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Coping with Pandemic Shock to Enhance Individual's Performance During Crisis: A Cross-National Study

My-Trinh Bui¹ , Don Jyh-Fu Jeng² , Dao Cong-Tuan¹ 

ABSTRACT

Before adjusting to the environment created due to the COVID-19 pandemic, individuals may experience pandemic shock via digital transformation to enhance performance. Pandemic shock can affect an individual's adaptation, psychological state, and performance. This study attempts to analyze individual cultural psychological progress during this crisis. Empirical data based on 597 responses of subjects who have experienced the COVID-19 crisis has been interpreted and used to determine further implications. Adjustive capability and psychological state are predicted to be mediators of the relationship between shock and performance. Cultural intelligence is tested as the mediated moderator. Cultural differences between the two nations (i.e., Vietnam and the US) are also examined. This study emphasizes that such shocks can affect the psychological state, adjustive capabilities, and individual performance. Additionally, this study's findings confirm that adjustive capabilities and psychological state are critical mediators of the relationship between shock and performance. Especially, cultural intelligence is the mediated moderator for the shock and performance relationship. Despite the prevalence of COVID-19 impact, there has been scant research understanding the COVID-19 shock on individual performance with the mediation effects of adjustive capability and psychological state. The interactions of cultural intelligence and cultural difference factors are critical in explaining shock-adaptation- performance relationship.

KEY WORDS:

pandemic shock (SH), psychological state (PS), adjustive capability (AC), cultural intelligence (CQ), performance (PR).

JEL Classification: M590, Q550, Q510, O57.

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1. Introduction

The COVID-19 pandemic has significantly influenced socio-cultural, economic, and political environments. The COVID-19 pandemic had differing negative impacts on various economic sectors. Sectors that were more adaptable to remote work experienced less of a decline during the pandemic (Espitia et al., 2022). During the early stages, the pandemic had an extremely strong impact on tourism (Zenker & Kock, 2020). The pandemic

has led to the implementation of restrictions and limitations on movement and travel, affecting both domestic and international tourism (Nagaj & Žuromskaitė, 2021). To prevent the spread of the infection, many governments have issued orders to ensure social distancing, and have advised travel bans and mandatory quarantine. Citizens subjected to lockdowns, stay-at-home rules, or quarantine may experience cultural difficulties arising due to situational crises. Individuals are encountering stressful and traumatic cultural changes that have

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emerged due to the COVID-19 pandemic, which is different from theirs, and will have to deal with these through new social and political institutions (Park & Fowler, 2021), education (Szopiński, 2023), situations, behaviours, and expectations (Zhang et al., 2024). Even they will also have to plan actions and adjust to new problems. These situations can be difficult to deal with at any time and are even more challenging if people have never dealt with them before (Dedhy et al., 2023). They are likely to get “lost in translation.” The cumulative impact of such situations associated with an unexpected crisis and practice is referred to as a “crisis shock.” This shock, caused by contextual changes, is viewed as the initial process of adjusting habits, lifestyles, and behavior according to the new cultural environment. People may experience such shock during a pandemic (Neamhom & Chumprasittichok, 2024). To overcome crisis shocks, individuals adapt. Prior research and studies have aimed intensively on the negative psychological effects of this shock. These indicate that pandemic shock can limit or extend an individual’s ability to adapt (Presbitero, 2016), based on their psychological and personal stresses (Ng, 2020), and contextual change-related difficulties (Zhou et al., 2008). The study and application of positive organizational behavior are “positively oriented human resources strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Youssef-Morgan, 2024). Fewer studies clearly show that adjustive capabilities can mitigate crisis shock, thereby helping people to adapt more quickly, especially during the change period arising from the pandemic, psychological capital plays a crucial role as a valuable resource for employees’ careers and well-being (Youssef-Morgan, 2024), particularly in challenging situations and crisis contexts (Casoria et al., 2021). During the COVID-19 crisis, people used information technology (IT) to cope with stressors including social media platforms and video games because social media support to pass the time and allow individuals to increase socialized activities with others while mentally disengaging or detaching from the anxiety caused by pandemic (De’ et al., 2020). Social media and digital platform usage reached

all-time highs during the COVID-19 crisis. Previous studies examined psychological detachment, or briefly mental release and refraining from stressful COVID-19 events (Sultana et al., 2023), as a major strategy that social media usage provides for dealing with the COVID-19 crisis (Mäntymäki et al., 2022). “In what has been described as a volatile, uncertain, complex, and ambiguous (i.e., V.U.C.A.) environment, the ability to attract, develop, and retain human capital and have a good life has become paramount” (Luthans et al., 2024). The detachment from stressful social isolation and work-family balancing issues (Sonnetag et al., 2008) is a useful way to prevent the negative impacts of COVID-19 shocks and stresses on well-being which drives social media (Mäntymäki et al., 2022) and digital platform use (Mendez-Picazo et al., 2024).

Therefore, both employees and organizations should prioritize the cultivation and enhancement of psychological capital (Youssef-Morgan, 2024). Literature on pandemic shock, psychological state, adjustment, and individual performance during health-based crises is critical in establishing guidelines to handle the event. This study adopts organizational psychology and a cultural perspective to understand how individuals undergo social and cultural adjustment to cope with shocks and perform better during a pandemic. While many studies have elaborated on the negative aspects (Satici et al., 2020) and the impact of a pandemic on mental health consequences (González-González & García-Almeida, 2021), this study elucidates the organizational psychology and cultural psychological process that can contribute to the improvement of performance and productivity during a crisis. This study aims to examine how pandemic shock, could influence cultural intelligence, social-cultural adaptability, and psychological state to enhance performance, which in turn offers a better understanding of the new digital environment and cultural differences for different contexts. Specifically, the objectives of the present study are to (a) conceptualize the pandemic shock and its relationships with cultural intelligence, social-cultural adaptability, and psychological state (first-tier consequences); (b) investigate the relationship between first-tier consequences and second-tier consequences

(performance); and (c) investigate the association between first-tier consequences and second-tier consequences across different contexts.

The rest of this study is structured as follows: Section 2 delivers a literature review that covers goal-setting theory, COVID-19 pandemic shock (SH), psychological state, and adjustment, and proposes the relationship among psychological state, cultural intelligence (CQ), and adjustive capability (AC). Cultural Intelligence (CQ) plays a role as a moderator between SH and performance. PS and AC are mediators in the relationship between SH and performance. The cultural difference affects the relationship between SH and other factors. Section 3 states the structure and research methods used. Section 4 contains the results analysis and a summary of the findings. Section 5 digs into discussions. We end this presentation by outlining our scholarly contributions to goal-setting theory and cultural psychological processes.

2. Theoretical Background and Hypotheses

2.1. Managing Pandemic Shocks Through Information Technology

The stress, strain, and shock are concepts grounded in the transaction-based method as a mix of a triggering environment and a person's reaction to it (Cooper, 2013; Sultana et al., 2023). The person-environment relationship proposed stress is a psychological response to an unbalanced state between the individual and the workplace environment caused by activities, events, needs, catalysts, or conditions (Cooper, 2013). Strain is defined as the behavioral, psychological, and physiological effects of a person's stressor (Cooper, 2013).

According to Mitha et al. (2021), culture shock refers to worry or discomfort in an unfamiliar social situation. The "stage theory" of culture shock outlines five stages: "honeymoon, frustration, adjustment, acceptance, and reintroduction" (Mitha et al., 2021). A study of social workers placed in rural communities found a "curvilinear relationship between lack of well-being (culture shock) and time, with the lowest well-being at

month 6 and returning to baseline at month 12" (Zapf, 1993). Culture shock is defined as the "process of initial adjustment to an unfamiliar environment" (Pedersen, 1995). Previous studies have been proposed to explain why people experience culture shock. The affect- behavior- cognition (ABC) model was established, which offers a thorough explanation for culture shock (Ward, et al., 2001; Ward & Kennedy, 1994). The ABC model offers clarification for culture shock by explaining how sojourners adjust through affective, behavioral, and cognitive processes. Culture shock is believed to be caused by the stress of migrating to an unfamiliar location as an affective process. The behavioral process addresses the challenges of adapting to a new cultural setting without culturally relevant skill sets. The cognitive process examines psychological factors related to self-perception, social identity development, and intergroup relations (Presbitero, 2016).

