for AMER by e-International Publishing House, Ltd., UK. This is an open-access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>). Peer review is under the responsibility of AMER (Association of Malaysian Environment-Behaviour Researchers).

DOI: <https://doi.org/10.21834/e-bpj.v10iSI27.6817>

performance, while the other is to adopt, engage and exploit all collected knowledge through organisational absorptive capacity before it can work with organisations. The individual creativity of employees is a vital resource that turns ideas into concrete actions and affects organisational performance, as it will benefit organisational operations and its development (Shalley et al., 2004). Therefore, improving the creativity of individuals to become innovative is critical in organisations. Anderson et al. (2014) from their research stated that individual creativity occurs when people in the workplace work individually or in a team on the task given. It is proven that individuals who work together in a group are more creative than individuals who work individually. According to Amabile (1997) and Berg (2014), organisations should identify, encourage and build on the creative capabilities of their employees if they want to survive in continuously changing, increasingly complex marketplaces. Therefore, this study investigates the antecedents of individual creativity among academicians at higher learning institutions in Malaysia.

2.0 Literature Review

2.1 Individual vs Organisational Creativity

According to Oldham and Baer (2012), creativity is the "production of ideas concerning products, practices, services, or procedures that are novel or original and potentially useful to the organisation". Therefore, organisational creativity is related to the novelty and usefulness of business outcomes. According to the componential theory of creativity (Amabile, 2011), four components influence creativity. Four components, consisting of domain-relevant skills, creativity-relevant processes and task motivation, are within individuals. The individual creativity of employees is an important resource that affects organisational performance. According to Rodrigues et al. (2019), to increase business performance in organisations, employees need self-perceived creativity, and they believe that less creative people might not be interested in entrepreneurship as skills and traits do not match their business profile. Group and organisational innovation are contributed by the individual's capabilities, which generate new and useful ideas (Ghosh, 2015). Organisational creativity refers to the resources that reflect the creation of services, ideas, routines, products and processes. Organisational creativity refers to the novelty, originality, and usefulness of a new creative venture's outputs, including products, services, processes, and procedures (Amabile & Pratt, 2016).

2.2 Organisational Culture

Organisational culture is defined as the values and opinions shared by employees in an organisation. It refers to expectations that work well to understand difficulties and that all works are done properly (Martins et al., 2004). Organisational culture also improves interpersonal relationships. Kwon Choi et al. (2013) also explored that the moral climate of the organisation strongly supports innovation. Hartmann (2006) displayed that organisational culture affects employees' involvement in business activities and influences their performance in adopting innovation. A study of culture within the organisation shows that employees reflect the same method and are led by the same thoughts about the business (Racelis, 2010). The competing values framework (CVF) introduced by Cameron and Quinn (2006) divides organisational culture into four distinct quadrants: clan, adhocracy, market, and hierarchy (Figure 1).

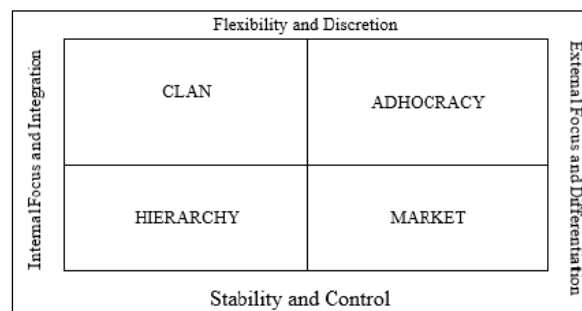


Fig. 1: The Competing Values Framework
(Cameron and Quinn, 2006)

Adhocracy culture in organisations highlights flexibility while also paying a great deal of consideration to the external environment, which is characterised by recognition to succeed. This type of organisation needs to be highly innovative and constantly assess what the future requires to survive. It was assumed that adaptation and innovativeness lead to new resources and profitability, so emphasis was placed on creating a vision of the future, organised anarchy, and disciplined imagination. A significant challenge for these organisations is to produce innovative products and services and to adapt quickly to new opportunities. Naranjo-Valencia et al. (2017) further stressed that adhocracy culture involves the exploration of new opportunities and employee freedom to take calculated risks. The study by Gupta (2011) emphasised that it must reflect a predisposition towards flexibility, constant learning, and adequate task autonomy. Naranjo-Valencia et al. (2017) concluded that an adhocracy culture encourages employee creativity. Hence, strong support of an adhocracy culture could be required to engender organisational creativity.

