# ORGANISATIONAL CULTURE IN INDONESIAN SCHOOLS DURING COVID-19: PERCEPTIONS OF SCHOOL PRINCIPALS

Jenny Ngo<sup>a</sup>

Institut Sains dan Teknologi Terpadu Surabaya

**Abstract:** This study investigates and identifies the organizational culture of Indonesian schools during COVID-19 through the lens of principals. We collected survey data from 93 applications of the OCAI instrument. Our data analysis results show that Indonesian schools' organizational culture is a unique blend of the four cultural types, with clan and hierarchy culture dominating, followed by adhocracy and, to a lesser extent, market culture. The most commonly ingrained concepts in the culture are job security and internal stability, coordination to ensure the smooth operation of online education, school commitment to innovation in online education, and school management through collaboration and teamwork. Our findings offer insights regarding how the COVID-19 pandemic transformed or changed the organizational culture of schools in Indonesia, which can be used to respond quickly to the *Merdeka Belajar* (Independent Learning) policy and enhance school performance in the post-COVID-19 pandemic.

Keywords: COVID-19, Indonesia, OCAI, organizational culture, school principals

#### Introduction

The *Merdeka Belajar* (Independent Learning) policy was announced in early 2020 by the Minister of Education and Culture, *Nadiem Makarim*. The policy's ultimate goal is to promote an autonomous and flexible learning environment by transitioning from teacher-centered to student-centered learning, as well as to foster an innovative learning culture through the use of technology (Kemendikbud, 2020a). To implement *Merdeka Belajar*, all schools must modify their curricula to include project-based learning strategies that help students build knowledge and strengthen significant learning while studying independently. In this regard, schools must be able to provide interactive, direct, appealing, and in-depth learning.

Before the implementation of the Independent Learning Policy spread throughout Indonesia, COVID-19 hit 190 nations, including Indonesia, employing various social distancing, lockdown, and quarantine measures to stop the spread of infection, with schools being the first to close, affecting nearly 1.7 billion students globally (World Bank, 2020). As a result, on March 17, 2020, the government issued the first official COVID-19 virus-fighting measures in Indonesia, encouraging online learning and work from home (Kemendikbud, 2020b), affecting 45.21 million students (Annur, 2021a) across 217.283 Indonesian schools (from primary to secondary) during the 2020/2021 academic year (Annur, 2021b).

Three critical components of Indonesian school education have changed as a result of the epidemic. To begin with, pedagogical transitions from traditional classroom models to remote or virtual classroom models are occurring (Kemendikbud, 2020a). The use of technology, such as the Internet, is the second factor. Many schools, principals, teachers, students, and parents are unprepared for remote online education in terms of online learning platforms and web-videoconferencing tools

a Correspondence can be directed to: mooi\_mice@yahoo.com

(Paddock & Sijabat, 2020). Third, schools must enforce rules, regulations, and policies to guarantee that teaching and learning are consistent across school systems (Kemendikbud, 2020a).

Indonesian schools are expected to be dynamic organizations, reflecting the fact that they have had to deal with last-minute closures as they prepare to move classes online and assess the impact of the virus on staff and student well-being (Bush, 2021). Schools may have shared specific values to help them manage their daily operations in order to respond immediately to the COVID-19 crisis. Schools may have shaped new beliefs, norms, processes, and strategies that resulted in the development of a new organizational culture (Istianda & Anthony, 2022).

This study investigated how the COVID-19 pandemic influenced the organizational culture of Indonesian schools. Thus, the purpose of this research was to investigate and identify the organizational culture of schools in Indonesia during COVID-19. Beyond the primary goal, the findings of this study are hoped to assist schools in successfully implementing the *Merdeka Belajar*, in which the disruptive impact of COVID-19 has accelerated the digital transformation process in schools (Haffar et al., 2023) related to online learning, leading to students' independent learning (Ngo & Ngadiman, 2019; Kemendikbud, 2020a). Furthermore, Istianda and Anthony (2022) argue that schools must be supported by their organizational culture in order to implement Independent Learning, as organizational culture is an important intangible resource for achieving strategic goals (Zhang et al., 2023). As a result, the study posits its importance that the study's findings will assist schools in understanding how their organizational culture can respond quickly to *Merdeka Belajar* (Independent Learning) implementation and its impact on school performance in the post-COVID-19 pandemic.

The structure of this study is as follows. The concepts of organizational culture and the Organizational Culture Assessment Instrument (OCAI) are first introduced to fully describe the study. Methods are then defined, including survey participants, procedures, measures, and data analysis. The empirical results are then presented, analyzed and discussed. Finally, the findings, implications, limitations and future directions of the study are discussed.

#### **Organizational Culture**

The modern definition of organizational culture includes the following elements: organizational values, dominant leadership styles, languages and symbols, practices and routines, and definitions of success (Quinn & Cameron, 2011; Hofstede Insights, n.d.). According to Weiner (2009), analyzing people's attitudes and behaviors is one way to understand the assessment culture in a given institution. The same is true according to Cameron and Quinn (2011, p. 22) who stated that "an organization's culture is reflected by what is valued, the dominant leadership styles, the language and symbols, the procedures and routines, and the definitions of success that make an organization unique."

There are many models available for assessing organizational culture and effectiveness. A literature study by David, Valas, Raghunathan (2018) described 14 models of organizational culture assessment tools available. Some models include the Organizational Culture Inventory, Hospital Culture Questionnaire, Organizational Culture Survey, Nursing Unit Cultural Assessment Tool, and the Organizational Culture Assessment Instrument (OCAI). According to David et al. (2018), OCAI by Cameron and Quinn (2011) has more advantages: "it is a validated research method for examining organizational culture, it shows better validity and reliability, it is an instrument used by numerous researchers, it is a model that is still in use today, and it is quick and simple to assess" (pp. 183-186).

Given that schools had to adjust to new surroundings and policies during the pandemic, it was determined that the OCAI was a suitable conceptual model for this study's exploration and investigation of organizational culture types in Indonesian schools. First, the OCAI's conceptual advantage is that it emphasizes a dynamic alignment of the internal-external and stability-flexibility dimensions rather than a single, definitive 'best' organizational culture (Cameron & Quinn, 2011). Successful organizations, according to Cameron and Quinn (2011), are adaptable and make use

of all four sets of values when necessary. Second, according to Caliskan and Chu (2019), the OCAI survey instrument has been extensively utilized and has proven to be successful in classifying various organizational cultures. Finally, the OCAI underpins organizational cultural dynamics, in which these organizational cultural types are crucial for organizational effectiveness (Cameron & Quinn, 2011; Caliskan & Chu, 2019).

# The Organizational Culture Assessment Instrument (OCAI)

The OCAI employs Quinn and Rohrbaugh's (1983) four value quadrants to represent the four types of organizational culture. It, shown in Figure 1, combines two dimensions of competing values, reflecting the degree of flexibility to control and the internal emphasis on external focus, to produce four quadrants. The four quadrants symbolize the four major cultural typologies that describe the various dimensions and competing values that characterize human behavior: adhocracy, hierarchy, market, and clan culture. The four quadrants of culture are described in greater detail below.

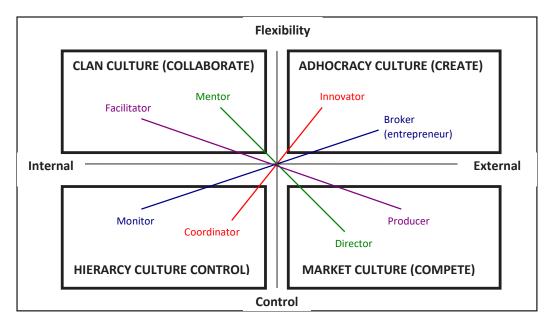


Figure 1. The OCAI based on the Competing Values Framework Source: Cameron and Quinn (2011), adopted from Figure 3.1, p. 39

# The (Four) Culture Types

The Clan Culture (the Collaborative) is located in the upper left quadrant and represents a flexible and internally focused organization. This culture provides a happy atmosphere while working, and each member's place where they work together to share disclosure of personal information, much like a family (Ngo, de Boer & Enders, 2014; Tyler, 2018). It implies that loyalty, interpersonal relationships, teamwork, open communication, and tradition are adhered to by an organization (Cameron & Quinn, 2011). As a result, members are extremely dedicated to the organization (Tyler, 2018). Leaders are viewed as mentors and facilitators with a collaborative attitude.