Individuals respond to pressures through coping behaviors, which are defined as cognitive and behavioral efforts to cope with external or internal pressures that exceed one's resources (Cooper, 2013). Stressors can drive individuals to employ either problem-oriented or emotion-oriented managing techniques (Mäntymäki et al., 2022). Problem-focused coping aims to change or control stressful events. Emotion-oriented coping is the cognitive process of reappraisal and disengagement which entails adjusting one's thoughts and feelings regarding a difficult event (Folkman, 2013). Prior research on workplace coping has focused on behaviors related to implementing new IT or troubleshooting existing IT issues (Tarafdar et al., 2020). Coping behaviors are responses to perceived discrepancies in a new system, such as task uncertainty caused by changes in work processes after IT installation. People cope with stressful situations by venting, seeking social support, and psychological distancing (Mitha et al., 2021). Their IT usage-related behaviors are refusal, prevention, controlling usage to the limitation or minimum, experimenting with fewer attributes to perform current tasks and work processes, and changing tasks to adjust to the new system (Beaudry & Pinsonneault, 2005; Mäntymäki et al., 2022).

The COVID-19 produced a variety of pressures (Ronkowitz & Ronkowitz, 2021) when the movement from face-to-face activities to a virtual environment was forced. Policies restricting travel and public services led to a significant increase in remote work. School closures may have made it more difficult for parents to balance their family life. The lockdown to avoid pandemic transmission led to stress, shock, strain produced by social isolation, perceived loneliness, work-family conflict.

2.2. *Pandemic Shock – Adaptation Model*

This study investigates if using social networking sites and digital platforms can help people cope with stress caused by the COVID-19 crisis. We use the work and organizational psychology and shock-adaptation model as the theoretical foundation for this study. Adaptation is conceptualized as "changes that take place in individuals or groups in response to environmental demands" (Berry, 1997) which includes two dimensions: psychological and societal (Forbush & Foucault-Welles, 2016). Psychological well-being is defined as a feeling of "identity, mental health, and life satisfaction, whereas sociocultural well-being refers to coping with daily stressors" in school, job, and society (Ward & Kennedy, 1994). Positive adaptation leads to successful sojourns, while negative adaptation can result in unsuccessful ones (Lejarraga & Pindard-Lejarraga, 2020). People who experience culture shock may struggle to establish a sense of identity, well-being, and fulfillment in their lives. Similarly, coping with daily stressors at school, home, and society is reduced (Presbitero, 2016).

The "stage theory" of culture shock is relevant to our investigation for two reasons. Previous research has predominantly used the coping theory and its variations to study shock and coping techniques (Beaudry & Pinsonneault, 2005; Huang et al., 2019). The "stage theory" of culture shock is commonly utilized in organizational behavior research (Sonnentag et al., 2008), but few studies have explored its impact on digital technologies. Our research expands on this body of work by incorporating the stressor-detachment model, increasing the diversity of theoretical viewpoints used in the study of IT and digital platforms. The

"stage theory" model explains how COVID-19 shock affects adjustment and performance. This study investigates how adjustive capabilities and cultural intelligence through social media can act as a mediator between COVID-19 shock and performance. Occupational pressures can hinder adjustive capabilities from work during non-work time by causing negative activation (Sonntag et al., 2008). The exposure to job stressors can hinder employees' adjustive ability to disengage from work and recuperate mentally (Mäntymäki et al., 2022).

A lack of a psychological model indicates that the technology-mediated psychological state is considered as an efficient detachment tool to reduce situational stressors and strains (Mäntymäki et al., 2022; Sonntag et al., 2008). A psychological state serves as a partial mediator between job shock and performance. The psychological state is used as detachment to describe an individual's experience of separation from their work environment (Mäntymäki et al., 2022). Thus, psychological state refers to a subjective state that extends beyond mere physical distance from work. The notion of psychological state is used to emphasize the experience part of stress and recovery studies (Sonntag et al., 2008).

We explore whether the shock-adaptation model may be applied to social media use during a worldwide epidemic. Psychological state via social media usage and digital platforms refers to temporarily disengaging from stressful activities or events while using social media. SNS usage promotes psychological state, aiding individuals in coping with and recovering from COVID-19-related stress (Mäntymäki et al., 2022). Performance is to carry out a set of intricate acts that combine abilities and knowledge to yield a useful outcome. Human performance is said to have a goal-setting effect (Chacko & McElroy, 1983; Deci & Ryan, 2000). As a supplemental incentive system, accomplishment motivates people to exhibit the desired behavior in order to earn a particular award. The goal-setting hypothesis (Locke & Latham, 1990) states that traditional goal-setting typically involves explicit and direct instructions. We also suggest that achievements elicit similar mechanisms as traditional goal-setting. A well-developed goal-

setting theory of work motivation is based on early observations of links between conscious objectives and performance (Groening & Binnewies, 2019; Locke & Latham, 1990). A goal can be thought of as the intended outcome of an action that a person attempts to complete, such as striving to reach a particular competence level within a given time frame (Locke & Latham, 1990; Mai et al., 2022). A goal may be self-set or given by peers or supervisors, for instance. Setting a goal could, in the correct circumstances, be a highly effective way to boost motivation and performance (Janssen & Van Yperen, 2004). The precise, challenging (hard) goals produce better levels of performance than easy goals or nebulous, general objectives like the directive to "do one's best" (Mai et al., 2022).

Accordingly, this study analyzes the following hypothesis: (a) COVID-19 shock has an impact on the PS, AC, and performance, (b) the mediating role of AC and PS on the association between SH and performance, and (c) the moderating mediated role of CQ on the association between SH and performance, and (d) the moderating role of cultural difference on the association between SH and performance.

2.3. COVID-19 Pandemic Shock (SH), Psychological State, and Adjustment

Many governments have issued travel and mobility limitations, community lockdowns, and restrictions on gatherings due to the COVID-19. This crisis has directed to huge losses in the cultural sector and content industry, including public museums, cinemas, and theatres. However, digital technologies have led to considerable transformation to address the changes arising. Individuals and organizations have embraced the cloud, video conferencing, and mobility trends in place of traditional face-to-face meetings (Camilleri & Camilleri, 2022; Davies, 2020). Traditional payment methods and transactions where physical cash is used primarily but can carry the virus are being quickly replaced by digital payment gateways. E-commerce, gaming, streaming, and video content platforms (e.g., Microsoft Xbox, Google Stadia, PlayStation, and Netflix) are huge ventures and important entertainment mechanisms for people during the imposed

lockdowns (Davies, 2020). The popularity of online grocery delivery has grown. Social distancing rules have forced people to work from home, learn online, and utilize online resources. Digital communication has garnered appreciation and has become essential in human life. The crisis has led to disruptive changes for human beings and organizations. Cultural and creative aspects are being critically altered thereby posing a risk in maintaining human health and wellbeing.

This study utilizes the pandemic shock concept to explain the shock as a cultural phenomenon in the context of COVID-19. The crisis is associated with threats that need to be addressed urgently. To overcome a crisis, it is necessary to introduce values and address threats (Destoumieux-Garzón et al., 2022; Zalfen, 2007). Individuals experience psychological and physical shock as part of a crisis when things that they are familiar with and daily routines, including communication, practices, activities, and values, are altered or have to be replaced. A state of shock occurs as the result of an individual's anxiety arising from the fear of a lack of familiar routine and social interaction. Cultural differences accumulate and automatically transform into dissatisfied expectations arising from unhappy events (Oberg, 1960). To respond to shock, individuals may maintain a psychological condition that reflects their existing positive, supportive, empathetic, inclusive, proactive, and encouraging properties (Gutiérrez, 2020; Youssef-Morgan, 2024). Pandemic shock is interpreted as a mechanism to shape new experiences and circumstances in the psychological sphere. This attribute is a reliable and psychometric process and arises from existing experiences (Hui et al., 2015). Hence, this study recommends the following hypothesis:

H1. Individuals who experience higher levels of pandemic shock are positively related to a higher level of psychological state.

