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LEADERSHIP COMPETENCIES FOR THE VOLATILE, UNCERTAIN, COMPLEX AND AMBIGUOUS (VUCA) ENVIRONMENT: CHALLENGES TO HIGHER EDUCATION

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Abstract:

The coaster-roller situations that challenge contemporary educational systems have created a surge for investigating if modern education leaders possess the required leadership competencies that may empower them to function effectively and efficiently in a world of precariousness. Incessantly, the gravity of the challenges such as environmental volatility, uncertainty, complexity, and ambiguity (VUCA) has reshaped where and how education activities should be done. Likewise, the challenges of leaders' self-confidence, tech-savviness have adversely impacted how leaders and teachers perform their pedagogical practices.

It follows that leveraging from the COVID-19 pandemic which has autocratically forced education practices out of its traditional context and students' learning trajectories, there is a need to explore how these precipitating environmental and social dichotomy trammeled school teaching strategies, and institutional challenges affecting the teaching and learning processes in higher education environments.

The quantitative method, descriptive research design, and random sampling techniques were used as the compass to steer the study. The study findings showed that the leadership competency dimension of self-confidence had the highest overall mean score, whereas tech-savviness got the lowest overall mean score. However, based on the criterion variables, institutional teaching strategies had the highest mean score while institutional challenges encountered by teachers had the lowest mean score. Also, positive and significant relationships were found between self-confidence and institutional teaching strategies but not with institutional challenges encountered by teachers.

The implication of the study findings is that higher education leaders need to be aware that epistemologically, it is not enough to have abstract knowledge of a cluster of leadership competencies or skills in leading today and future higher education institutions when linking VUCA challenges and pandemic crisis together.

Consequently, synergizing and rethinking the demands of technology, teachers' professional teaching strategies enhancement may help position leaders in fighting the present challenges of volatile, uncertain, complex, and ambiguous economic, social, environmental, and political instability impacting higher education institutions.

Keywords: Leadership Competencies, Volatility, Uncertainty, Complexity, Ambiguity, Self-confidence, Tech-savviness, institutional Teaching Strategies, Teachers Institutional Challenges Encountered

INTRODUCTION

The challenges higher education institutions encounter nowadays because of the volatility in the global and national economy, uncertainty in what tomorrow holds, complexities associated with international and national policies, human behavior, and ambiguities seem to paralyze leadership competencies to lead schools effectively and efficiently.

Besides, challenges of higher education leaders' self-confidence and tech-savviness competencies have been heightened by the call for technology integration into the school curriculum and classroom teaching. However, higher education leaders' demonstration of grit, self-efficacy, could help in sailing above whatever VUCA challenges that threaten leading schools especially educators who lubricate the institutional programs for students' success.

Furthermore, leaders' self-confidence in leading higher education institutions is significant for the success and achievement of goals. Theoretically, education leaders' self-confidence relates to mental and emotional states associated with professional and situational job task performance. Although specific self-confidence works best when a leader possesses general self-confidence which is a stable personality trait.

However, self-confidence affects our thoughts, emotions, and behavior in such a way that it undermines our capacity to function effectively and efficiently. For example, Goodstadt and Kipnis (1970) as cited in Axelrod's (2017) research showed that to manage performance problems, self-confident managerial leaders tend to work directly with their subordinates by utilizing informal persuasion and supervisory power. Conversely, those with less self-confidence may fall back on formal administrative processes and referrals (Goodstadt et. al. 1970).

Likewise, it follows that a leaders' self-confidence motivates him/her to persist in a task when threatened by situational uncertainties and ambiguities. For instance, Greenacre, Tung, and Chapman's (2014) article found that greater perceived interpersonal influence was felt by those with greater social self-confidence (Greenacre et al. 2014). However, in another study, the findings demonstrated that those with greater social self-confidence influence the actual purchase decisions of their peers to a much greater extent than those with less social self-confidence. The results demonstrated that greater levels of social self-confidence lead a person to act as a de-facto leader, with peers following their purchasing behavior as a consequence of the influence they exert (Greenacre et al. 2014).

Furthermore, Ratnasari and Andriansyah's (2014) results showed that self-confidence improves one's performance when coupled with good social skills. Whereas without supported social skills, self-confidence yielded a negative effect on performance. The results also showed that self-assessment had no significant effect on performance (Ratnasari et al. 2014).