The Adhocracy Culture (the Create) is represented in the upper-right quadrant by flexibility and external focus. This culture fosters a dynamic and creative work environment where employees are encouraged to take calculated risks with every decision they make (Tyler, 2018). Leaders in this culture act as innovators and risk-takers in every decision (Cameron & Quinn, 2011). Every innovation

#### Jenny Ngo

serves as an organizational link to a culture that is constantly evolving. This culture is characterized by constantly evolving behavior that seeks out novel resources and innovations (Tyler, 2018). As a result, the availability of new products or services is regarded as a result of an organization's success. The output result that innovates, transforms, and exhibits freedom is the driving value (Tyler, 2018).

The Market Culture (the Compete) is located in the lower-right quadrant, opposite the clan, where control and external focus are important dimensions. This culture is typical of a results-oriented workplace, emphasizing long-term concern for competitiveness and winning (Cameron & Quinn, 2011). In this culture, efficiency in finishing tasks on time is valued above all else. Organizations always have a competitive focus with competitors in achieving objectives (Tyler, 2018). Thus, the primary goals of these organizations with this culture are goal achievement, consistency, and competitiveness. Leaders are hard-drivers and producers (Cameron & Quinn, 2011).

The Hierarchy Culture (the Control) is located in the lower-left quadrant, with control and internal focus being the key dimensions. Workplace culture is very structured and formal. Every action is a structured activity. Based on existing procedures, by applicable regulations. The following values are regarded as important: formal policies and the smooth operation of the organization (Tyler, 2018). This culture promotes long-term goals such as organizational stability, performance, efficiency, and smooth operations (Cameron & Quinn, 2011). The success of an organization can be measured by its level of management reliability, smooth running scheduling, and cost efficiency. Furthermore, employee management must be done by focusing on each guaranteed job and the predictability of results (Tyler, 2018).

### OCAI Research in the Educational Sector

Aside from business, some studies look into the organizational culture found in schools and academic institutions. Ramachandran et al. (2011), for example, investigated organizational culture in Malaysian public and private higher education institutions. Market and adhocracy cultures, according to the study's findings, are prevalent in public institutions. In general, the hierarchical dimensions of public and private institutions are high. Because their income is dependent on the market, public institutions have a stronger clan culture than private institutions. Zhu and Engels (2014) investigated teachers' and students' perceptions of instructional innovation and its relationship to organizational culture in Chinese universities. The study, which took place at six different universities, found that educational innovations and institutional culture are inextricably linked. Goal orientation and collegial relationships were the most important aspects of organizational culture for practicing instructional innovation. Berkemeyer et al. (2015, p.94) validated "the OCAI-SK instrument based on Cameron and Quinn's OCAI which can be used to investigate school culture in German-speaking countries". The findings from 40 schools revealed that the "majority of them had a clan culture and only a few were adhocratic" (ibid, p. 95). Based on this, it was proposed that schools in Germany are internal-process oriented, but organizationally flexible due to their governmental embedment. The low-reliability values and the prevalence of the adhocracy culture may raise concerns about whether educational institutions are innovative or willing to take risks.

Caliskan and Zhu (2019) investigated student perceptions of the current organizational culture type in four Turkish public universities using OCAI. The findings through surveys and interviews revealed and validated that the "dominant culture type of Turkish universities regarding students is hierarchy followed by market culture" (p. 282). Kheir-Faddul et al. (2019) studied principals' perceptions of their values and the type of organizational culture in schools in Northern Israel's Druze sector, where "clan culture was found to be the most dominant, followed by market and adhocracy culture" (p. 216). The principals foster trust within teams, provide guidance, and inspire employees to be creative and innovative. In addition, Johansyah (2022) investigated organizational culture mapping at the Faculty of Economics, University of Borneo Tarakan, using the organizational culture assessment instrument (OCAI). According to the findings, the Faculty of Economics' current

and expected organizational culture is more akin to a Clan culture, with a focus on human resource development, loyalty, and organizational function as a family.

# **Research Objectives and Research Questions**

This study aimed to identiy school principals' perceptions of organizational culture types in Indonesian schools during COVID-19. This study sought to:

- 1. to investigate the organizational culture of Indonesian schools, and
- 2. identify the predominant culture item(s) that contributed to the organizational culture of Indonesian schools.

The research objectives define the main research question of the study: How do principals perceive the organizational culture of Indonesian schools? What culture item(s) contributed most to the organizational culture of Indonesian schools?

# Methods

### Research Design and Rationale

The objective of this research was to examine the organizational culture of Indonesian schools as perceived by principals, as well as the factors that contribute to this culture. In this study, a questionnaire survey was used as the best approach in order to achieve the intended objectives. Although employing multiple methods may produce more accurate results, this study considered other constraints such as cost, available budget, and time (Remenyi et al., 1998). The primary benefit of survey research is that it requires less time and money than face-to-face interviews (Babbie, 2013). Furthermore, it is the most effective method for covering a large geographical area like Indonesia while representing a specific population (Bacon-Shone, 2022). As a result, broad standardized information from samples can be extracted (Babbie, 2013). Furthermore, unlike face-to-face interviews, respondents can complete the questionnaire at their own pace (Bacon-Shone, 2022). This survey method is also widely used in social science research, making it a reliable empirical validation method (Babbie, 2013; Bacon-Shone, 2022).

This study used the Organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 2011) along with a four-Likert scale survey. When analyzing the data, we followed this reasoning. Fundamentally, the Likert-point scale allows people to express how much they agree or disagree with a specific statement, as well as their positive-to-negative level of agreement or feeling about the question or statement (Mcleod, 2023). The study's survey asked principals whether they strongly disagreed, disagreed, agreed, or strongly agreed with each OCAI statement. However, the distinction between the four Likert-point scales is frequently subtle (Ellis, 2024). Because the response categories in Likert scales are ranked, the frequency procedure is appropriate for ordinal data (Jamieson, 2004). It is possible to present the frequencies of each scale in a table for our study (see Table 1 for sample frequencies), but this provides little additional information. To identify the dominant school culture in Indonesia, we divided survey scores into four rating categories, in addition to 'unfavorable' (strongly disagree and disagree) and 'favorable' (agree and strongly agree). We transformed and recoded the scale scores, combining 'strongly agree' and 'agree' to create the 'favorable' variable. To see the results of our recoding, we run the Frequencies command with the new variable 'favorable'. The findings allow us to identify the principals' perceived dominant culture type(s), as well as the most commonly imbibed cultures in Indonesian schools. This analysis, while logical and meaningful, limits the study's results. The findings of this simple analysis may be insignificant for each culture; however, the purpose of this study is not to investigate the significance of each culture type, but rather to report on the dominant types and most contributing cultural items within that culture.

Dominant Characteristics		Frequency (Percentage) (N = 93)				
Culture Type	During the pandemic,	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)	
Clan	Q1. The school is a very personal place. It is like an extended family. People seem to share a lot of themselves.	-	4 (4.3)	37 (39.8)	52 (55.9)	
Adhocracy	Q2. The school is a very dynamic and entrepreneurial place, and people are willing to take risks.	10 (10.8)	13 (14)	40 (43)	30 (32.3)	
Market	Q3. The school is very results oriented, and the main concern is getting work done.	3 (3.2)	13 (14)	45 (48.4)	32 (34.4)	
Hierarchy	Q4. The school is a very controlled and structured place. Formal procedures generally govern what people do.	-	6 (6.5)	49 (52.7)	38 (40.9)	

#### Table 1. Sample Descriptive Statistics Organizational Culture

# Sample and Data Collection

Participants were school principals who attended the Teacher Professional Education Program and the Teacher Training and Science Education Program, both of which were held online in September 2020. The Indonesian principals were from private and public schools in 30 cities across Sumatra, Kalimantan, Sulawesi, Java, Madura, Bali, and East Nusa Tenggara. The Google Forms online survey was distributed to 101 principals and was open for two weeks, from February 1 to February 15, 2021. There were 93 valid responses, for a 97 per cent response rate. Figure 2 in the Findings depicts the demographic data of research participants.

We are aware of the study's main limitations regarding the generalizability of the results. First, the survey was limited to school leaders involved in educational programs. Second, the number of respondents is considered small. Arguably, the data and results have limited generalizability to other schools. Despite its limitations, the findings of this study have the potential to add to the literature and future research, particularly in terms of understanding the challenges faced by school leaders during the COVID-19 pandemic. The new organizational culture profile of Indonesian schools will undoubtedly aid them in more effectively implementing *Merdeka Belajar* (see Contribution and Implications section).