The COVID-19 pandemic has changed the world in the way we work and live. People feel anxious if physical distance is not maintained or if they have to participate in face-to-face activities and social gatherings. Individuals have to cope with cultural stress when adapting to the usage of digital communication, distant conferences, and rapid cultural

changes (Singh et al., 2022; Williams, 2020). Panic and anxiety associated with COVID-19 may also lead to stigmatization, social isolation, and exclusion of suspected and confirmed infectious cases and their related groups (Babu & Bhat, 2022; J. Zhang et al., 2020). The pandemic shock escalates when it is accompanied by increased fear of contracting the infection, the ad leads to risk, the adjustment of disorder, isolation, and depression (Lin, 2020; Satıcı et al., 2020). COVID-19 has forced people to adapt to remote working and learning. However, the home environment may not be conducive to efficient and productive work. The ability to adapt is important for people to adjust to the new work culture, and to make them feel valued, in-control, and successful (Gutiérrez, 2020). To adapt to the new conditions, people have to learn how to use new technologies while also handling several distractions and conflicting responsibilities. Adapting to the new structure is critical to ensure routine interaction and collaboration in terms of work (Gutiérrez, 2020; Mercedes & Burrell, 2022; Wu et al., 2023). The crisis is thus enhancing the adjustive capability of people. Therefore, we recommend the following hypothesis:

H2. Individuals who experience higher levels of pandemic shock are positively related to a higher level of adjustive capability.

Regarding the affective economy perspective, digital communication technologies have enabled people to maintain physically distant communication with migrants and their separated kin (Francisco-Menchavez, 2018). Digital technologies can transform pandemic shock into an emotional coping mechanism by narrowing the physical distance, reducing distress and suffering, increasing support across distances (Ahlin, 2018), and constructing bonds through mutual engagement through digital presence, practices, and rituals (Francisco, 2013; Jiang & Stylos, 2021). The routines of digital presence create practical and emotional closeness to enable efficient bonds that transform organizations into virtual structures and hierarchies (Hannaford, 2014; Madianou, 2012). In such situations, people must surpass contextual asymmetries and sustain working relationships through different digital platforms. The pandemic has forcibly scattered

employees of organizations to work from different geographical parts while maintaining efficient and effective performance. Regardless of the challenges of technical infrastructure, a continuous and smooth flow of work and intimacy across distances are expected (Cabalquinto, 2018). Thus, the following hypothesis is proposed:

H3. Individuals who experience higher levels of pandemic shock are positively related to a higher level of cultural intelligence.

2.4. Psychological State (PS), Cultural Intelligence (CQ), and Adjustive Capability (AC): The Role in Individual Performance

During COVID-19, the remote work environment encourages a democratic, proactive, and communicative culture which could ease technostress and improve organizational communication (An et al., 2023; Gutiérrez, 2020; Zito et al., 2021). To ensure social distancing, communal space, seating configurations, and route structures have been changed. To mitigate the risk, strategies such as environmental clean-up, travel bans, furloughs, and salary reductions are also being used (White, 2020). Due to the pandemic, it has been observed that individuals have a stronger faith in collective action than they previously did. Despite irreparable culture and social damage, they are working together for the greater good (Mann, 2020). The collective activities and synergy of public support may reduce the negative impact and introduce new opportunities that ensure resilience. The capability to deal with changes is a reaction to environmental demands (Berry, 1997; Wu et al., 2023). Psychological adaptation is a state that includes belongingness, psychological health, and life contentment, while the socio-cultural attributes of adaptation include the ability to confront and deal with pressures, disorders, and depression caused by the stress associated with a pandemic (Forbush & Foucault-Welles, 2016; Joo & Lee, 2017; Satıcı et al., 2020). Adaption to change is the mechanism for generating satisfactory performance (Presbitero, 2016; Smith & Khawaja, 2011). The more positive the adaptation, the greater the likelihood of attaining a sense of identity, productivity, life satisfaction (Joo & Lee, 2017), and role performance (Bowen & Martin, 2011) service innovation performance (Özsungur, 2019), improved decision

outcomes (Nicholson et al., 2021). Thus, we propose the following hypothesis:

H4. Individuals who possess a higher level of adjustive capability are likely to display a higher level of performance.

To deal with the panic and pressures associated with COVID-19, people may practice psychological strategies (e.g., addressing related issues directly) or secondary control (e.g., correcting, modifying, and re-evaluating existing problems) (Guan et al., 2020). Coping strategy choices are also shaped by cultural psychology (De Vaus et al., 2017). Individuals belonging to Western society generally practice primary control strategies heavily, while Eastern society emphasizes secondary control strategies (Weisz et al., 1984). The latter (e.g., Vietnamese, Chinese, and Japanese) may use universal, integrated (versus analytical), and dialectical styles of thinking as compared to the former (e.g., Americans), who emphasize context (relative to the subject) as the defining force, the expectation of continual change (e.g., the dissatisfaction can be converted into favorableness), and the possibility of the ability to tolerate conflict (e.g., opposing features or factors can exist together). Both primary control strategies, interpreted as psychological state, and secondary control strategies, interpreted as adjustive capability, are used to justify the high degree of psychological flexibility or positive belief to face challenging situations (De Vaus et al., 2017; Shaik et al., 2021). Psychological and AC to change become a useful mechanism in shaping coping strategies and their impact. The functional dimension of psychological strategies emerging from different cultural experiences potentially cultivate personal reservation and resilience of individual productivity and activities in response to the situational crisis (Guan et al., 2020). In addition to the negative social-cultural aspects associated with the impact of COVID-19, a review is required to use this pandemic as a transformative and positive opportunity (Mair, 2020, March 30). Thus, we propose the following hypotheses:

H5. Individuals with a higher level of psychological state are positively related to a higher level of adjustive capability.

H6. Individuals with a higher level of psychological state are positively related to a higher level of performance.

Cultural intelligence is a multidimensional notion that encompasses an individual's capacity to perform well in a variety of social settings (Rao, 2017; Shaik et al., 2021). For high performance and goal attainment, an individual can aggregate and combine a diversity of knowledge, expertise, and skills (Kaur & Shah, 2018). The positive association between cultural intelligence and expatriate performance (Lee & Sukoco, 2010) suggests the following hypothesis:

H7. Individuals with a higher level of cultural intelligence are positively related to a higher level of performance.

The pandemic-related psychological shock, suffering, and distress are mediated or moderated by the adjustive and intellectual capacity to associate with the goal and adapt to the digital platform. A pandemic shock is expected to predict adjustive capability and psychological state, and that capability and psychological state can lead to better performance. Thus, we suggest a psychological and adjustive process whereby the pandemic shock is related to performance through adjustive capability and psychological state. Adjustment to psychological well-being is considered a mechanism to cope with daily stressors in school, job, and society, gaining identity, mental health, and life satisfaction (Ward & Kennedy, 1994). Specifically, an individual with positive adaptation can overcome pandemic shock which suggests a consequence of better performance (Lejarraga & Pindard-Lejarraga, 2020). Accordingly, we propose the following hypotheses:

H8a. The positive relationship between pandemic shock and performance will be positively mediated by adjustive capability.

In addition to adjustive capability, a psychological state also serves as a partial mediator between pandemic shock and performance. The psychological state is interpreted as detachment to an individual's experience of isolation or separation from their environment (Mäntymäki et al., 2022). Thus, psychological state emphasizes the experience part of stress and recovery studies (Sonnetag et al., 2008) to gain better performance. Thus, the following hypothesis is posited:

H8b. The positive relationship between pandemic shock and performance will be positively mediated by the psychological state.

Cultural intelligence (CQ) refers to the capacity

to communicate and collaborate effectively in varied contexts (Livermore et al., 2022). New research on organizational CQ provides valuable insights for handling today's complex and dynamic corporate climate. According to Ang and Inkpen (2008), organizational CQ refers to a company's ability to operate successfully in a diverse and unexpected environment. Agile strategies promote organizational resilience, evolutionary fitness, and recovery from adversity. Grover, Tseng, and Pu (2022) recognize that digital platforms are social places with intersecting identities. CQ is a dynamic intelligence paradigm that enables organizations to predict and capitalize on emerging opportunities while adapting to the VUCA (volatility, uncertainty, complexity, and ambiguity) world. Thus, we posit:

H8c. The positive relationship between pandemic shock and performance will be positively mediated by cultural intelligence.