However, Moeheriono (2009) as cited in Ratnasari et al. (2014) found that the main factor of the young executive's success is self-confidence, adaptability, leadership, and the ability to influence others. Additionally, Magrane, Morahan, Ambrose, and Dannels (2018) explored how senior academic leaders in engineering perceive their leadership roles in terms of the importance they attribute to various leadership skills and their self-confidence in exercising those skills (Magrane et. al., 2018).

Correspondingly, it was found that academic leaders sought to support diverse individuals, while utilizing processes that support the status quo of academia, advocate through sponsorship while respecting the decision-making of shared governance, and coach for success while monitoring for risk (Magrane et. al., 2018). Nevertheless, inherent in the science, technology, engineering, and mathematics (STEM) leaders' processes were limitations of infrastructure for faculty development and implicit bias that carries the potential to counter the goals of supporting local talent and developing diverse workforces on campus (Magrane et. al., 2018).

Moreover, tailoring from tech-savviness or technologies, scholars have found that administrators are apprehensive about social media in the classroom (Uğur & Koç,2019). Consequently, there is a surge for school leaders to become intrinsically interested and adopt a learning approach to model technology acumen in institutional administrative practices. Accordingly, the global digital economy is prescribing and forcing colleges and universities to move from formal traditional roles of teaching and learning into redefining institutional innovation, entrepreneurship, creativity, and marketing (Wihlborg & Robson, 2018).

Also, the globalization of connected networks based on information and communications technologies created change on an unprecedented scale where technology-enabled complex data transfers and information access become essential to knowledge-intensive production (Muharlisiani, 2018). Besides, Bass and Eyon (2017) found that the world's economy, increasingly diverse populations, and the issue of the pervasive use of technology affect higher education in a myriad of topics (Bosire & Amimo, 2017).

However, Bano and Taylor's (2015) research findings suggested that the emergence of new digital technologies offers tremendous opportunities which leaders, individuals, and groups with the ability to modify and adapt could utilize in performing their job functions. Similarly, it was advocated that the capacity to adapt technologically could help higher education leaders in creating greater access to education, new markets for distribution, and expanded income opportunities for higher education institutions (Bano & Taylor, 2015; Malureanu, Panisoara, & Lazar, 2021; Shank 2019).

Furthermore, it follows that improving the quality of education deals a lot with the betterment of the teaching and learning processes, a well-planned curriculum, and effective implementation of the curriculum (Abdullah & Hui, 2014). There are many new approaches that have been introduced in improving the efficacy of teaching and learning strategies which include using inquiry learning, contextual learning, constructivism and mastery learning, etc. However, leaders are to continuously revise the curriculum to ensure that it is in line with the needs of the country and the changes that are taking place in the educational system around the world.

For instance, Yahyazade, Moghaddam, and Attaran (2014) claimed that students learn more when active learning is used compared to traditional teaching methods (lecturing), regardless of the subject matter. Besides that, Yahyazade, et. al. (2014) demonstrated that students tend to enjoy the class more and are able to retain the information longer. Also, it was noted that the active learning strategy allows students to learn in the classroom with the help of an instructor and other students, rather than learning on their own (Yahyazade et al. 2014).

However, Killian and Bastas (2015) examined the effects of Team-Based Learning (TBL), an active-learning strategy, on students' attitudes toward sociology as well as students' performances. The results revealed that, as

opposed to students in lecture-based learning (LBL) classes, students in team-based learning (TBL) classes have much more positive attitudes toward the discipline while demonstrating equivalent performances.

Also, Al-Odwan (2016) research findings revealed that students in the experimental group benefited from the active learning teaching strategy which was considered as one of the newest strategies through employing a number of skills that help students progress in the learning and transferring the effect of learning and acquiring the concepts, facts, and instructions. In contrast, it shows that active learning strategy enables students to think to move to higher levels of learning compared to the individuals in the control group taught by the traditional method lecturing which did not improve their ability to increase achievement and developing their acoustic awareness skills (Al-Odwan, 2016).

Besides, percolating issues that higher education leaders battle with today ranges from the volatile financial environment, the rise of international partnerships, greater accountability pressures, the need for new business models. Likewise, new technologies, and changing demographics of students are just some of the challenges, which call for leadership solutions that are tested both inside and outside of higher education (Kezar & Holcombe, 2017).