# Measures

The Organizational Culture Assessment Instrument (OCAI) (Cameron & Quinn, 2011) was used in this study to help principals identify, analyze, and eventually understand the organizational culture of schools in Indonesia (Cameron & Quinn, 2011). The OCAI is a validated organizational culture assessment tool and the most useful framework for determining organizational effectiveness criteria with competing managerial leadership roles (Quinn & Rohrbaugh, 1981, 1983; Nguyen et al., 2020). The self-reporting OCAI survey has six criteria: Dominant Characteristics, Organizational

Leadership, Management of Employees, Organizational Glue, Strategic Emphases, and Criteria of Success. Each criterion has four substitutes, totalling 24 items that comprise the four culture types: Clan, Adhocracy, Market, and Hierarchy culture.

The OCAI survey was slightly modified to meet the goal of this context-based study. First, at the beginning of each item, the phrase "during the COVID-19 pandemic..." [Di masa pandemik...] was added. Second, all 24 items were translated into Bahasa Indonesia using simpler statements while maintaining the original meaning. The goal of the translated survey was to clearly convey the messages of the statements to avoid any misinterpretation of the meaning and to become more familiar with the subject and context under study, which were school principals and the pandemic, respectively. Third, the assessment of the OCAI survey for this research was limited to the organizational culture of Indonesian schools at the time it was conducted. The preferred culture that Indonesian principals perceive is not evaluated in this study. Fourth, the response of the 24 items adopted from the OCAI survey (Cameron & Quinn, 2011) was changed from an ipsative response format (in which participants allocate 100 points among four statements to indicate organizational relevance to the four cultures) to a 4-Likert scale, with 1 being strongly disagree, 2 being disagree, 3 being agree, and 4 being strongly agree. This modification was made to accommodate the online testing format. Previous research has confirmed the instrument's validity and reliability in both testing versions. Di Stefano and Scrima (2016) conducted a validation study using both its ipsative and Likert versions adapted to the Italian context. The results showed that both exploratory factor analysis (EFA) on Likert response scale data and multidimensional scaling (MDS) on ipsative response scale data yielded good validity and reliability estimates for measuring the CVF model.

# The Reliability and Validity of the Current OCAI Survey

The current research survey included 24 OCAI items (six items for each cultural type), with responses using a 4-point Likert scale: 1 (strongly disagree), 2 (disagree), 3 (agree), and 4 (strongly agree). Demographic characteristics such as age, gender, years of service, type of school (public or private), and place of residence are also included to describe the test sample. A pilot survey was conducted, with five principals from 101 serving as the sample population. Some additional COVID-19-related questions (non-OCAI items) were removed from the survey due to redundancy, and the survey was revised in response to group feedback. The five pilot study respondents were excluded from the analysis, leaving 96 principals as the sample population. To validate the final instrument, the survey was distributed to five of the 96 respondents. Following approval of the final instrument by the five respondents, the survey was sent to the remaining 91 principals in the sample population. We received 96 total responses after combining the five and 91 respondents. Out of 96 respondents, three did not complete all of the survey questions, leaving 93 valid responses. As a result, it received 97% of all responses.

In terms of the research instrument's reliability and validity, this study confirmed that the modified instrument had good construct validity and reliability. Clan culture factor loading ranged from .578 to .830, Adhocracy culture factor loading ranged from .585 to .827, Market culture factor loading ranged from .624 to .788, and Hierarchy culture factor loading ranged from .678 to .775. Scale reliability has been demonstrated to be adequate for each of the four cultures, with Cronbach's alpha values ranging from .76 to .82, which are higher than the recommended value of .70 (Babbie, 2013). The findings of this study are consistent with those of prior studies. Choi et al. (2010) used internal consistency and factorial validation analyses to evaluate and confirm the validity of the Korean translation of the OCAI. The use of OCAI in the Australian setting was verified by Heritage et al. (2014). Using CFA, Heritage et al. (2014) discovered that a good model fit was found for both existing and expected cultures. The OCAI has moderate reliability and construct validity in measuring four types of organizational culture in a healthcare environment in Vietnam, according to Nguyen et al. (2020). Our findings support Cameron and Quinn's (2011) contention that the OCAI is a reliable tool for determining organizational cultural types.

# Data Analysis

The SPSS statistical program version 26 was used to analyze the data collected from 93 respondents. The OCAI survey included 24 items from six key dimensions of OCAI and used a Likert-style rating scale of 1 to 4, with 1 indicating strongly disagreed and 4 indicating strongly agreed. In this section, we followed the rationale explained earlier in the Method (see Research Design and Rationale section). To answer our first research question, we first classified 24 items into four organizational culture types: clan, adhocracy, market, and hierarchy, with each culture type containing six items. Second, we recoded each item variable in each culture type as a unique variable by combining the Agree and Strongly Agree categories to create the favorable category. Finally, we calculated the frequencies of the six items in each cultural type; the results are shown in Table 2. The higher favorable score represents the more dominant culture, while the lower favorable score represents the less dominant culture, as depicted in Figure 3 of the Results section.

To answer our second research question, we followed a similar procedure. We classified 24 items into six dimensions of OCAI, with each dimension containing four culture types. We recoded each item in each dimension by combining the Agree and Strongly Agree categories to create the favorable category. Appendix A displays the frequencies for each cultural item across dimensions. The high frequency of principals' perceived responses to items representing each cultural type in each dimension determines which items contribute most to the organizational culture of Indonesian schools (see Appendix B).

# Results

# Sample Profile

Figure 2 depicts demographic information from the first OCAI survey participants. The study included 93 school principals, 57% of whom were females, 52% worked in private schools, 26% were under 30 years old, and 26% were between 41 and 50 years old. Almost 51% of principals have served for less than 5 years, while 23% have served for more than 10 years.

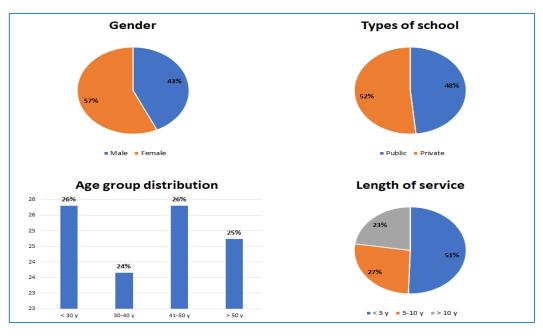


Figure 2. Demographic Information from the First OCAI Survey Participants

# School Organizational Culture in Indonesia.

Respondents were asked to rate 24 items related to the four different cultural types to answer our first research question. According to Table 2, school culture in Indonesia is a unique blend of four culture types: Clan culture (544), Hierarchy culture (541), Adhocracy culture (497), and Market culture (459). A higher score indicates that the culture type is more dominant. According to the findings, Clan and Hierarchy culture predominates among organizational cultures in Indonesian schools, followed by Adhocracy culture, and, to a lesser extent, Market culture. Based on human collaboration and teamwork, Indonesian schools were portrayed as a family where people are loyal and trustworthy. Simultaneously, schools were a formalized and structured workplace, characterized by inter-relationship stability, and people were committed to innovation in response to the pandemic's sudden shift to online education. To some extent, we can see that schools emphasize competitive activities and achievement. Figure 3 depicts the organizational culture of Indonesian schools during the pandemic, which is a synthesis of all four cultures, with a dominant clan and hierarchy, some adhocracy, and, to a lesser extent, market culture, answering our first research question.

Culture	Sum of Agree and Strongly Agree (N of Items = 6; N = 93)	Cronbach's Alpha (N of Items = 6; N = 93)
Clan	544	0.80
Hierarchy	541	0.81
Adhocracy	497	0.76
Market	459	0.82

Table 2	Descriptive	Statistics of	of School	Organizational	Culture in Indonesia
---------	-------------	---------------	-----------	----------------	----------------------

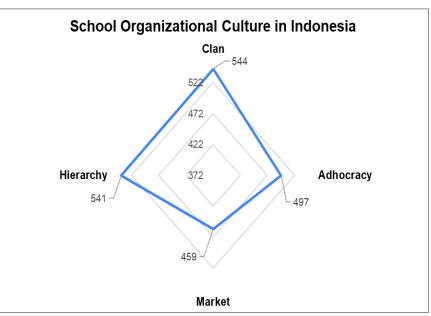


Figure 3. School Organization Culture in Indonesia

# The Items Contributing to the Organizational Culture of Indonesian Schools

As shown in Appendix B, the 24 items that comprise the six dimensions of OCAI were evaluated using frequencies in the favorable category. For this study, the items that contributed the most to

Indonesian school organizational culture were determined by the high frequency of responses to the items representing each culture type in each dimension. The high frequency assigned to a specific culture type determines the strength of culture. The more dominant the cultural type, the higher the score (Cameron & Quinn, 2011).