2.4.1. Cultural Intelligence as a Moderator

Cultural intelligence is the metacognitive perception of culture in different contexts and changes (Aldaheri, 2021; Ang et al., 2007; Shaik et al., 2021). Cultural intelligence is the ability to use appropriate verbal and nonverbal gestures, words, and expressions to meet the expectations of new environmental requirements (Ang et al., 2007). Individuals possessing cultural intelligence will make adjustments, adopt clever modifications, and apply knowledge or practices into their activities. The COVID-19 pandemic has radically reshaped the world and led to increased public deliberation and democratic accountability, and this generates intelligent collective action (UNESCO, 2020). The connectivity and access to knowledge and information should be expanded and should increase opportunities for remote working through non-standard work models, technological applications, and tools. The contingent and flexible workforce is encouraged to work remotely, and employers utilize technologies to monitor and understand the employees' experiences and well-being (Hazzam et al., 2023). Employers expand their role and take part in the employee's financial, physical, and psychological well-being (Gartner, 2020). Additionally, cultural change based on the use of technology also leads to new behavior in terms of teamwork, productivity, and communication.

Firms and organizations frequently encourage open communication to demonstrate their support for employees and make donations to support society even though cost-saving measures are being implemented (Gartner, 2020). This new culture encourages autonomy and offers flexibility to act collaboratively. It is encouraged that technology and educational resources are offered free of cost and are made available to the public. The talent-sharing partnerships with other organizations and advances in global solidarity increase complexity. Cultural intelligence refers to the cultural knowledge of a person. This implies knowledge from multiple sources including economic, political systems, religious beliefs, and language, which could be garnered through daily practices, experiences, and contextual changes. To practice effectively, individuals attempt to understand the context and operate according to the given situation (Ang et al., 2007). If individuals are intrinsically concerned about the change and the diverse environments, they shape the ability to learn and adapt to new cultural environments and display a higher level of self-efficacy and performance. Thus, individual with high score of cultural intelligence will have appropriate actions in order to fit in the new context and complete tasks (Jyoti & Kour, 2015; Presbitero, 2016). Based on the above argument, we offer the following hypotheses:

H9a: The indirect relationship between pandemic shock and performance through adaptive capability will be stronger when an individual has high versus low cultural intelligence.

H9b: The indirect relationship between pandemic shock and performance via psychological state will be stronger when an individual has high versus low cultural intelligence.

2.4.2. Influence of Culture Difference in COVID-19 Times

The cultural role has been proposed in management as one of the human emotional shocks related to inner nervous energy. Prior studies suggested that different cultures cause different motivations and emotions to their degree of comfortability in unstructured circumstances (Guan et al., 2020; Mantzaris & Myloni, 2023). Hofstede's (Hofstede, 1984, 2011) cultural dimensions would offer clarification to address this issue. This study included uncertainty avoidance (UA)

to explain the contextual differences (a comparison of two countries- Vietnam and America). The COVID-19 outbreak is considered as unstructured circumstance which are unidentified, new, shocking, and turbulent. The dimension of uncertainty avoidance is referred to as the ability to minimize the likelihood of unstructured conditions by severe behavioral codes, regulations, rules, and objections of deviant opinions. Uncertainty avoidance, according to Hofstede, refers to how members of a group try to deal with anxiety by reducing uncertainty. In cultures that rank high in uncertainty avoidance, individuals tend to seek a mechanism to cope with fear which may enhance their adjustive capabilities and performance. These cultures favor laws (e.g., on religion and food) and formal situations. Hofstede's cultural dimension scores are posted on Hofstede's website which reports that the United States scores higher (46) on the UA dimension as compared to Vietnam (30). "Places with a greater prevalence of individualistic cultural traits saw less compliance with the stay-at-home requirements implemented by their governments" (Chen et al., 2021) but more mobility with online activities. This cultural dimension establishes a moderation effect of UA on the distinct relationships of shock on other facets. A higher level of UA may lead to a stronger shock-pandemic adjustment relationship, shock-performance relationship, shock

– psychological state relationship, and psychological state – adjustment, respectively (Kaur & Sharma, 2019; Nenkov & Scott, 2014; Petersen et al., 2018; Suzuki et al., 2019). Thus, we suggest the following hypothesis:

H10a. Culture, as differentiated by the UA dimension, will moderate the relationship between shock and adjustive capabilities, such that high UA culture (USA) will have a stronger positive relationship than low UA culture (Vietnam).

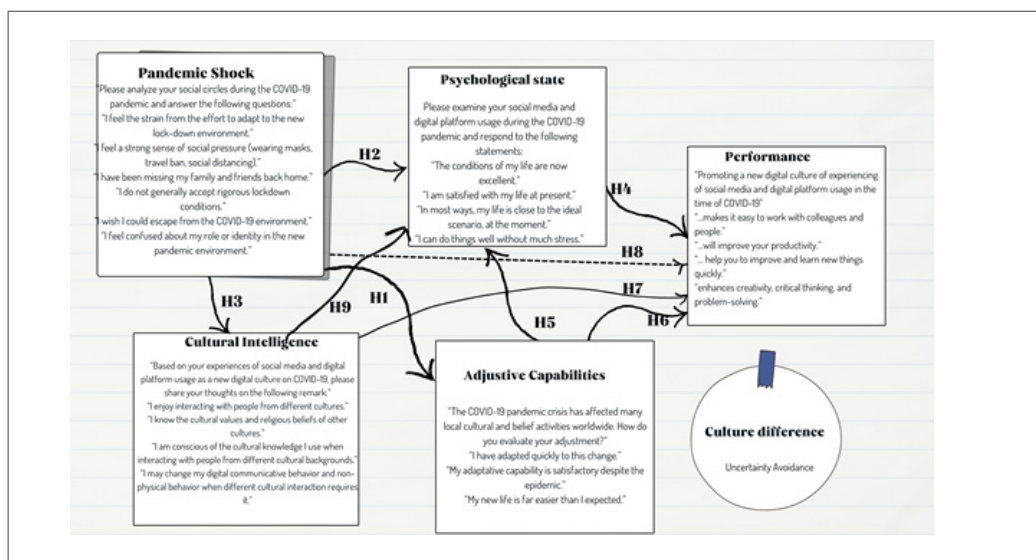
H10b. Culture, as differentiated by the UA dimension, will moderate the relationship between shock and performance, such that high UA culture (USA) will have a stronger positive relationship than low UA culture (Vietnam).

H10c. Culture, as differentiated by the UA dimension, will moderate the relationship between shock and psychological state, such that high UA culture (USA) will have a stronger positive relationship than low UA culture (Vietnam).

H10d. Culture, as differentiated by the UA dimension, will moderate the relationship between psychological state and adjustment, such that high UA culture (USA) will have a stronger positive relationship than low UA culture (Vietnam).

The conceptual framework to summarize the hypotheses is displayed in Figure 1.

Figure 1
Conceptual Framework



3. Methodology

3.1. Data Collection and Sample

Vietnamese workers and United States workers were chosen as the sources of samples for this study. The first two patients who came from Wuhan were diagnosed with COVID-19 in Vietnam on January 30, 2020. There was an increase in the number of infections due to travel. To arrest “the spread of the virus, many states temporarily closed schools, bars, restaurants, and movie theaters, imposed travel restrictions and banned public gatherings, and encouraged organizations to implement work-from-home” (Statista, 2020).

Vietnam is regarded as a developing country, whereas the United States is a developed country. Because of the difference in terms of labor productivity and performance, the study proposes that individuals who belong to the developed country the as the United States might perceive the situation and adjust differently than those individuals who belong to less developed countries such as Vietnam. Data collection was conducted in these two contextual periods during the crisis. In the first period, in April 2020, an online survey to collate data was conducted with Vietnamese via snowballing and a convenient sampling method. The online survey invitations are posted via social networking sites including Facebook and Zalo groups, Facebook walls, Facebook activities private individual messages, (e.g., Facebook messenger, Zalo), and personal e-mails (Gmail). In the second period, in August 2020, the Mturk survey was conducted to collect information from individuals across the world. This was based on the fact that individuals could thrive in different diverse cultures and would have significant cultural ability to work effectively across boundaries. Respondents were informed that anonymity would be maintained to protect privacy. Respondents are required to complete all the questions. As scales were initially designed in English, three doctoral researchers in social science fields were employed to work on the confirmation the accuracy of the Vietnamese versions. The similarity between the original and translated versions was back-translated and approved by two other translation professionals. After conducting a pilot survey to ensure the validity and reliability of the data, in this study, a formal experiment is conducted. The pilot professional research assistant is assigned to provide support during the survey time, and we offer

incentives for filling out the survey.