Likewise, the literature indicates that social injustice in higher education (Wilkins and Burke, 2015, Yilmaz and Kaya, 2015), students demographics (Preece, 2015), faculty ethical challenges (Altbach, 2015a), challenges faced due to globalization (Altbach, 2015b, Yilmaz & Sarpkaya, 2016); unsatisfied expectations from the program (Kiral & Altun, 2015) have a negative effect on universities.

However, the challenges of today have created a unique occasion that leaders, educators, and administrators should take advantage of rather than lament, as it provides higher education institutions the invaluable opportunity to identify strategies and tactics to become "Universities of the 21st Century" (Ramsey & Wesley, 2015), and select multimedia (Torres, 2017) that could assist in meeting the trends of educational practices.

Taken together, these findings suggest the implication for higher education leaders in the VUCA world to be aware that depreciation in their self-confidence may erode their competency to lead in situations that are constantly metamorphosizing due to environmental, social, volatile economic, and technological revolutions. This notion was supported by Palmer (2014) who submitted that self-awareness (self-confidence) requires self-reflection of assumptions and the impact of those assumptions on others.

It follows that in order to close the existing gaps in the extant literature on issues relating to how leadership competencies in a VUCA environment are conceptualized and applied in higher education institutions, this study integrated leadership elements which VUCA constructs could adversely impact leadership in this study as suggested by Millar et al. (2018). Secondly, the paper looked at leadership competencies of higher education institutions in order to help in the generalization of past studies conducted in the western hemisphere and those centered on basic education in the Philippines (Alegado, 2018; Combalicer, 2016)

METHODOLOGY

The chapter included the research design, respondents of the study, sampling technique, research instruments, data gathering procedure and statistical treatment, scales validation, and reliability testing, and ethical considerations. According to Kothari (2004), as cited in Chelimo (2017), research methodology is the systematic, and theoretical analysis of the procedures applied to a field of study.

In this study, the quantitative research method was used because it deals with numbers to explain findings (Kowalczyk, 2016). Using numbers implies that the researcher has a good knowledge of both descriptive and inferential statistical parameters, statistical calculations and interpretations of standard deviations, ANOVA, correlations, etc. (Center for Research Quality, 2015a).

Whereas both descriptive and correlational research designs were used in the interpretation and discussion of findings. Burns and Grove (2003) as cited in Chelimo (2017) define research design as a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings. Interestingly, Kothari adds that the research design is the conceptual structure within which research is conducted and it constitutes the blueprint for the collection, measurement, and analysis of data (Kothari, 2004).

The descriptive design is preferred since it allows the use of quantitative or qualitative elements within the same study. It also often uses visual aids such as graphs and charts thus interpretation and presentation of data are simplified. Whereas correlations indicate the relationship between paired scores (Ary, Jacobs, Sorensen, & Walker, 2014), and in the correlational study, the goal is to explore relationships between independent and dependent research variables (Creswell, 2005).

Consequently, a correlational research design was appropriate for this study because data could be statistically analyzed to identify whether or not higher education leadership competencies influence directly or indirectly respondents' institutional teaching strategies, and the institutional challenges teachers encounter. More specifically, Pearson r (Bivariate) as a type of correlational procedure that evaluates relationships among several variables were used (Ary et al., 2014).

RESPONDENTS OF THE STUDY

The respondents of the study were university teachers (instructors) from selected South Manila Education Consortium member universities operating within Taft Avenue, National Capital Region (NCR) Manila, Philippines while the researcher used the simple random sampling technique which gives equal chances to the respondents to be included in the study. In a simple random sampling technique, according to Alvi (2016), the population must contain a

finite number of elements that can be listed or mapped. Apparently, this implies that the population must be homogenous or consistent and every element contains the same kind of characteristics that meets the described criteria of the target population such as the university teachers within a geographical setting as for this study (Alvi, 2016).

In this study, the total sample size was determined through the use of the Krejcie and Morgan (1970) table for determining sample size. The respondents were one hundred and eighty-four (N=184) that took part in the study. Out of the one hundred eighty-four respondents, eighty-two (44.6%) were male while one hundred and two (55.4%) were female.