- 1) The dominant characteristics dimension indicates which criteria identify a school. According to the findings in Appendix B, Clan culture has the highest frequency score (89) for dominant characteristics. The other culture types respectively scored as follows: Hierarchy culture (87), Market culture (77), and Adhocracy culture (70). Most principals strongly agreed that their schools have a family-like culture that emphasizes internal focus and integration based on trust and collaboration. Appendix A number 1 depicts the cultural profile of dominant characteristics of Indonesian schools.
- 2) The organizational leadership dimension is the school's leadership style. In Appendix B, Clan is the organizational leadership dimension with the highest frequency score of 92, followed by Hierarchy culture at 91. Other cultural types include Market culture (88) and Adhocracy culture (86). To ensure the smooth operation of online education, most principals strongly agree that the school's leadership should focus on mentoring, facilitation, as well as stability and control via coordination. Furthermore, the study's principals believed that planning and goal setting was seen as a way to increase productivity and efficiency. Simultaneously, innovative school leadership is critical during times of crisis. When an organization clarifies its tasks and establishes objectives for online learning, its employees are ready to take action, guided by mentors, to keep schools stable and education running smoothly. Appendix A number 2 depicts the cultural profile of organizational leadership in Indonesian schools.
- 3) The employee management dimension reflects how schools manage their employees. Appendix B shows that the dimension of employee management strongly correlates with hierarchy (f = 92) and clan culture (f = 91). Job security and inter-relationship stability, as well as teamwork, collaboration, and participation, are all highly valued by the principals in this study. Furthermore, 75 principals agree that online education innovation is critical. Market culture exists to some extent, with 73 principals in the study agreeing that the school's management style values competition and achievement. Appendix A number 3 depicts the cultural profile of school management employees in Indonesia.
- 4) The organizational glue dimension refers to the mechanisms that keep schools together. Appendix B shows that loyalty, trust (Clan culture = 93), and a commitment to online education innovation and development (Adhocracy culture = 90) are the strongest schoolbinding agents. Principals in this study agreed that formal rules and policies are essential for a well-functioning school (Hierarchy culture = 88). To some extent, principals concur that goal achievement is important (Market culture=76). Appendix A number 4 depicts the cultural profile of organizational glue in Indonesian schools.
- 5) The strategic emphasis dimension explains what motivates the school's objectives. As shown in Appendix B, Indonesian schools place a high value on permanence and stability. It implies that efficiency, control, and smooth operation are essential in Indonesian schools. These are the strategic emphases of Hierarchy culture (90). The school's strategic emphases include human development (Clan culture = 88), resource acquisition (Adhocracy culture = 88), and, to a lesser extent, competitive actions and achievement (Market culture = 77). The cultural profile of strategic emphases in Indonesian schools is depicted in Appendix A number 5.
- 6) The criteria of success dimension represent the definition of success in schools. Appendix B shows that efficiency (Hierarchy culture = 93) and human resources, teamwork, employee commitment, and concern for people (Clan culture = 91) are critical to success. Following that, schools define success as the outcome of online education innovation (Adhocracy culture, 88), and, to a lesser extent, as winning in the marketplace and outperforming the competition (Market culture, 68). The cultural profile of success criteria in Indonesian schools is depicted in Appendix A number 6.

# Discussion

The study investigated organizational culture types in Indonesian schools and determined which dominant culture item(s) contributed the most to it. The results identified and validated the organizational culture type in Indonesian schools. Based on the research questions, the discussion is divided into two sections. In addition, contributions and implications are presented.

First, this study suggests that the organizational culture of Indonesian schools, as perceived by principals, is a mix of four cultural types, with clan and hierarchical cultures dominating, followed to varying degrees by adhocracy and market culture (see Table 2). In this study, conducted in the context of COVID-19, principals in Indonesian schools perceived a dominant clan and hierarchy culture. Despite the pandemic context, the dominant Clan and Hierarchy culture is also found in previous studies before COVID-19. An earlier study of Indonesian deanship (Ngo, de Boer & Enders, 2014), for example, discovered that clan culture and hierarchical culture dominated the leadership styles of Indonesian deans. Similarly, Johansyah's (2022) study of organizational culture discovered that the Faculty of Economics at the University of Tarakan in Borneo, Indonesia, has a combination of clan culture centered on personal development, loyalty, and collaboration, as well as hierarchy culture with firm control.

Because of the similarities found in some studies conducted before and during the pandemic regarding Clan and Hierarchy culture, we assume that the dominant hierarchical and clan culture found in this study is most likely due to the national cultural structure of Indonesian society. The strong dominance of clan and hierarchy culture reflects gotong royong (mutual corporation) traditions (Irawanto, 2009) and the country's family and power-hierarchy culture (Hofstede Insights, n.d.), influencing people's beliefs, values, and attitudes (Ngo, de Boer & Enders, 2014). According to Geert Hofstede of the Global Culture Study (Hofstede Insights, n.d.), Indonesian society is collectivist (individualism index score = 5), implying that clan culture's influence is growing. Power distance is ingrained in Indonesian society (power distance index score = 78), implying that as power distance grows, so does the influence of hierarchical culture (Hofstede Insights, n.d.). Indonesian society's strong collectivism (clan culture) and high-power distance (hierarchy culture) may have a significant impact on how people perceive, behave, and reflect in their organizations (Ngo, de Boer & Enders, 2014). Furthermore, the research backs up previous findings that "a strong sense of group cohesiveness" with trust and confidence (Notman, 2015, p. 452), as well as school control and stability, are critical to keeping schools open and running smoothly (Argyropoulou et al., 2021; Thornton, 2021). The findings of this study are consistent with previous research emphasizing the importance of people development, collaboration with staff, and interpersonal interactions (Harris & Jones, 2020; Argyropoulou et al., 2021; Thornton, 2021).

Moreover, this study revealed the existence of an adhocracy culture in Indonesian organizational culture (see Table 2). The study's principals perceived an adhocracy culture to be prevalent during the crisis period. Due to school closures during the pandemic, schools were committed to innovation in online learning which was cited as the glue that held their school together by 90 out of 93 principals (see Appendix B, Q14). It is reasonable to believe that learning quality in Indonesian schools has been prioritized, which includes "online teaching models, distance learning infrastructure, technology-focused teacher foundational skills, and transitioning offline course materials to online models" (Nurdiansyah, 2021, p. 377). The study's findings show that there has been a significant wind of change from face-to-face classrooms to online classrooms in the Indonesian educational context. Moreover, these findings are consistent with previous research that has highlighted the growing importance of technological knowledge and pedagogy during the pandemic, particularly in terms of digital teaching and the transition from classroom to virtual classroom (Frattini, 2021; Nurdiansyah, 2021).

The findings of this study, however, contradict previous research that found adhocracy with an emphasis on innovation played a less dominant role long before the COVID-19 pandemic (Ngo, de Boer & Enders, 2014). Before the COVID-19 crisis, classrooms in Indonesia were lecture-driven,

with teachers providing a variety of resources (UNICEF, 2020). As a result, many schools and teachers were unfamiliar with online learning platforms and had yet to integrate them into their curriculum (UNICEF, 2020). When the pandemic hit, schools were forced to adapt to become more dynamic and adaptable, and schools began using virtual classrooms for both synchronous and asynchronous learning (Ngo, Budiyono & Ngadiman, 2021), resulting in the adhocracy culture observed in this study. This research shows, both conceptually and empirically, that Indonesian schools are capable of transcending their culture and moving in a new direction, namely, Adhocracy culture.

When compared to other cultures, principals in this study perceived that schools were less likely to engage in outcome-oriented and competitive activities during the pandemic (Market culture, see Table 2). In this context, it is reasonable to assume that during times of uncertainty, Indonesian schools faced enforced business restrictions, quarantines, and decreased activity (ILO-OECD, 2020). As a result, they believed that competitive advantage was not the most important consideration (Alsaqqa & Akyurek, 2021). As a result, Indonesian school principals engaged in fewer market behaviors associated with market dominance during COVID-19.