Private universities and colleges offer competitive programs based on market demands, and they are collaborating with renowned universities abroad to offer twin programs in which students can spend their studies abroad. The core values of a market culture are competitiveness and productivity, which rely on a strong emphasis on creativity and innovation. Market organisational culture is a hard-

driving and competitive work environment. According to Singh and Shanker (2012), the market culture measurement scale was applied in different research contexts to assess the impact of marketing on service organisations' performance. Gallagher et al. (2008) in their research state that, a strong market culture exhibits high ratings on six dimensions of corporate beliefs and behaviours related to customer insight, competitor awareness, collaborative approach, criteria for decisions, CEO leadership, and a deep organisational commitment and contribution of all functions to the creation of superior value for customers, profitably. Appiah-Adu et al. (2000) found that all marketing culture dimensions, except organisation, strongly impacted customer satisfaction.

In the competing values framework, an organisation is characterised by a strong internal focus along with a high degree of flexibility and discretion; with goals that are highly shared by members of the organisation and high levels of cohesiveness, such organisations feel more like extended families than economic entities. Typical characteristics of clan-type firms were teamwork, employee involvement programs, and corporate commitment to employees. Ogbeibu et al. (2018) reported that clan culture positively affects organisational creativity. However, this finding contradicts the study of Cameron and Quinn (2006) and Gilson and Litchfield (2017), who argued that with its strong focus on internal orientation, it is hard to adopt values that encourage the acquisition of creative ideas from the external environment. The studies show that clan culture negatively affects employee creativity (Naranjo-Valencia et al., 2017). The finding was supported by Acar and Acar (2012), who reported that an organisational culture that emphasises internal focus in comparison to external focus often proves to be disadvantaged in creativity.

Hierarchy culture was first introduced by Weber in 1997, known as establishment, which has seven attributes: rules, specialisation, meritocracy, hierarchy, separate ownership, impersonality, and accountability (Cameron & Quinn, 2006). These characteristics were adopted in organisations to achieve efficient, reliable, smooth-flowing, predictable output. The hierarchy culture is known for its strict rules and tight control over employee actions and task processes. Hierarchy culture values are adopted in public HEIs to drive research and development initiatives. Studies (Acar & Acar, 2012; Naranjo-Valencia et al., 2017) conclude that the hierarchy culture is known for its bureaucratic values, and these values are usually unsupportive of organisational creativity. Studies have espoused that unwarranted strict regulations and rules implementation might suffocate organisational creativity (Liu et al., 2016). Therefore, as legalities and bureaucracies focus on operational efficiencies rather than task autonomy, hierarchy OC is anticipated to harm organisational creativity. However, Ogbeibu et al. (2018) again found that hierarchy culture has positively affected organisational creativity.

2.3 Impact of Organisational Culture on an individual's productivity

Creativity involves the generation of ideas (Oldham & Baer, 2012), and individual creativity is recognised as one of the most important parts of organisational innovation (Higgins, 1995). A creative employee will help the organisation create new products, practices, or methods with creative ideas (Yeh-Yun Lin & Liu, 2012), which results in innovation (Amabile et al., 1996). Based on previous studies, organisational culture not only generally impacts employees' involvement with the organisation's business activities and performance (Hartmann, 2006) but also impacts employees' performance (Abdullahi et al., 2021). The adhocracy culture, which observes how innovation and risk-taking are boosted within an organisation, is believed to promote employee individual creativity positively (Naranjo-Valencia et al., 2017). It was found that there was a significant relationship between market culture and individual creativity in academic institutions that focus on market competition and market forces (Bamber & Elezi, 2020). Meanwhile, clan culture that measures the extent to which collaboration, teamwork, and a supportive environment are encouraged, is reported to have both positive (Ogbeibu et al., 2018) and negative impacts (Acar & Acar, 2012; Cameron & Quinn, 2006; Gilson & Litchfield, 2017; Naranjo-Valencia et al., 2017) on organisational and individual creativity. However, in higher education settings, the relationship between clan culture and university performance is significant, emphasising individual research output, university ranking, student placement, and graduation rate (Chege et al., 2022). Similarly, even though a hierarchical culture that looks into the effects of controlled procedures, mechanisms, and stability within the organisation also contributes positively (Ogbeibu et al., 2018), this culture, nonetheless, is usually known by many researchers as negatively influencing creativity in organisations (Acar & Acar, 2012; Liu et al., 2016; Naranjo-Valencia et al., 2017). Employees will typically be more engaged in creative activities when their leaders are authentic and innovative (Lei et al., 2021).