RESEARCH INSTRUMENT

The research questionnaires were researcher-developed from the literature review and theoretical conceptualization in relation to the study indicators. The first part was on the leadership competencies which include self-confidence leading in complex and ambiguous situations, tech-savviness (digital), whereas the second part centered on institutional teaching strategies and institutional challenges encountered by teachers.

The questionnaires were duly piloted with a total of thirty university teachers before it was administered to the target study respondents. Accordingly, the Leaders' self-confidence leading in complex and ambiguous situations competency was assessed on 12 items and a five-point level of agreement or disagreement with a Cronbach alpha of .972.

While Leadership Tech-Savviness (digital) Competency Scale was used to assess the leadership inclinations and activities with an overall alpha coefficient for the dimension reliability of (α = 0.973). Institutional teaching strategies were assessed with the use of the Higher Education Institutional Teaching Strategies Scale yielding a Cronbach alpha of .939. However, the Higher Education Teachers' Challenges Scale was used to assess the perceptions of teachers to determine the type or kind of challenges they face in the institution. The scale was 12 items on a five-point Likert rating scale and the Cronbach alpha was .930. Moreover, all ethical procedures were observed and given full consideration in this study in order to safeguard the protection of life, health, privacy, and dignity of participants throughout the study.

It's worth mentioning that this paper is reporting partial findings of dissertation research first part has been published and other series will follow accordingly.

RESULTS AND DISCUSSION

This study explored the leadership competencies for a VUCA environment challenges that perturb higher education institutions' smooth operations, effectiveness, and efficiency. Accordingly, this section discusses the findings of the study data analysis, and tables were used for visualizations of the results.

Table 1.
Mean Rating Summary on Leadership Competencies (N=184)

Scale Indicators	Mean	SD	Verbal Interpretation
Self-confidence	4.16	.643	Very High
Tech-savviness	4.13	.644	Very High

The results show that item 1 had the highest mean score of (m=4.22, SD. = .801), followed item 1 with a mean score of (m= 4.21, SD. = .793) and then items 3, 4, and 7 with mean scores of (m=4.20) correspondingly. While item 5 got the lowest mean score of (m=4.08, SD. = .826). Nevertheless, the overall mean score was (4.16, SD. = .643) which could be interpreted as a very high level of competency.

The findings indicate that the participants rated their leaders "Very High". This implies that the participants observed their institutional leaders as having the self-confidence leadership competency in leading the affairs of the institution in complex and ambiguous environments. It equally means that the leaders possessed the ability to get things done and it shows that the participants expressed confidence in the motivation of their leaders putting their words into action.

Moreover, the findings attest that the higher education leaders irrespective of the VUCA challenge honed their capacity in identifying their strengths and weaknesses in order to erect a bridge to cross over the difficult situations that may retard institutional goals achievements.

The findings harmonize with Greenacre et. al. (2014) who found that greater perceived interpersonal influence was felt by those with greater social self-confidence. In addition, it has been found that self-confidence improves one's performance when coupled with good social skills Ratnasari et al. 2014). However, this was in reverse according to Magrane et al. (2018) study that reported a relatively low prevalence of leaders' self-confidence practices.

Moreover. the results showed that item 16 had the highest mean score of (m=4.24, SD. = .722), followed by item 15 with a mean score of (m= 4.23, SD. = .772) correspondingly. While item 11 got the lowest mean score of (m=4.05, SD. = .835) and item 10 with a mean score of (m= 4.08, SD. = .760). Nonetheless, the overall mean score was (4.13, SD. = .644) with a verbal interpretation of "Very High".

The findings further revealed that the leaders promote and enforce privacy, security, and online safety related to the use of technology in the respective institutions. Similarly, the results indicate that leaders promote and enforce environmentally safe and healthy practices in the use of technology. In the same manner, the participants perceived their leaders as having the tech-savviness competency to identify, use, evaluate, and promote appropriate technologies to enhance and support instruction/curriculum.

Likewise, the results foretell the leaders' capacity to utilize technology for communication and collaboration among colleagues, staff, parents, students, and the larger school community. Similarly, the findings cascade the awareness of leaders in identifying, modeling, and enforcing social, legal, and ethical practices to promote responsible use of technology which is significant in abating unlawful litigation that may arise from unethical practices.