Second, Appendix B shows that cultural items related to clan and hierarchy dominate the key dimensions of organizational culture in Indonesian schools. As we can see, clan and hierarchy cultural items are highly embedded in the dominant characteristic of Indonesian school culture (89 and 87, respectively). During the pandemic, a notable change was the widespread adoption of remote learning and working from home (Krajcsák & Kozák, 2022), which was new in the Indonesian school system (Kemendikbud, 2020b; Ngo, Budiyono & Ngadiman, 2021) and which required organizations to prioritize the health and safety of their employees (Mikusova et al., 2023). Staying in close contact with teachers, staff, students, and parents to listen to concerns and provide daily online advice has proven critical in responding to the pandemic (Brackett et al., 2020). Adamu and Mohamad (2019) state that people feel included and cared for as the school fosters a family-like environment (see Appendix B, Question 1) and prioritizes staff well-being during the COVID-19 pandemic (Mikusova et al., 2023). This school's clan-dominant characteristics influence its organizational leadership, with principals acting as mentors and facilitators for their teachers and academic staff (see Appendix B, Question 5). As a result, school principals prioritize fostering trust, openness, and participation among teachers (see Appendix B, Question 17) through empathy and optimism, which may provide better support during the pandemic (Kaul et al., 2020). Accordingly, the school management style is defined by collaboration, consensus, and participation (see Appendix B, Question 9) in order to define success during the pandemic.

To keep school structure and workflow intact during the pandemic, schools needed to establish a stable and controlled environment (hierarchical culture) with formal procedures in place to govern and delegate tasks to teachers (see Appendix B, Question 4). To ensure that remote online education ran smoothly, schools had to implement strict schedules and monitor teaching processes (Appendix B, Question 8) due to the rapid acceleration of pedagogical shifts to online classrooms (Frattini, 2021). They standardized work processes to ensure coherence, stability, and control as schools' strategic focuses (Appendix B, Question 20). As a result, schools measure their success in terms of efficiency during the pandemic (Appendix B, Question 24). Debski et al. (2020) provide further support for the findings of this study. Their research (Debski et al., 2020) discovered that public universities in Poland have a predominantly hierarchical culture, which is a desirable organizational culture during COVID-19.

One of the predominant factors related to hierarchy culture is job security and inter-relationship stability (see Appendix B, Question 12). In this study, 92 principals out of 93 identified immediate job safety and stability concerns as a manifestation of the situation in which "by August 2020, the pandemic had affected around 29 million workers in Indonesia, [...], 2.6 million workers lost their jobs, and 24 million workers suffered from cuts in hours of work and wages due to the pandemic" (International Labour Organization, 2021, paragraph 2). Furthermore, Haiyani Rumondang, Director General of the Ministry of Manpower's Labor Inspection and Occupational Safety and Health in Indonesia, stated that "ensuring safe workplaces for businesses and workers has become a critical

priority throughout the pandemic" (International Labour Organization, 2021, paragraph 3). This could be one of the main reasons why schools prioritized internal stability and control during the pandemic.

The commitment of Indonesian schools to innovation and development during the pandemic is one of the factors influencing their organizational culture (Adhocracy culture, see Appendix B, Question 14). The pandemic transformed schools into dynamic and innovative online educational environments (Bush, 2021). Zhu and Engels (2014) argue that educational innovation is inextricably linked to institutional culture because the interpersonal relationship between employees based on loyalty and mutual trust (Clan culture, Appendix B, Question 13) is an essential component of the organizational culture for implementing classroom innovation. Octavia (2020) found that for Indonesian school principals to fulfil their duties, they should prioritize collaborative work patterns (Clan culture) and envision innovation (Adhocracy culture), which is in line with this research.

According to Appendix B, Adhocracy and Market cultural items in the Dominant characteristic dimension (70 and 73, respectively) had a lower impact on the organizational culture of Indonesian schools. According to the findings of this study, online learning is a novel concept in Indonesian schools. Schools were hesitant to take risks because they lacked experience with online education, internet access was difficult, and internet data packages in Indonesia were expensive (Yarrow and Bhardwaj, 2020; Paddock and Sijabat, 2020; Firman and Rahman, 2020). Due to a lack of online education infrastructure in Indonesia, schools, including teachers, students, administrators, and parents, are unprepared to work and learn from home (Yarrow and Bhardwaj, 2020; Paddock and Sijabat, 2020). All of this could have influenced both innovation (in this case, online learning) and academic performance (Vincent-Lancrin, 2019).

Furthermore, Appendix B demonstrates that the management style in the school with a strong Clan and Hierarchy culture (Question 9 = 91 and Question 12 = 92, respectively) causes the other culture types to decline. Conceptually, an adhocracy culture values adaptability and is concerned with the outside world. In contrast, a hierarchical culture stifles innovation because the values it emphasizes hinder it: control, stability, and an internal orientation (Naranjo-Valencia et al., 2016; Aichouche et al., 2022). Internal stability and job security, both of which are characteristics of hierarchy cultures, are associated with lower levels of innovation, as reflected in this study.

# Contributions, Implications and Limitations of the Study

The current study adds to the existing body of knowledge in several ways. First, this study fits into the OCAI concept of a dynamic alignment of the internal-external and stability-flexibility dimensions rather than a single best organizational culture. This study shows that schools can deal with complex and dynamic environments conceptually. This study, in addition to validating existing literature, empirically demonstrated that schools can use the four competing culture types to identify the underlying organizational culture. Second, this study indicates a breakthrough in organizational culture in Indonesia, with an adhocracy culture coexisting with the dominant clan and hierarchical culture. For this study, schools are conceptually capable of transcending their culture to Adhocracy culture. Moreover, this study has demonstrated how schools in Indonesia have evolved to be more flexible and externally oriented as a result of the pandemic, in which innovation (Adhocracy culture) in online education has emerged. Third, by identifying the organizational culture profile of Indonesian schools, this study can provide insights into how schools can succeed and aid in understanding how to work more efficiently, productively, and creatively. As a result, this study has the potential to improve school effectiveness by encouraging better performance (Octavia, 2020). Lastly, in the broader context of organizational culture, this study confirms previous COVID-19 research (Harris & Jones, 2020; Argyropoulou et al., 2021; Thornton, 2021; Bush, 2021) that, during times of crisis, organizations emphasize clan and hierarchy culture, in which leaders manage the organizations through control, policies, and procedures, and lead the employees with trust, collaboration, and care.

#### Implications beyond COVID-19

This is the first empirical study of how principals perceive organizational culture, particularly during the pandemic. The findings indicate that schools are employing more cutting-edge teaching technologies than ever before and that an Adhocracy culture has emerged. COVID-19 has altered the culture of Indonesian schools, allowing education to continue to operate effectively by promoting positive emotions in the virtual classroom via video conference meetings. COVID-19 has also highlighted the value of commitment, collaboration, stability, control, integrity, people-centeredness, and innovation. These values are more important than ever, and school cultures have shifted to prioritize values that will be useful in a post-COVID world, particularly regarding the Indonesian government's new policy *Merdeka Belajar* (Independent Learning) (Kemendikbud, 2020).

The Merdeka Belajar policy emphasizes student-centered classrooms (Uswatiyah et al., 2021) and innovation that uses technological advancements to improve educational quality (Sherly et al., 2020), which are consistent with the impact of the COVID-19 pandemic on teaching and learning. The findings of this study can guide and assist schools in implementing *Merdeka Belajar* by understanding their post-COVID-19 organizational culture. The adhocracy culture found in this study may help schools establish an integrated mechanism in curriculum and instructional technology to enhance autonomous learning through innovation and planned change efforts in schools (Istianda & Anthony, 2022). In practice, schools can form a dynamic team of change agents (principals, teachers, and curriculum designers) to collaborate (clan culture) to carry out independent learning and facilitate the teaching and learning system. The success of *Merdeka Belajar* depends on school leaders, teachers, and administrators as crucial actors in the change process (Octavia, 2020).

Clan culture, one of the dominant cultures identified in this study, has the potential to facilitate the implementation of *Merdeka Belajar* in schools. In a collectivist society, everyone in the school values loyalty to network members and is emotionally dependent on their group (Hofstede Insights, n.d.). Collectivism provides group members with security and resources (Suh & Son, 2016) while increasing employee loyalty to the organization (Zhang et al., 2023). Furthermore, it has a significant positive effect on team performance (Mayfield et al., 2016). Teachers are more likely to cooperate and share knowledge in a collaborative environment, which may improve innovation efficiency and organizational performance (Zhang et al., 2023). Schools in Indonesia can implement Teacher Training Programs and hold teacher workshops to improve teachers' skills and abilities to learn educational technology (Kemendikbud, 2022), which are essential for implementing classroom innovation (Zhu & Engels, 2014). Teachers' cooperative nature and willingness to grow can help schools successfully implement *Merdeka Belajar*, which aims to significantly improve educational quality (Octavia, 2020).