3.0 Research Model

The model is based on two theories: organisational culture theory (Cameron & Quinn, 2006) and creativity theory (Amabile et al., 1996). The Competing Values Framework (CVF) introduced by Cameron and Quinn (2006) categorises organisational culture into four categories: adhocracy, clan, market, and hierarchy. Furthermore, the componential theory of creativity proposed by Amabile et al. (1996) highlights the role of the work environment in fostering creativity. The author suggests that cultural factors contribute to the individual's ability to create unique ideas and solutions. Four hypotheses (H1–H4) are proposed to examine the relationships between organisational culture and individual creativity. Figure 2 illustrates the proposed research model and the hypothesised relationships between the organisational culture and the individual's creativity.

H1: Adhocracy culture has positively influenced individual creativity.

H2: Clan culture has positively influenced individual creativity.

H3: Market culture has positively influenced individual creativity.

H4: Hierarchy culture has positively influenced individual creativity.

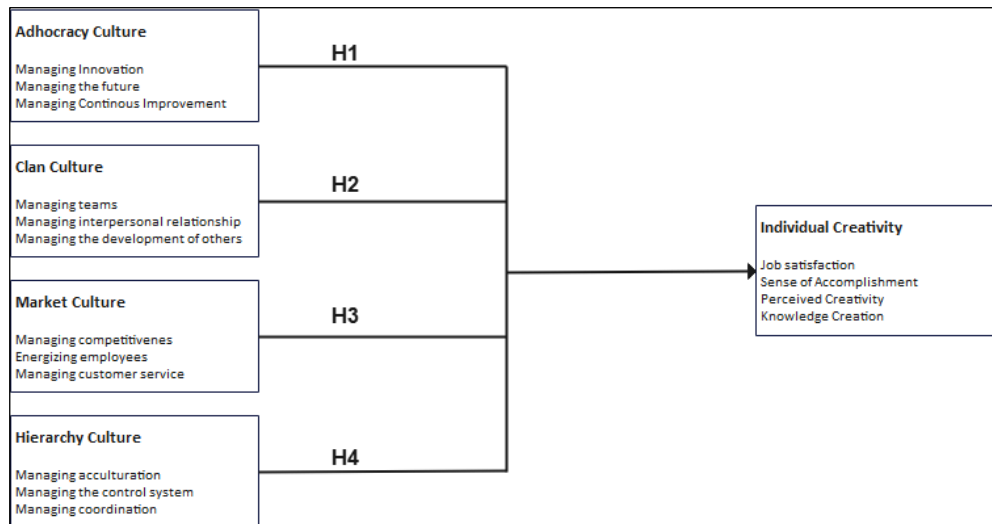


Fig. 2: Research Framework

4.0 Methodology

The study started with the development of a research instrument. The instruments were adopted from similar studies within the field of organisational culture, organisational performance, and organisational psychology. The questionnaire consists of 6 sections. Section A collects information regarding the respondents' demographic profiles. Section B until Section F meanwhile collect the data about the variables of the study, namely Adhocracy Culture (managing innovation, managing the future, and managing continuous assessment), Clan Culture (managing teams, managing interpersonal relationships, and managing the development of others), Market Culture (managing competitiveness, energising employees and managing customer service), Hierarchy Culture (managing acculturation, managing the control system and managing coordination), and Individual Creativity (job satisfaction, sense of accomplishment, individual creativity and knowledge creation). There are a total of 73 items in the study. The instrument was then pre-tested and sent for an expert review process. As a result of the expert review process, the amendment was made to the instrument before pilot testing. A total of 30 respondents were invited to participate in pilot testing. Next, the instrument was evaluated for reliability using Cronbach's Alpha coefficient. As a result, the instrument recorded the lowest value of 0.729 and the highest value of 0.981, indicating a sufficient result to confirm the instrument's reliability, as declared by (Nunnally, 1978).