The first online survey was spread over three weeks and was conducted with 400 Vietnamese people. After data inspection, data with missing values were removed and 230 valid responses were collated. The second online US Mturk survey results provided 367 valid responses. To encourage participation, each respondent received \$1 for completion of the survey. The total data used for analysis was 597. The data attained were coded and examined by using the Statistical Package for Social Science (SPSS) software version 22 and Smart PLS version 3.3.3. In the pooled sample, 54.3% of respondents were female, 42.7% between the ages of 25 and 44.9 years old, 51.3% were married, 67.3% had a college and undergraduate degree, and 31.7% were businessman and managers. 59.4% were U.S. respondents. Table 1 displays demographic profiles for participants in both nations.

3.2. Measurement Items

To simulate the pandemic situation, the survey introduction included both negative and positive situations. The COVID-19 has led to the establishment of a new socio-cultural state. Many governments and cities have imposed lockdowns, travel halts, distant work regulations, quarantines, and isolation. Negative aspects of the changes brought about by the pandemic may cause social pressures. The positive aspects are that people have embraced the use of cloud computing, video conferencing, and digital mobility trends to replace traditional face-to-face meetings. Online grocery delivery, remote working, online learning, and online resources are convenient and accessible. The negative and positive aspects arising from the crisis have been simulated to understand individual perceptions of the pandemic shock; psychological state, adjustive capability, and performance. Additionally, the new cultural conditions arising from the pandemic have been listed as lockdown conditions, wearing masks, travel bans, and social distancing.

All construct items were evaluated using a 7-point Likert scale, fluctuating from strongly disagree to strongly agree. The measurement items are reported in Table 2. The pandemic shock dimension has been adopted and modified from the cultural shock concept (Chen et al., 2011). The dimensions added pandemic context and demonstrated reliable and valid properties. The items of psychological state have been adapted from a previ-

Table 1*Demographic Data*

Measure	Item	Frequency	Percentage
Age	18–24.9	236	39.5
	25–44.9	255	42.7
	45–65.9	102	17.1
	Over 66	4	7
Gender	Male	273	45.7
	Female	324	54.3
Marital Status	Single	283	47.4
	Divorced	7	1.2
	Married	306	51.3
	Other	1	0.2
Education	Junior high school & vocational school	38	
		6.4	
Job	College and undergraduate	402	67.3
	Postgraduate	157	26.3
	Business and management	189	31.7
	Housework	17	2.8
	Worker	77	12.9
	Staff	65	10.9
	Self-employed	36	6.0
	Student	177	29.6
Data source	Others	36	6
	Vietnam	230	40.6
	US (Mturk)	367	59.4

ous study (Diener et al., 1985). The dimension of adjustment capability has been developed and modified from a previous construct (Hui et al., 2015). The dimension of cultural intelligence has been adopted from Presbitero (2016) and modified into a digital dimension that includes communicative and non-physical behaviors stemming from crisis cultural change. The items of performance constructs have been generated from a survey by Sintema (2020) and Gerdenitsch et al. (2020).

3.3. Structural Equation Modeling

This study used SPSS and PLS version 3.3.0 to analyze our data. We collected data from two different sources (i.e., Vietnamese people and Mturk workers). The two samples are jointly analyzed

for the main reasons. First, both samples contain of active individuals who have been experiencing the pandemic, and therefore it is likely that they could generate an adjustment to the crisis. Second, most of all proposed research constructs are related and relevant for both samples. The combined samples would be beneficial for the generalization of results and findings. The disease includes a diversity of people which may vary in demographic profile. Third, both samples are similar to expose the breaks. The study model was tested using the PLS-SEM method. PLS-SEM is a useful instrument for analyzing quantitative data and examining multiple components simultaneously (Hair et al., 2014). The proposed associations and complicated

Table 2
Measurement Table

Constructs	Indicators	Items
Pandemic Shock	“Please analyze your social circles during the COVID-19 pandemic and answer the following questions:”	
	“I feel the strain from the effort to adapt to the new lock-down environment.”	SH1
	“I feel a strong sense of social pressure (wearing masks, travel ban, social distancing).”	SH2
	“I have been missing my family and friends back home.”	SH3
	“I do not generally accept rigorous lockdown conditions.”	SH4
	“I wish I could escape from the COVID-19 environment.”	SH5
Psychological State	“I feel confused about my role or identity in the new pandemic environment.”	SH6
	“Please examine your social media and digital platform usage during the COVID-19 pandemic and respond to the following statements:”	
	“The conditions of my life are now excellent.”	PS1
	“I am satisfied with my life at present.”	PS2
	“In most ways, my life is close to the ideal scenario, at the moment.”	PS3
Adjustive Capabilities	“I can do things well without much stress.”	PS4
	“The COVID-19 pandemic crisis has affected many local cultural and belief activities worldwide. How do you evaluate your adjustment?”	
	“I have adapted quickly to this change.”	AC1
	“My adaptative capability is satisfactory despite the epidemic.”	AC2
Cultural Intelligence	“My new life is far easier than I expected.”	AC3
	“Based on your experiences of social media and digital platform usage as a new digital culture on COVID-19, please share your thoughts on the following remark:”	
	“I enjoy interacting with people from different cultures.”	CQ1
	“I know the cultural values and religious beliefs of other cultures.”	CQ2
	“I am conscious of the cultural knowledge I use when interacting with people from different cultural backgrounds.”	CQ3
Performance	“I may change my digital communicative behavior and non-physical behavior when different cultural interaction requires it.”	CQ4
	“Promoting a new digital culture of experiencing of social media and digital platform usage in the time of COVID-19”	
	“...makes it easy to work with colleagues and people.”	PR1
	“...will improve your productivity.”	PR2
	“... help you to improve and learn new things quickly.”	PR3
	“enhances creativity, critical thinking, and problem-solving.”	PR4

models are relevant to management studies. We use the PLS-SEM approach in this research.

4. Data Analysis and Results

4.1. Assessment of Measurement Model

Pearson correlation was employed to assess the reliability and construct validity. First, it has been

established that the reliability of scale measures is acceptable if the composite reliability (CR) score is greater than 0.7 (Fornell & Larker, 1981). Second, convergent validity is acceptable if the CR score is greater than the average variance extracted (AVE), which should surpass the threshold value of 0.5 (Chin, 1998). Reliability for each construct was also evaluated using Cronbach’s α which should be

greater than 0.70 thresholds (Nunally, 1978). The AVE, CR, rho_A, and Cronbach's α are listed in Table 3.

The discriminant validity was evaluated using Fornel and Larcker (1994) by comparing the square root of each AVE in the diagonal with the correlation coefficients (off-diagonal) for each construct in the relevant rows and columns (Henseler et al., 2015). For each construct in this study, the square root of the AVE is greater than the coefficients of its correlation with all other constructs, thus illustrating sufficient discriminant validity.