Another prevalent organizational culture discovered in this study was the hierarchical culture. To survive COVID-19, schools must establish a stable and controlled environment (hierarchical culture), emphasizing internal focus and efficiency to ensure that educational processes run smoothly (Petrova et al., 2023), which is essential in times of crisis. However, when a high-power distance culture exists within an organization, managers tend to make decisions based on authority and power, communicate less with employees, and pay little attention to employee input, limiting opportunities for employees to express and implement innovative ideas (Zhang et al., 2023). To foster educational innovation following COVID-19, schools should reduce hierarchy culture while increasing clan culture. The nature of collectivism (Clan culture) not only fosters a positive, innovative team climate (Zhang et al., 2023), but it also aligns individual goals with collective goals (Jackson et al., 2006) to adhere to the Independent Learning policy: student-centered and educational technology. As a result, Clan culture is critical for improving school innovation performance.

#### Limitations of the Study

Aside from the contributions and implications, a few limitations should be mentioned. To begin with, the study's sample size limited its findings, which were not sufficiently representative of the

Indonesian archipelago's diverse populations. While we could argue that this study reflects the overall picture of Indonesian school culture types, the study's findings should be considered in other contexts. Second, the respondents were limited to principals from schools in Java, Indonesia's most populous island, who had participated in Teacher Professional Training and Science Education Programs. A survey of more principals in schools throughout the Indonesian archipelago would be extremely beneficial. As a result, we acknowledge that the study's findings may not apply to all Indonesian schools. Third, this study conducted a simple analysis to investigate and identify the organizational culture of Indonesian schools by converting principals' perceived agree and strongly agree scales into a positive variable. While we argue that the simple analysis was logical and meaningful in answering our research questions, the results between cultures may not be significant.

# **Conclusions and Suggestions for Future Research**

Schools in Indonesia are a unique blend of the four cultural types, with clan and hierarchy culture dominating, followed by adhocracy culture and market culture to varying degrees. As a result, the most frequently ingrained concepts in school culture are clan, hierarchy, and, to some extent, adhocracy. Job security and internal stability, coordination to ensure the smooth operation of online education, efficiency and control, school commitment to innovation in online education, family-like schools, and school success through collaboration, teamwork, and employee commitment have all influenced the school's organizational culture.

The findings of this study, as the new profile of organizational culture in Indonesian schools, will serve as a starting point for a more in-depth analysis in future research, and similarities between schools will be apparent. The findings will also help schools understand their organizational culture and create and develop strategic plans to support the *Merdeka Belajar* policy in Indonesia.

# Note

<sup>1</sup> The author thanks all participants and the two anonymous reviewers for their insightful comments.

# References

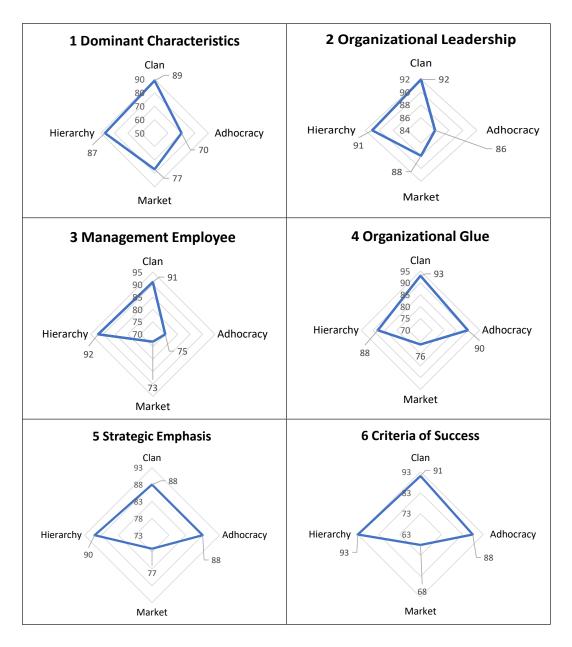
- Adamu, A. A., & Mohamad, B. (2019). Developing a strategic model of internal crisis communication: Empirical evidence from Nigeria. *International Journal of Strategic Communication*, 13(3), pp. 233-254. https://doi.org/10.1080/1553118X.2019.1629935
- Aichouche, R., Chergui, K., Brika, S. K. M., El Mezher, M., Musa, A., & Laamari, A. (2022). Exploring the relationship between organizational culture types and knowledge management processes: A meta-analytic path analysis. *Frontiers in Psychology*, 13:856234. https://doi.org/10.3389/ fpsyg.2022.856234
- Alsaqqa, H. H., & Akyürek, Ç. E. (2021). Assessment of organizational culture types, leadership styles and their relationships within governmental and non-governmental hospitals in Gaza Strip of Palestine. *BMC health services research*, *21*, 356. https://doi.org/10.1186/s12913-021-06351-1
- Annur, C. A. (2021a). Siswa SD Dominasi Jumlah Pelajar di Indonesia pada Tahun Ajaran 2020/2021. [Elementary school students dominated the number of students in Indonesia in the 2020-2021 academic year]. Available at https://databoks.katadata.co.id/datapublish/2021/11/26/siswa-sddominasi-jumlah-pelajar-di-indonesia-pada-tahun-ajaran-20202021 [Accessed 7 October 2023].
- Annur, C. A. (2021b). Berapa Jumlah Sekolah di Indonesia pada Tahun Ajaran 2020/2021? [How many schools exist in Indonesia in the 2020/2021 academic year?]. Available at https://databoks. katadata.co.id/datapublish/2021/11/26/berapa-jumlah-sekolah-di-indonesia-pada-tahunajaran-20202021 [Accessed 7 October 2023].

- Argyropoulou, E., Syka, C. H., & Papaioannou, M. (2021). School leadership in dire straits: Fighting the virus or challenging the consequences? *International Studies in Educational Administration*, *49*(1), pp. 18-27.
- Babbie, E. (2013). *The Practice of Social Research*. (13th ed.). Singapore: Wadsworth and Cengage Learning.
- Bacon-Shone, John. (2022). Introduction to Quantitative Research Methods. Available at: https:// www.researchgate.net/publication/265793712\_Introduction\_to\_Quantitative\_Research\_ Methods [Accessed 7 October 2023].
- Berkemeyer, N., Junker, R., Bos, W., & Müthing, K. (2015). Organizational cultures in education: Theory-based use of an instrument for identifying school culture. *Journal for Educational Research Online*, 7(3), pp. 86-102.
- Brackett, M., Cannizarro, M., & Levy, S. (2020). *The Pandemic's Toll on School Leadership is Palpable. Here's what is Needed for a Successful School Year*. Available at https://www.edsurge.com/ news/2020-07-16-thepandemic-s-toll-on-school-leaders-is-palpable-here-s-what-s-neededfor-asuccessful-school-year [Accessed 3 January 2024].
- Bush, T. (2021). Leading through COVID-19: Managing a crisis. *Educational Management Administration and Leadership, 49*(3), pp. 373-374. https://doi.org/10.1177/1741143221997267.
- Caliskan, A., & Zhu, C. (2019). Organizational culture type in Turkish universities using OCAI: Perceptions of students. *Journal of Education Culture and Society*, *10*(2), pp. 270-292. https:// doi.org/10.15503/jecs20192.270.292.
- Cameron, K. S., & Quinn, R. E. (2011). *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework* (3rd ed.). San Francisco: Jossey-Bass.
- Choi, Y. S., Seo, M., Scott, D., & Martin, J. (2010). Validation of the organizational culture assessment instrument: an application of the Korean version. *Journal of Sport Management, 24*(2), pp. 169-189. https://doi.org/10.1123/jsm.24.2.169
- David, S.N., Valas, S., & Raghunathan, R. (2018). *Assessing Organization Culture A Review on the OCAI instrument*. Available at: http://www.icmis.net/icmis18/ICMIS18CD/pdf/S216-final.pdf [Accessed 3 January 2024].
- Debski, M., Cieciora, M., Pietrzak, P., & Bolkunow, W. (2020). Organisational culture in public and nonpublic higher education institutions in Poland: A study based on Cameron and Quinn's model. *Human Systems Management, 39*(3), pp. 345-355. https://doi.org/10.3233/HSM-190831
- Di Stefano, G., & Scrima, F. (2016). The psychometric properties of the Italian version of the Organizational Culture Assessment Instrument (OCAI). *Applied Psychology Bulletin, 276*(64), pp. 51-63.
- Ellis, J (2024). *Difference between Scores of Strongly Agree and Agree*. Available at https://support. cultureamp.com/en/articles/7048403-difference-between-scores-of-strongly-agree-and-agree [Accessed 1 March 2024].
- Farrell, M. A. (2000). Developing a market-oriented learning organisation. *Australian Journal of Management, 25*(2), pp. 201-222. https://doi.org/10.1177/031289620002500205
- Firman, F. & Rahman, S. R. (2020). Pembelajaran online di tengah pandemi Covid-19 [Online learning during the Covid-19 pandemic]. *Indonesian Journal of Educational Sciences (IJES)*, 2(2), pp. 81-89. https://doi.org/10.31605/ijes.v2i2.659
- Frattini, F. (2021). *The Acceleration of Digitalization within Education as a Result of COVID-19*. Available at https://www.globalfocusmagazine.com/the-acceleration-of-digitalisation-within-education-as-a-result-of-covid-19/ [Accessed 7 October 2023].
- Haffar, M., Al-Karaghouli, W., Djebarni, R., Al-Hyari, K., Gbadamosi, G., Oster, F., Alaya, A., & Ahmed,
  A. (2023). Organizational culture and affective commitment to e-learning' changes during
  COVID-19 pandemic: The underlying effects of readiness for change. *Journal of Business Research*, 155, Part A, 113396. https://doi.org/10.1016/j.jbusres.2022.113396
- Harris, A., & Jones, M. (2020). COVID 19 school leadership in disruptive times. *School Leadership* and Management, 40(4), pp. 243-247. https://doi.org/10.1080/13632434.2020.1811479