Regarding population and sampling, the population for this study was selected among academicians in higher educational institutions in Malaysia. Thus, the research adopted convenience sampling, which is regularly applied in education and social sciences when conducting a qualitative study where researchers have ready access to existing target populations (Golzar et al., 2022). This method will be a good fit for your study when you plan to get people's insights and attitudes, and if you plan to produce hypotheses that will be tested in detail in future studies (Nikolopoulou, 2022). An online questionnaire was developed using Google Forms. Data collection took approximately 6 weeks after the approval of the ethics application. The data was analysed using Partial Least Square Structural Equation Modelling (PLS-SEM) using SmartPLS software version 3.2.8. The PLS-SEM method requires confirmation of the model based on the measurement and structural model. This study documented a total valid sample of 100 respondents, indicating a sufficient sample size for PLS-SEM. The following section shows the findings of the study.

5.0 Findings

Table 1 shows the demographic details of respondents. Based on the data, the majority of the respondents are female (N=75 or 75%) while males are represented by 25 respondents (N=25 or 25%). This is in line with the current academic scenario, which sees more female academicians than male academicians. In relation to respondents' age, most of the respondents are between 36-40 years old (N=37 or 37%), followed by 41-45 years old (N=19 or 19%). Interestingly, respondents aged 51 years or above are the third most frequent respondents, indicating their interest towards the outcome of the study. In response to academic qualification, as expected, the majority of respondents have a master's degree (N=54 or 54%), followed by a doctorate degree (N=45 or 45%). Moreover, academic position shows that most of the respondents are considered as experienced academics with the title of senior lecturer (N=65 or 65%). In relation to experience, the majority of respondents have at least 11 - 15 years of academic experience (N=32 or 32%).

Table 1: Demographic Details of Respondents

Item	Sub-Item	Frequency	Percentage
Gender	Male	25	25%
	Female	75	75%
Age	24 - 30 years	6	6.0
	31-35 years old	10	10.0

	36–40 years old	37	37.0
	41–45 years old	19	19.0
	46–50 years old	12	12.0
	51 years or above	16	16.0
Qualification	Bachelor's Degree	1	1.0
	Master's Degree	54	54.0
	Doctorate	45	45.0
Academic Position	Lecturer	23	23.0
	Senior Lecturer	65	65.0
	Associate Professor	8	8.0
	Others	4	4.0
Experience	1 - 5 years	19	19.0
	6 - 10 years	11	11.0
	11 - 15 years	32	32.0
	16 - 20 years	17	17.0
	21 - 25 years	11	11.0
	More than 25 years	10	10.0

5.1 Normality Test

A normality test was conducted using Mardia's multivariate normality test to assess the common method bias (Cain et al., 2017). Based on multivariate skewness ($\beta = 4520.404$, $p < 0.01$) and Mardia's multivariate kurtosis ($\beta = 5668.620$, $p < 0.01$), the results confirmed that the research data is slightly not normal, thus justifying the selection of Structural Equation Modelling Partial Least Square (PLS-SEM) for analysing the research data. On the other hand, all constructs also meet the requirement of VIF below 5.5, indicating the inexistence of common method bias for the study.

5.2 Convergent Validity

The first step in confirming the measurement model is to assess the convergent validity in terms of factor loading, composite reliability (CR) and average variance extracted (AVE). Table 2 shows the results of the convergent validity of the study. A total of a single run was conducted; results show that all indicators met the threshold provided (factor loading ≥ 0.5 , AVE ≥ 0.5 , CR ≥ 0.7) as recommended by Hair Jr et al. (2014). Therefore, it can be concluded that the model has achieved convergence validity assessment.

Table 2: Convergent Validity

Constructs	Factor Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Adhocracy Culture	0.717-0.865	0.933	0.943	0.582
Clan Culture	0.702-0.855	0.948	0.954	0.597
Market Culture	0.623-0.868	0.953	0.948	0.585
Hierarchy Culture	0.759-0.887	0.945	0.954	0.697
Individual Creativity	0.532-0.856	0.940	0.958	0.525

5.3 Discriminant Validity

The next step to confirmed measurement model is to assess discriminant validity using Heterotrait-Monotrait Ratio (HTMT) Test (Henseler et al., 2015). The following Table 3 shows the HTMT result of the study. The HTMT results indicated no value above 0.9, therefore confirming the achievement of discriminant validity, as well as completed the measurement model assessment.

Table 3: Heterotrait-Monotrait Ratio (HTMT) Test

	Adhocracy Culture	Clan Culture	Hierarchy Culture	Individual Creativity	Market Culture
Adhocracy Culture					
Clan Culture	0.772				
Hierarchy Culture	0.713	0.643			
Individual Creativity	0.669	0.708	0.595		
Market Culture	0.758	0.730	0.690	0.709	

5.4 Structural Model Analysis

The following Table 4 shows the final assessment of the structural model. A total of four hypothesis were tested. The results indicated that two hypotheses were accepted (H2 and H3) while H1 and H4 were rejected. Figure 3 shows the final model of the study.