Also, it could be inferred that the leaders could integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage resources to overcome VUCA challenges. The study findings were affirmed by Laurenceau et. al. (2016) results which suggested that the digital journey offers tangible benefits to business leaders and is being even more positively embraced by their employees.

However, this was contradicted by the Global Leader Forecast 2018 report which showed that only 22 percent of digital-era leaders considered themselves effective in driving digital by leveraging technology to modernize their business strategy and operations (Dettmann et. al. 2018).

Table 2.
Mean Rating Summary on VUCA Teacher Assessment (N=184)

Scale Indicators	Mean	SD	Verbal Interpretation / Descriptive Equivalent
Institutional Teaching Strategies	4.09	.577	Very High
Institutional challenges teachers encounter	3.12	.881	High

Table 2 findings showed that institutional teaching strategies got the highest mean score of (m=4.09, SD. = .577). Conversely, institutional challenges encountered by teachers had the lowest mean score of (m=3.12, SD. =.881). Nevertheless, stitching the findings together shows that the participants perceived their leaders and themselves as having and using different teaching strategies to enhance pedagogical practices.

The findings equally suggest that the participants utilized eclectic methodological approaches in encouraging students to work hard in solving and providing solutions to assigned academic tasks or problems. Similarly, the results indicate educators' use of constructive feedback techniques in providing written explanations on how students can approach solving tasks problems.

Likewise, the findings indicate that the teachers strongly agreed that active learning, cognitive learning strategies are as essential as teaching methods to improve students learning outcomes. Though, in the part analysis of the study, it was observed that the teachers used more of a teacher-directed teaching strategy that extant literature has found to be unproductive to students learning success.

Therefore, it is hoped that higher education educators will realize that learning today should not stereotyped but should be heterogeneous in its teaching approaches in order to reach all students irrespective of their learning styles. Similarly, this calls for educators to embrace productive instructional strategies that support motivation, competence, and students' self-directed learning.

This curriculum, teaching, and assessment strategies have been found to feature well-scaffolded instruction and ongoing formative assessment that support conceptual understanding, take students' prior knowledge and experiences into account, and provide the right amount of challenge and support on relevant and engaging learning tasks (Darling-Hammond, Flook, Cook-Harvey et. al. 2019).

Nevertheless, for students to become productive citizens within and beyond the school, Stafford-Brizard (2016) disclosed that the students need positive mindsets about self and school, along with social awareness and responsibility (Stafford-Brizard, 2016). In turn, students are required to possess strong self-regulation, executive functioning, meta-cognitive skills, resourcefulness, perseverance, and resilience in the face of obstacles and uncertainty, the ability to learn independently, and curiosity, inventiveness, and creativity (Darling-Hammond et al. 2019).

Table 3
Correlation between Independent and Dependent Variables

Variables	Schools	Pearson-r	P-value	Decision	Interpretation
Self-confidence	ITS	.632**	.000	Reject	Significant
	TIC	-.109	.141	Accept	Not Significant
Tech-savviness	ITS	.669**	.000	Reject	Significant
	TIC	.010	.890	Accept	Not Significant

**Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the correlation matrix analysis between leadership competencies and institutional teaching strategies (ITS), and teachers' institutional challenges (TIC).

Accordingly, the correlation results were: ITS (r=.632, p=.001), and TIC (r= -.109, p=.141). This disclosed that there was a strong and positive significant relationship at the 0.01 level of significant (2-tailed) between leadership self-confidence competency and teaching strategies, cultural values, and students' diversity. Hence, the decision to reject the null hypothesis and conclude that there was a significant relationship between self-confidence and ITS.

Conversely, teachers' institutional challenges displayed a negative significant relationship with self-confidence leadership competency. This led to accepting the null hypothesis and conclude that there was no relationship between self-confidence and TIC.

The findings suggest that higher education leaders' self-confidence has a strong connection with leadership competencies. It also denotes that the respondents perceive their higher education leaders as having strong beliefs and values self-esteem in accomplishing tasks. It could as well means that the leaders have trust in teachers to use the appropriate teaching strategies initiatives of the institution.

Besides, theoretically leveraging the data's very high mean scores and positive correlations, it could be adduced that the self-confidence of leaders in the VUCA environment is imperative if higher education leaders are to excel and achieve institutional goals in a VUCA challenging environment. This is because self-confidence is a psycho-emotional trait that permeates through a person's cognitive ability, emotionality, and purposeful actions.