4.2. Common Method Variance

To assess the common method variance (CMV), Harman's one-factor test was conducted to identify possible general factors that could explain the covariance among the constructs. The variables were

subjected to a principal component analysis to test the unrotated factor solutions. Harman's one-factor test results indicated that (1) a single factor did not emerge from the factor analysis and (2) one general factor did not account for the majority of covariance among the measures (Podsakoff et al., 2003). A principal component analysis was conducted on the measured items to determine pandemic culture shock, psychological state, pandemic cultural adjustment, CQ, and performance. Three factors were derived with eigenvalues higher than 1.0, accounting for 58.43% of the variance. The first factor loading in the unrotated factor structure captured 28.33% of the detected variances, indicating that further observation of the CMV is required. In addition, the Pearson correlation matrix was employed to assess highly correlated factors (Bagozzi & Yi, 1989). CMV is a concern when an uncommonly high correlation occurs ($r >$

Table 3
PLS-CFA Results for Combined Sample (n=597)

Items	AVE, CR, CA	SL	Mean	SD	VIF
SH1	AVE=0.651, CR=0.912, rho_A=0.910, CA=0.888	0.757	4.739	1.557	1.675
SH2		0.754	3.298	2.833	2.250
SH3		0.812	4.372	1.881	2.621
SH4		0.819	4.005	1.915	1.945
SH5		0.798	4.635	1.717	2.130
SH6		0.837	4.353	1.812	2.141
PS1	AVE=0.681, CR=0.895, rho_A=0.843, CA=0.842	0.851	4.982	1.419	2.370
PS2		0.851	5.057	1.451	2.330
PS3		0.848	4.928	1.496	2.041
PS4		0.745	4.714	1.566	1.487
AC1		0.734	5.034	1.293	1.357
AC2		0.810	5.191	1.323	1.471
AC3	AVE=0.638, CR=0.840, rho_A=0.748, CA=0.720	0.849	4.861	1.502	1.429
CQ1		0.755	5.337	1.262	1.563
CQ2		0.855	5.152	1.314	1.979
CQ3		0.805	5.054	1.316	1.789
CQ4		0.774	5.018	1.386	1.504
PR1		0.811	4.812	1.468	1.752
PR2	AVE=0.658, CR=0.885, rho_A=0.830, CA=0.827	0.830	4.911	1.461	1.824
PR3		0.823	5.308	1.282	1.954
PR4		0.781	5.348	1.285	1.742

Note: CR=Composite reliability, AVE=average variance extracted, SL= Standardized loadings, VIF= Variance Inflation Factor, CA= Cronbach Alpha.

0.9, other than the square root of the AVE). The correlation analysis results found in the correlation table do not report such an incident. After evaluating these two indicators, our data is concluded to be relatively robust against CMV. Descriptive Statistics and correlation are listed in Table 4. Heterotrait-Monotrait (HTMT) suggest none of the values exceeds the cut-off value of 0.9. Fornell-Larcker criterion confirms that the square root of the AVE of each construct is higher than its correlations with any other construct. Both criteria illustrate a satisfactory level of discriminant validity.

4.3. Hypotheses Testing

Smart PLS was employed to perform structural equation modeling (SEM). We used critical ratios to determine structural parameter significance which was evaluated by a bootstrapping procedure (Efron & Tibshirani, 1993). A bootstrap assessment of the

path coefficients' significance with a 5,000 resampling size was used (Hair et al., 2012). Figure 2 illustrates the results of the PLS-SEM path analysis.

The effects of pandemic shock on adjustive capabilities ($\beta=0.157$, $t=3.887$, $p=0.000$, $VIF= 1.082$), psychological state ($\beta=0.276$, $t=6.791$, $p=0.000$, $VIF= 1.000$), and culture intelligence ($\beta=0.383$, $t= 9.844$, $p=0.000$, $VIF= 1.000$) were positive and significant. Thus, Hypothesis H1, H2, and H3 were supported. The effects of adjustive capabilities on performance ($\beta=0.223$, $t=4.585$, $p=0.000$, $VIF= 1.681$) were positive and significant, therefore H4 was supported. The effects of psychological state on adjustive capabilities ($\beta=0.540$, $t=14.018$, $p=0.000$, $VIF= 1.082$) and performance ($\beta=0.341$, $t= 7.547$, $p=0.000$, $VIF= 1.556$) are positive and significant. Culture intelligence has positive influence on performance ($\beta=0.262$, $t=5.997$, $p=0.000$, $VIF= 1.301$). Thus, hypotheses H5, H6 and H7 were supported.

Table 4a
Description, Correlation

	AGE	GEN	MA	EDU	JOB	SH	PS	AC	CQ	PR
AGE										
GEN	.121**									
MA	.673**	.130**								
EDU	.330**	-.015	.327**							
JOB	-.493**	-.202**	-.481**	-.299**						
SH	.326**	.142**	.226**	.195**	-.405**	(0.800)				
PS	.008	.042	.066	.081*	-.086*	.300**	(0.825)			
AC	.071	.080	.074	-.003	-.120**	.304**	.575**	(0.799)		
CQ	.154**	.137**	.167**	.072	-.234**	.349**	.401**	.473**	(0.797)	
PR	-.018	.041	.029	.076	-.074	.290**	.571**	.536**	.508**	(0.811)
Mean	1.79	.46	2.04	2.20	4.47	4.421	4.920	5.028	5.130	5.09
SD	.741	.499	.997	.536	2.475	1.441	1.221	1.101	1.044	1.116

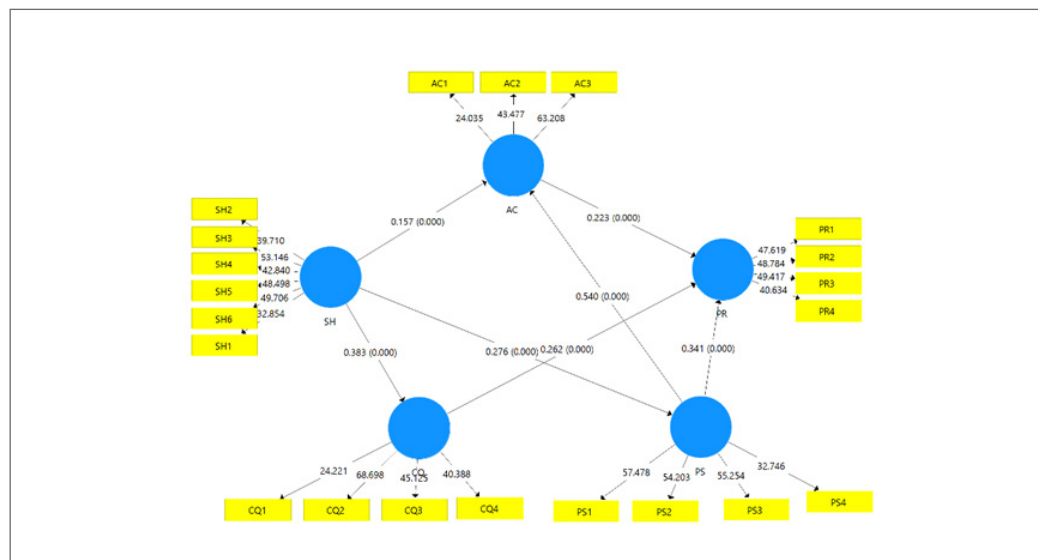
Table 4b
Heterotrait-Monotrait Ratio (HTMT)

	AC	CQ	PR	PS	SH
AC					
CQ	0.606				
PR	0.686	0.603			
PS	0.730	0.461	0.680		
SH	0.375	0.426	0.307	0.317	

Table 4c*Fornell-Larcker Criterion*

	AC	CQ	PR	PS	SH
AC	0.799				
CQ	0.459	0.797			
PR	0.542	0.496	0.811		
PS	0.583	0.384	0.572	0.825	
SH	0.306	0.383	0.272	0.276	0.800

Note: * $p < 0.05$, ** $p < 0.01$. Gen=Gender; MA=Marital status; Edu=Education; SH=Pandemic shock; PS=Psychological state; AC= Adjustive Capability; CQ=Cultural intelligence; PR=Performance; SD=Standard deviation.

Figure 2*PLS-Structural Equation Model*

Altogether, the model explained 44.3% of the variance in performance and 36.10% of the variance in adjustive capabilities, 14.5% of the variance in culture intelligence, 7.5% through of the variance in psychological state. Accordingly, it can be concluded that pandemic shock, psychological state, adjustive capabilities, cultural intelligence can enhance performance during pandemic adaptation.

4.4. Analysis of Mediating and Moderation Effects

The PROCESS Model 4 (Hayes, 2018), 5,000 bootstrap iterations, and 95% confidence interval (CI) values do not include zero results, as shown

in Table 5. This indicates the indirect effect of culture shock on performance through psychological state and AC. The indirect effect of culture shock on performance through the psychological state ($ab = 0.033$, 95% CI = [0.057, 0.123]), AC ($ab = 0.088$, 95% CI = [0.014, 0.055]) and CQ ($ab=0.099$, 95% CI = [0.042, 0.156]) is significant. These findings support hypotheses 8a, b, and c. In conclusion, the results are consistent with the hypotheses and demonstrate that pandemic cultural adjustment and psychological state are effective mediators of the relationship between culture shock and performance.