Table 4: Structural Model Final Assessment

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Result
H1 Adhocracy Culture -> Individual Creativity	0.105	0.103	0.149	0.709	0.479	Rejected
H2 Clan Culture -> Individual Creativity	0.338	0.329	0.125	2.69	0.007	Accepted

H3	Market Culture -> Individual Creativity	0.299	0.294	0.109	2.749	0.006	Accepted
H4	Hierarchy Culture -> Individual Creativity	0.095	0.11	0.113	0.842	0.4	Rejected

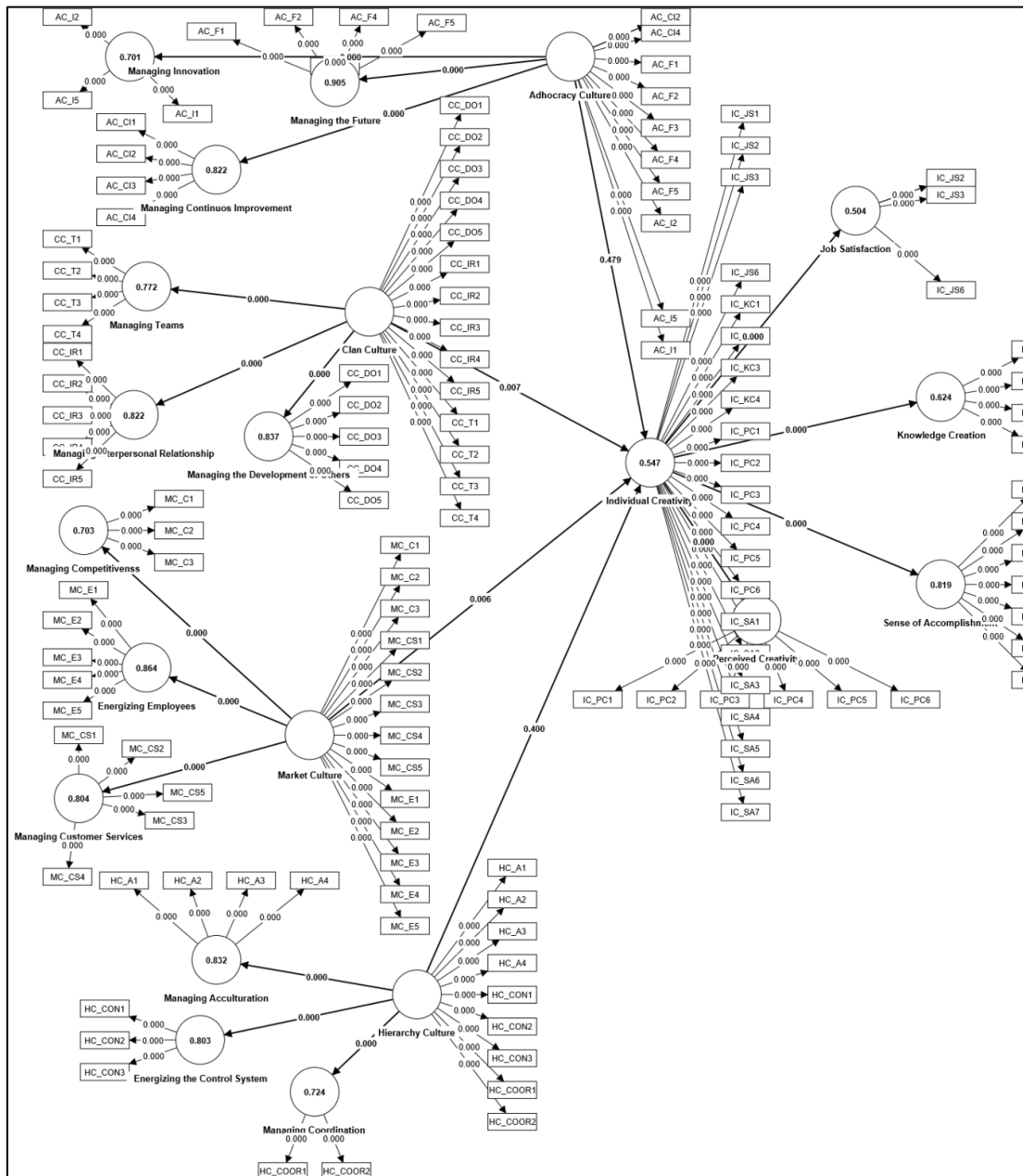


Fig. 3: Final Structural Model

6.0 Discussion

This study primarily aimed to investigate the antecedents of individual creativity among academicians at higher learning institutions (HEI) in Malaysia, specifically examining the influence of organisational culture on creativity. To ensure effective and high-quality research, several stages and levels of research were conducted to strengthen the study's findings. This research is covered with a theoretical insight to validate the instruments pertaining to the study. This step includes expert review and face validity. The validated instruments are then tested through a pilot study to assess their reliability and suitability for the sample population. This paper then undergoes practical application to examine and address the outcomes in line with the research context. The findings that have been discussed

indicate that various organisational cultures may impact individual creativity. However, for the subjects of this study, adhocracy and hierarchy cultures do not significantly impact individual creativity, while clan and market cultures have a positive influence.

6.1 Adhocracy Culture and Individual Creativity

Contrary to expectations, the study found no significant relationship between adhocracy culture and individual creativity among academicians in higher learning institutions in Malaysia. An adhocracy culture can foster an environment within an organisation that encourages creativity and drives innovation by promoting flexibility and constant learning. Prior studies believed that an adhocracy culture encourages employee creativity (Gupta, 2011; Hung et al., 2022; Lau & Ngo, 2004; Naranjo-Valencia et al., 2017). While adhocracy culture is believed to encourage creativity, it may be less emphasised or not fully realised in the Malaysian higher education sector, which is facing challenges related to internationalisation, including funding issues that might limit the creative potential of individuals (Tham & Kam, 2008).

6.2 Market Culture and Individual Creativity