- Heritage, B., Pollock, C., & Roberts, L. (2014). Validation of the organizational culture assessment instrument. *PLoS One*, *9*(3): e92879. https://doi.org/10.1371/journal.pone.0092879.
- Hofstede Insights. (n.d.). *Hofstede Insights: Indonesia*. Available at https://www.hofstede-insights. com/country/indonesia/ [Accessed 7 March 2022].
- ILO-OECD. (2020). The Impact of the COVID-19 Pandemic on Jobs and Incomes in G20 Economies. Available at: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/ publication/wcms\_756331.pdf [Accessed 3 January 2024].
- International Labour Organization (ILO). (2021) *Indonesia and Japan Work Hand in Hand Enhancing COVID-19 Prevention at Workplaces*. Available at https://www.ilo.org/jakarta/info/public/pr/ WCMS\_811274/lang--en/index.htm [Accessed 3 January 2024].
- Irawanto, D. W. (2009). An analysis of national culture and leadership practices in Indonesia. *Journal of Diversity Management*, *4*(2), pp. 41-48. https://doi.org/10.19030/jdm.v4i2.4957
- Istianda, M., & Anthony, S. (2022). Budaya organisasi dalam mendukung Merdeka Belajar-Kampus Merdeka. [Organizational culture in supporting Independent Learning-Independent Campus.] JIAPI: Jurnal Ilmu Administrasi Dan Pemerintahan Indonesia, 3(2), pp. 136-147. https://doi. org/10.33830/jiapi.v3i2.66
- Jackson, C. L., Colquitt, J. A., Wesson, M. J., & Zapata-Phelan, C. P. (2006). Psychological collectivism: A measurement validation and linkage to group member performance. *Journal of Applied Psychology, 91*, pp. 884-899. https://doi.org/10.1037/0021-9010.91.4.884
- Jamieson, S. (2004). Likert scales: How to (ab)use them. *Medical Education, 38*(12), pp. 1217-1218. https://doi.org/10.1111/j.1365-2929.2004.02012.x
- Johansyah. (2022). Analisis Pemetaan Budaya Organisasi Menggunakan Organizational Culture Assessment Instrument (OCAI) Pada Fakultas Ekonomi Universitas Borneo Tarakan. [Analysis of Organizational Culture Mapping Using the Organizational Culture Assessment Instrument (OCAI) at the Faculty of Economics, University of Borneo, Tarakan]. Bachelor Project: Universitas Borneo Tarakan.
- Kaul, V., Shah, V. H., & El-Serag, H. (2020). Leadership during crisis: Lessons and applications from the COVID-19 pandemic. *Gastroenterology*, 159(3), pp. 809-812. https://doi.org/10.1053/j. gastro.2020.04.076
- Kemendikbud (Indonesian Ministry of Education and Culture). (2020). *Kebijakan Pemerintah Terkait Kurikulum Merdeka* [Government Policy Related to Independent Curriculum]. Available at https://pusatinformasi.guru.kemdikbud.go.id/hc/en-us/articles/6824815789465-Kebijakan-Pemerintah-Terkait-Kurikulum-Merdeka [Accessed 7 December 2022].
- Kemendikbud (Indonesian Ministry of Education and Culture). (2020a). Kemendikbud Gandeng Swasta Siapkan Sistem Belajar Daring. [Ministry of Education and Culture Collaborates with Private Sector to Prepare Online Learning System.] Available at https://www.kemdikbud.go.id/ main/blog/2020/03/kemendikbud-gandeng-swasta-siapkan-sistem-belajar-daring [Accessed 20 May 2020].
- Kemendikbud (Indonesian Ministry of Education and Culture). (2020b). *Pembelajaran secara Daring dan Bekerja dari Rumah untuk Mencegah Penyebaran Covid-19*. [Learning Online and Working from Home to Prevent the Spread of Covid-19]. Available at https://www.kemdikbud. go.id/main/blog/2020/03/se-mendikbud-pembelajaran-secara-daring-dan-bekerja-dari-rumahuntukmencegah-penyebaran-covid19 [Accessed 20 May 2020].
- Kemendikbud. (2022). *Peran Guru Dalam Menghadapi Inovasi Merdeka Belajar*. [The Role of Teachers in Facing Independent Learning Innovation]. Available at https://gurudikdas.kemdikbud.go.id/ news/peran-guru-dalam-menghadapi-inovasi-merdeka-belajar [Accessed 3 January 2024].
- Kheir-Faddul, N., Bibu, N., & Nastase, M. (2019). The principals' perception of their values and the organizational culture of the junior high schools in the Druze sector. *Revista de Management Comparat International, 20*(3), pp. 210-225. https://doi.org/10.24818/RMCI.2019.3.210

- Krajcsák, Z., & Kozák, A. (2022). The moderating role of remote work in the relationship between organisational culture and OCB: case studies from the financial sector. *Journal of Advances in Management Research*, *19*(2), pp. 300-315. https://doi.org/10.1108/jamr-07-2021-0247
- Mayfield, C.O., Tombaugh, J.R., & Lee, M. (2016). Psychological collectivism and team effectiveness: Moderating effects of trust and psychological safety. *Journal of Organizational Culture, Communications and Conflict, 20*(1), pp. 78-94.
- Mcleod, S. (2023). *Likert Scale Questionnaire: Examples & Analysis*. Available at https://www. simplypsychology.org/likert-scale.html [Accessed 1 March 2024].
- Mikusova, M., Klabusayova, N., & Meier, V. (2023). Evaluation of organisational culture dimensions and their change due to the pandemic. *Evaluation and Program Planning*, *97*:102246. https:// doi.org/10.1016/j.evalprogplan.2023.102246
- Naranjo-Valencia, J. C., Jiménez-Jiménez, D. J., Sanz-Valle, R. (2016). Studying the links between organizational culture, innovation, and performance in Spanish companies. *Revista Latinoamericana de Psicología*, 48(1), pp. 30-41. https://doi.org/10.1016/j.rlp.2015.09.009
- Ngo, J., & Ngadiman, A. (2019). The impacts of Edmodo on students' performance in ESP classrooms. International Seminar on Language, Education, and Culture, KnE Social Sciences, pp. 369-378. https://doi.org/10.18502/kss.v3i10.3918
- Ngo, J., Budiyono, & Ngadiman, A. (2021). Investigating student satisfaction in remote online learning settings during Covid19 in Indonesia. *Journal of International and Comparative Education*, *10*(2), pp. 73-95. https://doi.org/10.14425/jice.2021.10.2.0704
- Ngo, J., de Boer, H., & Enders, J. (2014). The way deans run their faculties in Indonesian universities. *Tertiary Education and Management, 20*(1), pp. 1-13. https://doi.org/10.1080/13583883.20 13.848924
- Nguyen, V.H., Nguyen T.H.T., Nguyen L.T.A, Nguyen T.H.A, Nguyen T.P., Nguyen T.C. & Pham D.M. (2020). The validation of organizational culture assessment instrument in healthcare setting: results from a cross-sectional study in Vietnam. *BMC Public Health, 20*(316). https://doi. org/10.1186/s12889-020-8372-y
- Notman, R. (2015). Seismic leadership, hope, and resiliency: Stories of two Christchurch schools post-earthquake. *Leadership and Policy in Schools*, *14*(4), pp. 437-459. https://doi.org/10.10 80/15700763.2015.1039137
- Nurdiansyah, Y. (2021). The role of Indonesian school principals' leading distance learning during Covid-19 pandemic. *Advances in Social Science, Education and Humanities Research 526*, pp. 374-378. https://doi.org/10.2991/assehr.k.210212.080
- Octavia, M.V. (2020). Perspektif kepemimpinan kepala sekolah di era milenial. [Principal's leadership perspective in the millennial era]. *Terampil: Jurnal Pendidikan dan Pembelajaran Dasar, 7*(1), pp. 29-34.
- Paddock, R. C., & Sijabat, D. M. (2020). When Learning Is Really Remote: Students Climb Trees and Travel Miles for a Cell Signal. Available at https://www.nytimes.com/2020/09/05/world/asia/ coronavirus-indonesia-school-remote-learning.html [Accessed 16 September 2021].
- Petrova, K., Konecna, Z., & Hornungova, J. (2023). The impact of Covid-19 on organization: A case study from the IT area on changing culture perceptions in organization. *Journal of Eastern European and Central Asian Research*, *10*(2), pp. 152-163. https://doi.org/10.15549/jeecar.v10i2.1140
- Quinn, R. E., & Rohrbaugh, J. (1981). A competing values approach to organizational effectiveness. *Public Productivity Review, 5*(2), pp. 122-140. https://doi.org/10.2307/3380029
- Quinn, R. E., & Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Towards a competing values approach to organizational analysis. *Management Science, 29*(3), pp. 363-377. https://doi.org/10.1287/mnsc.29.3.363
- Ramachandran, S., Chong, S. C., & Ismail, H. (2011). Organizational culture: An exploratory study comparing faculties' perspectives within public and private universities in Malaysia. *International Journal of Educational Management*, 25(6), pp. 615-634. https://doi. org/10.1108/09513541111159086