The PROCESS Model 7 (Hayes, 2018), 5,000 bootstrap iterations and 95% CI values do not contain zero results, as shown in Table 5, indicating that the indirect effect of culture shock on performance through psychological state and pandemic culture adjustment is moderated by culture intelligence. The index of moderated mediation, which provides a formal test of moderated mediation (Hayes, 2018), was significant (index=.01, 95% CI=[.002, .028]). As Table 5 shows, the indirect effect of SH on performance through PS was more positive (difference = .02, 95% CI = [.004, .066]) when CQ was high (estimate=0.194, 95% CI=[.124, .263]) than when CQ was low (estimate=-0.011, 95% CI=[-.103, .081]). Similarly, the indirect effect of SH on performance through AC was more positive (difference=.02, 95% CI=[.004, .066]) when CQ was high (estimate=.218, 95% CI=[.138, .298]) than when CQ was low (estimate=.040, 95% CI=[-.067, .146]). Additionally, it predicts that the positive relationship between SH on PS and culture adjustment will be stronger for those with high CQ. The plot of the interaction (see Figure 3) using mean-centering demonstrated that the relationship between SH and psychological state was more pronounced when culture intelligence

was high (+1 SD; simple slope: b=0.216, p<.001) as opposed to low (-1 SD; simple slope: b=0.047, n.s.). Similarly, the relationship between SH and AC is more pronounced when culture intelligence was high (+1 SD; simple slope: b=0.191, p<.001) as opposed to low (-1 SD; simple slope: b=-0.003, n.s.). This pattern supports Hypotheses 9 a and b.

4.5. Moderating Effect of Culture Difference

To examine the moderating effect, multiple group analysis (MGA) with SmartPLS was performed to conduct the SEM analysis by dividing the data set into two different cultural groups of Vietnam and America. Based on the PLS MGA suggested by Sarstedt, Henseler, and Ringle (2011) and J. F. Hair et al. (2012), we use the bootstrapping of 5000 re-sampling to analyze the data. A result is significant if there is a 5% probability of error level (i.e., the p-value is less than 0.05 or p-value is greater than 0.95) which indicates a significant difference in group-specific path coefficients. Table 6 illustrates significant differences between groups in terms of the relationship between SH and AC, SH and Performance, SH and PS, PS, and AC which support hypotheses 10a, 10b, 10c, 10d.

Table 5
Moderation and Mediation Results

Panel A. Mediation results	Coefficient	95% CI
Indirect effects		
SH→ AC →performance	0.088**	0.014, 0.055
SH→ PS→performance	0.033**	0.057, 0.123
SH→ CQ →performance	0.099**	0.042, 0.156
Panel B. Moderated mediation results		
SH→ AC →performance		
Low CQ (-1 SD)	0.040	-0.067, 0.146
Average CQ	0.141**	0.075, 0.207
High CQ (+1 SD)	0.218**	0.138, 0.298
SH→ PS→performance		
Low CQ (-1 SD)	-0.011	-0.103, 0.081
Average CQ	0.105**	0.048, 0.163
High CQ (+1 SD)	0.194**	0.124, 0.263

Note: Coefficients are unstandardized. **p < .01, two-tailed. Pandemic shock =SH; psychological state =PS, adjustive capabilities =AC, cultural intelligence =CQ

Table 6*Culture Moderating Effects: Results of Multiple Group Analysis*

	United States	Vietnam	path coefficients differences (United States -Vietnam)	t-statistic	MGA p-value (United States vs Vietnam)
SH -> AC	0.1291	-0.0721	0.2012	1.975	0.049*
SH -> Performance	0.2749	0.0203	0.2546	2.637	0.009*
SH -> PS	0.5678	0.1202	0.4476	5.633	0.000*
AC -> Performance	0.2731	0.301	-0.0279	0.27	0.787
PS -> AC	0.6975	0.257	0.4405	5.888	0.000*
PS -> Performance	0.3381	0.2093	0.1288	1.183	0.237

Notes: *p<0.05 or p>0.95

5. Discussions

Undoubtedly, the COVID-19 led to many different economic, social, and cultural problems globally. Besides the physical health impact, it has had a significant impact on cultural, psychological, and social factors and it is imperative to understand these to garner an understanding of the defense mechanisms. This study attempts to examine how pandemic shock, could influence performance via the effects of cultural intelligence, social-cultural adaptability, and psychological state. Many questions related to its predictors and behavioral outcomes are unanswered, especially in the new digital environment and cultural differences across different contexts (Mäntymäki et al., 2022). To this end, this study has examined its shock variable with first-tier consequences and second-tier consequences. We utilize the shock-adaptation framework and explain these relationships in a theoretical model, thereby responding to calls for adding insights to the knowledge related to shock-adaptation.

Our results prove that the two levels of shock-adaptation exist. The respondents in the combined data specify that the pandemic can be considered as a continuum with feelings of strain, feeling of social pressure, missing their friends and family, not accepting rigorous lockdown conditions, escaping from COVID-19, and being confused about their role or identity in the pandemic environment. We also confirmed the robustness of this model from a cross-national perspective by examining two samples of respondents from the U.S. and Vietnam

to evaluate the validity of the framework. Results from the combined data confirmed the support of all ten hypotheses, demonstrating the viability of this model. First, this study demonstrates that individuals who experienced strong shock during the COVID-19 pandemic are more likely to make a stronger effort to adjust to the changes (Singh et al., 2022). Additionally, individuals who have a positive psychological state are likely to adjust better to pandemic situations and display effective performance during crises (Lovin et al., 2023). Interestingly, performance is expected to improve after the shock caused by the pandemic.

Second, aligned with the shock-adaptation model, this study illustrates a positive impact of pandemic shock via psychological state and adaptive capability via social media usage on individual performance (Wu et al., 2023). A limited number of studies have investigated the concept that the shock due to the COVID-19 pandemic has led to improved levels of adjustment and enhanced performance. Prior studies have suggested that the fear of COVID-19 is positively related to depression and decreases life satisfaction (Satici et al., 2020). Exposure to global news about the number of cases and the rate of spread has led to depression, tension, and fear (Ahorsu et al., 2020). However, the positive aspect of the PS of an individual has not been explored thoroughly. A positive psychological state could increase psychological well-being, empathy, and passion to overcome any crisis and hardship.

Third, factors including AC and PS are signifi-

cant mediators of the relationship between SH and performance. Mediation analysis demonstrates a strong positive relationship between performance and shock through the PS as a primary control strategy and social culture adjustment as a secondary control strategy (Guan et al., 2020), as predicted. The capability to adjust to digital culture change brought about by a pandemic is a mediator of the relationship between SH-performance and PS- performance. This dimension represents a person's perspective in terms of regarding change as an opportunity for performance growth rather than a situation that requires personal adjustment and adaptation (Joo & Lee, 2017). It has been observed that psychologically strong individuals struggle less during a pandemic. They consider the crisis as an exciting opportunity to develop rather than focusing on the problem.

The adaptation dimension is similar to the internal locus of control as it assumes a sense of control over a person's life and environment (Wu et al., 2023). It is critical to conclude that a crisis may enable individuals to realize how the world is interconnected and interdependent and the relatively little control that they have over their global environment. Thus, the ability of human beings to modify their environmental practices and work could be predicted by their mechanism to deal with fear, shock, and distress.

Finally, CQ and cultural differences moderate the positive relationship between shock and performance (Aldhaferi, 2021; Shaik et al., 2021). Individuals who can embrace and thrive in the new diverse culture via social media and digital platforms and actively involve themselves in the mediated degree of psychological or adjustment strategies are likely to succeed and attain productivity in a time of crisis (Mantzaris & Myloni, 2023). The United States reports a higher score (46) on the UA dimension as compared to Vietnam (30). However, the United States has scores lower (40) on the power distance (PD) dimension as compared to Vietnam (70). Countries that score highly on the power distance dimension and have less need to lessen future uncertainty are likely to have a high level of personnel bureaucracy. This type of cultural and social structure is built around a strong leader whose in-

fluence is based more on the person than his position or function. These cultural structures most likely reside in China, India, Hong Kong, Singapore, and Vietnam. Changes and innovations that encourage information distribution can become a challenge rather than an advantage in this culture because of incomplete bureaucracies. In contrast, Americans tend to get context meaning, lessen conversational ambiguity, and support acceptable technological usage.