The study found that market culture, which focuses on delivering superior value to customers, has a significant positive impact on individual creativity. This result matches previous research, which suggests that a market culture can encourage creativity by motivating employees and managers to think creatively, especially in terms of competitiveness and customer service. In the Malaysian context, HEIs are increasingly focusing on international rankings, research output, and industry collaboration, a market-oriented culture may drive academicians to engage in more creative and innovative activities to meet these performance expectations. The market culture is a results-driven environment that emphasises winning, overtaking the competition, increasing share, and market leadership (Hafit et al., 2015). To uphold competitiveness and strengthen institutional reputation, academicians might be encouraged to adopt creative approaches to teaching, research, and academic service.

6.3 Clan Culture and Individual Creativity

The study also found a positive relationship between clan culture and individual creativity. Although existing literature reports negative impacts of clan culture within organisations (Acar & Acar, 2012; Cameron & Quinn, 2006; Gilson & Litchfield, 2017; Naranjo-Valencia et al., 2017), this study shows the opposite. Malaysian HEIs seem to provide a more supportive environment for creativity within a clan culture, due to the emphasis on teamwork ethics and harmonious relationships. However, effective communication among organisational members is essential for fostering cross-cultural relationships in the workplace (Choo et al., 2023). The fundamental principle of clan culture is that people behave in a positive manner when they experience trust, loyalty, and a sense of belonging within the organisation. The main values promoted are connection, affiliation, teamwork, trust, and support (Strengers et al., 2022).

6.4 Hierarchy, Culture, and Individual Creativity

In the Malaysian HEIs context, the preference for hierarchical structures may constrain the ability of academicians to engage in creative and innovative activities. The study finds that there is a lack of significant relationships between hierarchy culture and individual creativity. This is not a new finding, as there is evidence from studies supporting the negative influence on creativity (Acar & Acar, 2012; Liu et al., 2016; Naranjo-Valencia et al., 2017).

6.7 Practical Implications

For HEIs in Malaysia, these findings suggest several practical steps to enhance individual creativity among academicians. First, universities should promote a clan culture that focuses on teamwork, trust, and shared values. Encouraging collaboration and providing opportunities for informal interactions among staff can create a supportive environment that boosts creativity. Second, incorporating aspects of market culture, like setting clear goals and rewarding achievements, can also encourage creativity, especially in research and academic work. However, management should be aware of the risks of excessive competition, making sure it doesn't cause unnecessary stress or burnout.