- Remenyi, D., Williams, B., Money, A., & Swartz, E. (1998). *Doing Research in Business and Management*. London: Sage Publications. https://doi.org/10.4135/9781446280416
- Sherly, S., Dharma, E., & Sihombing, H. B. (2020). Merdeka Belajar: Kajian literatur [Freedom to learn: A literature review] *UrbanGreen Conference Proceeding Library*, 1, pp. 183-190.
- Suh, J. & Son, B. (2016). What is the role of collectivism in channel marketing? *Journal of Marketing Thought, 3*, pp. 53-63.
- Thornton, K. (2021) Leading through COVID-19: New Zealand secondary principals describe their reality. *Educational Management Administration and Leadership, 49*(3), pp. 393-409. https://doi.org/10.1177/1741143220985110
- Tyler, U. T. (2018). *Report Organizational Culture Assessment Instrument*. Available at: https://www. uttyler.edu/faculty-senate/files/ocaisurveyfinalreportforuttyler.pdf [Accessed 3 January 2024].
- UNICEF. (2020). Strengthening Digital Learning across Indonesia: A Study Brief. Available at https:// www.unicef.org/indonesia/media/10531/file/Strengthening%20Digital%20Learning%20 across%20Indonesia:%20A%20Study%20Brief.pdf [Accessed 3 January 2024].
- Uswatiyah, W., Argaeni, N., Masrurah, M., Suherman, D., & Berlian, U. (2021). Implikasi kebijakan kampus Merdeka Belajar terhadap manajemen kurikulum dan sistem penilaian pendidikan menengah serta pendidikan tinggi. [Implications of the independent learning campus policy for curriculum management and assessment systems for secondary and higher education.] *Jurnal Dirosah Islamiyah, 3*(1), pp. 28-40. https://doi.org/10.47467/jdi.v3i1.299
- Vincent-Lancrin, S., González-Sanchoi, C. Bouckaerti, M. de Lucai, F. Fernández-Barrerrai, M., Jacotini, G., Urgeli, J. & Quentin Vida, Q. (2019). Fostering Students' Creativity and Critical Thinking: What it Means in School. Paris: OECD Publishing, Paris. https://doi.org/10.1787/62212c37-en
- Weiner, W. F. (2009) Establishing a culture of assessment: Fifteen elements of assessment success. *Academe*, 95(4), pp. 28-32.
- World Bank. (2020). *Lessons for Education during the COVID-19 crisis*. Available at https://www. worldbank.org/en/topic/edutech/brief/lessons-for-education-during-covid-19-crisis [Accessed 3 January 2024].
- Yarrow, N., & Bhardwaj, R. (2020). Indonesia's Education Technology during COVID-19 and Beyond. Available at https://blogs.worldbank.org/en/eastasiapacific/indonesias-education-technologyduring-covid-19-and-beyond [Accessed 16 September 2023].
- Zhang, W., Zeng, X., Liang, H., Xue, Y., & Cao, X. (2023). Understanding how organizational culture affects innovation performance: A management context perspective. *Sustainability, 15*, 6644. https://doi.org/10.3390/su15086644
- Zhu, C., & Engels, N. (2014) Organizational culture and instructional innovations in higher education: Perceptions and reactions of teachers and students. *Educational Management Administration* & Leadership, 42(1), pp. 136-158. https://doi.org/10.1177/1741143213499253



# Appendix A. Indonesian School Culture Profiles on Six Dimensions

# Appendix B. Descriptive Statistics for the Six Key Dimensions of Organizational Culture based on the Agree and Strongly Agree Categories

	Dominant Characteristics	Frequency (N = 93)
Culture Type	During the pandemic,	Sum of A and SA
Clan	Q1. The school is a very personal place. It is like an extended family. People seem to share a lot of themselves.	89
Adhocracy	Q2. The school is a very dynamic and entrepreneurial place, and people are willing to take risks.	70
Market	Q3. The school is very results oriented, and the main concern is getting work done.	77
Hierarchy	Q4. The school is a very controlled and structured place. Formal procedures generally govern what people do.	87
	Organizational Leadership	1
Culture Type	During the pandemic,	Sum of A and SA
Clan Culture	Q5. The leadership in the school is generally considered to exemplify mentoring, and facilitating.	92
Adhocracy Culture	Q6. The leadership in the school is generally considered to exemplify entrepreneurship, innovation, or risk taking.	86
Market Culture	Q7. The school's leadership is widely regarded as exemplifying a results-oriented focus.	88
Hierarchy Culture	Q8. The school's leadership is widely regarded as exemplifying coordination to ensure the smooth operation of online education.	91
	Management Employees	1
Culture Type	During the pandemic,	Sum of A and SA
Clan Culture	Q9. The management style in the school is characterized by collaboration, consensus, and participation.	91
Adhocracy	Q10. The management style in the school organization is characterized by individual risk taking, and innovation.	75
Market	Q11. The school's management style is defined by competitiveness, high expectations, and achievement.	73
Hierarchy	Q12. The management style in the organization is characterized by security of employment and inter-relationship stability.	92
	Organizational Glue	
Culture Type	During the pandemic,	Sum of A and SA
Clan Culture	Q13. Loyalty and mutual trust are the glue that holds my school together.	93
Adhocracy	Q14. A commitment to innovation and development is the glue that holds the school together.	90
Market	Q15. The emphasis on goal achievement is the glue that holds the school together.	76
Hierarchy	Q16. Formal rules and policies are the glue that holds the school together. It is critical to keep the school running smoothly.	88

	Strategic Emphases				
Culture Type	During the pandemic,	Sum of A and SA			
Clan	Q17. The school places a strong emphasis on human development, including trust, openness, and participation.	88			
Adhocracy	Q18. The organization places a strong emphasis on acquiring new resources and developing new challenges.	88			
Market	Q19. The school emphasizes competitive actions and achievement.	77			
Hierarchy	Q20. The school emphasizes permanence and stability. Efficiency, control and smooth operations are important.	90			
Criteria of Success					
Culture Type	During the pandemic,	Sum of A and SA			
Clan	Q21. The school defines success on the basis of human resource development, teamwork, employee commitment, and concern for others.	91			
Adhocracy	Q22. The school defines success on the basis of a product innovation in online education.	88			
Market	Q23. The school defines success as outperforming the competition and winning in the marketplace.	68			
Hierarchy	Q24. The school measures success based on efficiency. It is critical to have consistent delivery, smooth scheduling, and low-cost production in online education.	93			