6. Theoretical Implications

In addition to the theoretical implications discussed, this study has several psychosocial implications and social media to ensure the performance and productivity of individuals and a successful outcome of the crisis. Adaptation capability plays a vital role in motivating individuals to cope with pandemic shock (Berry, 1997). To develop successful adaptation strategies, a holistic understanding of the pandemic shock concept is necessary. The present study aims to offer a deeper understanding of pandemic shock in the VUCA world. Building on several research streams related to pandemics, including the pandemic shock-adaption model supported by the people-environment relationship literature (Cooper, 2013), the psychological perspective (Ward & Kennedy, 1994), the cultural shock perspective (Presbitero, 2016), the behaviors of coping with pressures (Mäntymäki et al., 2022), and cross-national research (Hofstede, 1984, 2011), the present study proposes new perspectives on the pandemic. Our work also advances the literature related to the effect of culture on shock-adaptation relationship by comparing two nations, namely the U.S. and Vietnam.

From a theoretical perspective, this research leads to a more comprehensive understanding of shock-adaption in COVID-19 in several ways. Mäntymäki et al. (2022) framework created a landscape for all activities on digital mediums. Precisely, the purpose of their study was to build shock-adaptation and to maintain these relationships for the better performance. Our study has broadened Mäntymäki et al. (2022)'s and Presbitero (2016)'s proposed conceptual framework related to shock-adaptation. Consistent with Mäntymäki et al. (2022) work, our framework presented pandemic shock as a first-tier consequence. While

Mäntymäki et al. (2022) proposed the behavioral dimension of stressor, we propose the cultural dimension of pandemic shock. The cultural dimension is considered a key factor in people-environment (Cooper, 2013). Additionally, Presbitero (2016) revealed that shock influences adaptation (second-tier consequence). The relationship between community shock and adaptation is well-developed in the literature. As such, it is more valuable at the current time to examine the relationship between the two levels of pandemic shock and the psychological and cultural perspectives of adaptation as they have been rarely studied. Hence, this study provides a more in-depth investigation by examining three types of adaptation, namely adjustment, psychological state, and cultural intelligence (second-tier consequences) induce performance.

Second, this paper contributes to the literature on digital platform strategies for coping with pandemic shock. Specifically, administrators, communities, and families should assess individuals on their AC before they join the workforce. Individuals have to accelerate their AC to change (Wu et al., 2023). Pandemic crises encourage people to live in a virtual world where things are accessible and physical interaction is not required. Information is quick, manipulated, and integrated with the least cultural mediation, which leads to effective and efficient performance. Culture is digitally accessible through mechanisms that include digital platforms and digital social media, which are equivalent to cultural institutions. CQ has become a new concept that is strongly associated with digital communication and not as much with a given religion, territory, or nation (Shaik et al., 2021). Human interaction has transformed into a new visual function through a more common and useable language, like English, and fast images and pedagogies are key to learning or adjusting as required.

7. Implications for Policy and Practice

The mentoring or counseling community could facilitate a program for better adjustment of individuals who experience higher crisis shock to develop their psychological state and CQ. Another strategy could be to identify at-risk individuals and provide enhanced counseling to enable them to cope with difficulties and provide support during the crises. Governments, companies, and communities, especially in middle-income

countries like Vietnam, should focus on establishing additional psychological counseling, education, and training mechanisms for workers to help them develop a healthy psychological state and adaptive capabilities. In such situations, mobilized cultural individuals become agents of global collective forces. While half of the world's population was in lockdown because of the pandemic crisis, digital intercultural dialogue and cooperation took center stage. To implement a pleasant, cultured, and enlightened interaction, people must respect diverse cultures to enhance renewed, productive, and creative identities (Keanet.eu, 2020).

The COVID-19 outbreak has led to a transformation that is popular with the digital younger generation. This generation depends on virtual mechanisms, networks, and platforms. Organizations should adapt to this sociological trend to leverage the advantage of collective behavior and digital cultures. Over time, the landscape of digital companies in the content industry (entertainment, culture, and art sector) will become more critical and larger. During the pandemic, customs, beliefs, habits, and culture have moved toward the digital content platforms and eCommerce, with companies such as Disney, Amazon, Alphabet, Netflix, and Tencent. Digital cultural content is increasingly accumulating many special attributes, including artificial intelligence, data connecting retail, exhibition, and digital distribution, to reduce intermediaries and to magnify individual satisfaction and benefits. Individuals increase their entertainment choices as with time, cultural mediation will transform. Furthermore, new talents are being given more opportunities to receive funding when transforming new business models and implementing breakthroughs in the value chain. The micro-providers are obliged to collaborate and share resources and creativity to ensure feasibility and sustainability.

Future policies for cultural and creative sectors are being altered to progressively adapt supportive measures to enable the recovery and coordination of the entire creative ecosystem across countries. Emphasis is being laid on the fact that individuals should perform efficiently and creatively in a digital environment to address the expected global challenges. People are being encouraged to increasingly engage in cultural resilience activities to achieve performance and productivity objectives and environmental goals (less pol-

luting and sustainable production, distribution, and events).

Firms are preparing to enhance their competitive capability in the management of the cultural and creative aspects to deal with uncertainties and disasters, new digital consumption trends, and increased international business paradigms. It is recommended that the adaptative cultural and content policies take into account new digital trends to ensure resilience. The cultural and creative aspects may speed up the transformation in areas of digital programming to respond to new cultural and consumption behaviors. Firms may shift to digitalized culture and implement new policies to assist the adjustment, prepare well for cultural diversity, and increase virtual mechanisms (virtual reality headsets) to support online conferences, remote work, crowd virtual events, virtual services, and virtual entertainment. At this point, competition policy should not only focus on the impact of individual differences and diversity. Large international digital platforms do not discriminate against national and local content and smaller independent players in terms of licensing. Streaming platforms should be appropriately financed to benefit from this creative ecosystem. The art and cultural products should be transformed into supportive marketing and distribution channels for independent producers.

7. Limitations and Future Directions

This study examines the SH and PS process as predictors of performance toward digitalization during crisis-based cultural change. First, the limitations can be figured out in the selection of research variables. While shock, psychological state, and adjustive capability variables are included, other threats to physical health, and potential financial problems should be considered as additional variables. Second, the shock and psychological state via digital platform and social media, adjustive capability success would enhance an individual's efficiency and effectiveness during uncertainties and turbulences. Future research should invest in other social and cultural support strategies.

Third, escalated shock implies that individuals adjust to new digital habits, experiences, and customs, which help them to effectively deal with stress, depression, and other crises-induced situations to perform better. Future studies that can enhance the

depth of the results through other combined data collection methods, including qualitative methods or big data analysis, should be conducted.

Finally, the data in this study primarily focuses on respondents with college degrees or higher, which were collected from Vietnamese and Mturk workers who are familiar with digital platforms (Amazon). Some particularly salient challenges of MTurk research includes "inattention, self-misrepresentation, self-selection bias, high attrition, inconsistent English language fluency, non-naivete, growth of MTurker communities (Aguinis, Villamor, & Ramani, 2020). Although all hypotheses are strongly supported, for a more comprehensive assessment, the larger global surveys are needed.

Conclusions

We studied a theoretical framework that anticipated a holistic understanding of pandemic shock in shock-adaptation model. This framework provided new perspectives on resident pandemic shock by illuminating key individual-level antecedents and its first-tier and second-tier consequences. Our paper focused on the psychological state, cultural intelligence and adaptation as mediators of the relationship between pandemic shock and performance. We further confirmed the robustness of this framework from a cross-national perspective by comparing two representative samples from the U.S. and Vietnam. Our findings confirmed that U.S. individuals' high pandemic shock is linked to higher levels of psychological state, cultural intelligence and adaptation than those reported by Vietnamese individuals. This indicates that pandemic shock varies from one nation to another, which is a key contribution of this paper. Similarly, we reported some differences between the U.S. and Vietnamese individuals. For example, in the assessment of the relationship between pandemic shock and the two tiers of pandemic shock, the effects were stronger for the U.S. respondents. However, the effect of adaptation on performance, and the effect of psychological state on performance were not significantly different for the two groups of respondents. This study adds new insights into the pandemic shock literature as it is considered one of the most important factors in motivating individuals to cope with shock and perform better.

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