7.0 Conclusion

The results indicate that clan and market cultures positively influence individual creativity, while adhocracy and hierarchy cultures do not. These findings highlight the importance of fostering a supportive, collaborative environment (clan culture) and maintaining a results-oriented approach (market culture) to enhance creativity within academic institutions. There are gaps in the findings where adhocracy and hierarchy cultures do not impact individual creativity. The contributing factors can be further explored in future research to better understand their influence on individual creativity. Regarding the sample population, future studies could expand the respondent group to include both private and public HEIs.

Acknowledgements

The authors would like to thank the financial support received from Universiti Teknologi MARA Kelantan Branch, Malaysia, under Internal Grant 600-TNCPI 5/3/DDN (03) (001/2022).

Paper Contribution to Related Field of Study

This paper contributes to the understanding of individual creativity among academicians, focusing on the higher learning institutions in Malaysia. The research also offers both theoretical and practical contributions to the field of individual creativity. The study identifies the antecedents of an individual's creativity, which contribute to the theoretical development of creativity research. Besides, this study also contributes to government planning to fulfil the nation's aspirations. The study also gives insight to policymakers and leaders in higher learning institutions to identify possible initiatives to encourage creativity among academicians.

References

- Abdullahi, M., Raman, K., & Solarin, S. (2021). Effect of organizational culture on employee performance: A mediating role of employee engagement in Malaysia educational sector. *International Journal of Supply and Operations Management*, 8(3), 232-246.
- Acar, A. Z., & Acar, P. (2012). The effects of organizational culture and innovativeness on business performance in healthcare industry. *Procedia-Social and Behavioral Sciences*, 58, 683-692.
- Amabile, T. (2011). *Componential theory of creativity*. Harvard Business School Boston, MA.
- Amabile, T. M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California management review*, 40(1), 39-58.
- Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of management journal*, 39(5), 1154-1184.
- Amabile, T. M., & Pratt, M. G. (2016). The dynamic componential model of creativity and innovation in organizations: Making progress, making meaning. *Research in organizational behavior*, 36, 157-183.
- Anderson, N., Potočník, K., & Zhou, J. (2014). Innovation and creativity in organizations: A state-of-the-science review, prospective commentary, and guiding framework. *Journal of management*, 40(5), 1297-1333.
- Appiah-Adu, K., Fyall, A., & Singh, S. (2000). Marketing culture and customer retention in the tourism industry. *The Service Industries Journal*, 20(2), 95-113.
- Bamber, C. J., & Elezi, E. (2020). What culture is your university? Have universities any right to teach entrepreneurialism? *Higher Education Evaluation and Development*, 14(1), 19-32.
- Berg, J. M. (2014). The primal mark: How the beginning shapes the end in the development of creative ideas. *Organizational Behavior and Human Decision Processes*, 125(1), 1-17.
- Cain, M. K., Zhang, Z., & Yuan, K.-H. (2017). Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence and estimation. *Behavior research methods*, 49, 1716-1735.
- Cameron, K. S., & Quinn, R. E. (2006). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*. Wiley. <https://books.google.com.my/books?id=dOuuBgAAQBAJ>
- Chege, S. W., Gichunge, E., & Muema, W. (2022). Clan culture implementation plan and performance of Kenyan universities. *Journal of Strategic Management*, 2(2), 76-82.
- Choo, L. S., Bakar, H. A., & Connaughton, S. L. (2023). Understanding workplace culture in Malaysia: cultural characteristics of Chinese-Malaysian ethnic society. *International Journal of Business and Globalisation*, 34(2), 131-151.
- Gallagher, S., Brown, C., & Brown, L. (2008). A strong market culture drives organizational performance and success. *Employment Relations Today*, 35(1), 25-31.
- Ghosh, K. (2015). Developing organizational creativity and innovation: Toward a model of self-leadership, employee creativity, creativity climate and workplace innovative orientation. *Management Research Review*, 38(11), 1126-1148.
- Gilson, L. L., & Litchfield, R. C. (2017). Idea collections: a link between creativity and innovation. *Innovation*, 19(1), 80-85. <https://doi.org/10.1080/14479338.2016.1270765>
- Golzar, J., Noor, S., & Tajik, O. (2022). Convenience sampling. *International Journal of Education & Language Studies*, 1(2), 72-77.
- Gupta, B. (2011). Organisational culture and creative behaviour: moderating role of creative style preference. *International Journal of Innovation and Learning*, 10(4), 429-441. <https://doi.org/10.1504/ijil.2011.043100>
- Hafit, N., Asmuni, A., Idris, K., & Wahat, N. (2015). Organizational culture and Its effect on organizational innovativeness In Malaysian higher education institution. *International Academic Research Journal of Social Science*, 1(2), 118-124.
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European business review*, 26(2), 106-121.
- Hartmann, A. (2006). The role of organizational culture in motivating innovative behaviour in construction firms. *Construction Innovation*, 6(3), 159-172. <https://doi.org/10.1108/14714170610710712>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135.
- Higgins, J. M. (1995). Innovation: The core competence. *Planning review*, 23(6), 32-36.

- Hung, Y.-C., Su, T.-C., & Lou, K.-R. (2022). Impact of organizational culture on individual work performance with national culture of cross-strait enterprises as a moderator. *Sustainability*, 14(11), 6897.
- Kwon Choi, B., Koo Moon, H., & Ko, W. (2013). An organization's ethical climate, innovation, and performance. *Management Decision*, 51(6), 1250-1275. <https://doi.org/10.1108/MD-Sep-2011-0334>
- Lau, C. M., & Ngo, H. Y. (2004). The HR system, organizational culture, and product innovation. *International Business Review*, 13(6), 685-703. <https://doi.org/https://doi.org/10.1016/j.ibusrev.2004.08.001>
- Lei, S., Qin, C., Ali, M., Freeman, S., & Shi-Jie, Z. (2021). The impact of authentic leadership on individual and team creativity: a multilevel perspective. *Leadership & Organization Development Journal*, 42(4), 644-662.
- Liu, W., Zhang, P., Liao, J., Hao, P., & Mao, J. (2016). Abusive supervision and employee creativity. *Management Decision*, 54(1), 130-147. <https://doi.org/10.1108/MD-09-2013-0443>
- Martins, E., Martins, N., & Terblanche, F. (2004). An organizational culture model to stimulate creativity and innovation in a university library. In *Advances in Library Administration and Organization* (Vol. 21, pp. 83-130). Emerald Group Publishing Limited.
- Naranjo-Valencia, J. C., Jimenez-Jimenez, D., & Sanz-Valle, R. (2017). Organizational culture and radical innovation: Does innovative behavior mediate this relationship? *Creativity and Innovation Management*, 26(4), 407-417.
- Nikolopoulou, K. (2022). What is convenience sampling?| Definition & examples. *Scribbr. com website*.
- Nunnally, J. C. (1978). An overview of psychological measurement. *Clinical diagnosis of mental disorders: A handbook*, 97-146.
- Ogbeibu, S., Senadjki, A., & Gaskin, J. (2018). The moderating effect of benevolence on the impact of organisational culture on employee creativity. *Journal of Business Research*, 90, 334-346.
- Oldham, G. R., & Baer, M. (2012). Creativity and the work context. In *Handbook of organizational creativity* (pp. 387-420). Elsevier.
- Racelis, A. D. (2010). The influence of organizational culture on the performance of Philippine banks. *Social science diliman*, 6(2).
- Rodrigues, A. P., Jorge, F. E., Pires, C. A., & António, P. (2019). The contribution of emotional intelligence and spirituality in understanding creativity and entrepreneurial intention of higher education students. *Education+ Training*, 61(7/8), 870-894.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: Where should we go from here? *Journal of management*, 30(6), 933-958.
- Singh, V., & Shanker, R. (2012). Marketing culture: Ggap analysis of select Indian commercial banks. *IRACST-International Journal of Research in Management & Technology (IJRMT) Marketing*, 2(3).
- Strengers, J., Mutsaers, L., van Rossum, L., & Graamans, E. (2022). The organizational culture of scale-ups and performance. *Journal of Organizational Change Management*, 35(8), 115-130.
- Tham, S. Y., & Kam, A. J. Y. (2008). Internationalising higher education: Comparing the challenges of different higher education institutions in Malaysia. *Asia Pacific Journal of Education*, 28(4), 353-367.
- Yeh-Yun Lin, C., & Liu, F. C. (2012). A cross-level analysis of organizational creativity climate and perceived innovation: The mediating effect of work motivation. *European Journal of Innovation Management*, 15(1), 55-76.
- Zhao, S., Jiang, Y., Peng, X., & Hong, J. (2021). Knowledge sharing direction and innovation performance in organizations: do absorptive capacity and individual creativity matter? *European Journal of Innovation Management*, 24(2), 371-394.