Consequently, these study findings were substantiated by research that those with high self-confidence enjoy better overall health because they deal with stress and difficult emotions better; improved performance at work through better ability to concentrate and greater commitment to tasks; and develop better relationships by setting a healthy boundary habit and ability to focus on improving relationships (Ray, 2017).

Furthermore, the study findings revealed the correlation between tech-savviness and ITS and TIC. The results were: ITS (r=.669, p=.000), and TIC (r=-.053, p=.472). The results disclosed that there was a strong and positive significant relationship at the 0.01 level of significant (2-tailed) between tech-savviness and teaching strategies. However, there was not a significant relationship between tech-savviness and institutional challenges encountered by teachers thereby necessitating the decision to reject the null hypothesis on ITS while accepting the null hypothesis on TIC.

The study positive significant relationship found between higher education tech-savviness leadership competency and teaching strategies suggests that leaders were able to facilitate the use of technologies to support and enhance instructional methods. Luckily for the students, such endeavors could help to develop students' higher-level thinking, decision-making, and problem-solving skills. It follows that the tech-savviness capability of higher education leaders could empower them to promote and enforce privacy, security, and online safety related to the use of technology within the institutions in order to mitigate undue litigations arising from employees and students unethical uses of technological tools.

Also, the results indicate that technology could influence higher education leadership capacity to employ technology for communication and collaboration among colleagues, staff, parents, students, and the larger community. Apparently, that requires leaders to possess the ability to integrate strategic plans, technology plans, and other improvement plans and policies to align efforts and leverage institutional resources.

Interestingly, this study's findings affirm Laurenceau et. al. (2016) results which suggested that the digital journey offers tangible benefits for business leaders and is being even more positively embraced by their employees. However, these findings contradict the Global Leader Forecast 2018 report which showed that only 22 percent of digital-era leaders considered themselves effective in driving digital by leveraging technology to modernize their business strategy and operations (Dettmann et. al. 2018). Similarly, it has been found that disruptive technology and subsequent technological changes in response to competition had intense effects on organizations (Lahiri, Pérez-Nordtvedt & Renn, 2008; Du & Chen, 2018).

Besides, the study findings showed a negative relationship between tech-savviness and TIC. This implies that higher education institutions leaders should innovate and ameliorate this negativity through further self and teachers' development programs and pieces of training in order to have wholeness in the ways technology is used to address

institutional challenges. This was incongruence with scholars' findings that the introduction of digital tools affects the design of work, and, particularly, how people work together (Barley, 2015; Schwarzmüller et al., 2018).

Overall, significant correlational analysis suggests that the higher education institutions which participated in the study possessed the needed competencies that could empower them to face and navigate VUCA challenges when applied effectively and efficiently (Van Der Steege, 2017). However, the finding also demonstrated that the leaders need to broker out management strategies and ways for tackling institutional challenges (Elkington, Van Der Steege, Glick-Smith, & Breen, 2018) encountered by teachers which were very high on salary inequality or not conforming to norms and lack of research skills.

This is imperative because changes in the real world are occurring at a faster pace than the corresponding academic development, leading to the latter lagging behind (Hall and Bowles, 2016). In addition, Hall et. al. (2016) further submitted that academic syllabi need to incorporate VUCA as a phenomenal concept to ensure that leaders are aware of VUCA from an early developmental stage (Hall et. al., 2016).

CONCLUSION

This is imperative because changes in the real world are occurring at a faster pace than the corresponding academic development, leading to the latter lagging behind (Hall and Bowles, 2016). In addition, Hall et. al. (2016) further submitted that academic syllabi need to incorporate VUCA as a phenomenal concept to ensure that leaders are aware of VUCA from an early developmental stage (Hall et. al., 2016).

The results showed that there was a very high level of higher education institutions' leadership competencies of the participating schools on the self-confidence, tech-savviness, and institutional challenges encountered by teachers as perceived by the respondents. Consequently, it was concluded that the leaders keep up with the very high level of leadership competency as indicated in the study findings in order to lead in a transitioned virtual educational trend of today and the future.

The theoretical implication is that higher education leaders should be aware that overcoming and achieving institutional goals effectively and efficiently in a highly VUCA world especially when a health crisis like the ongoing COVID-19 pandemic has limited human movements and traditional educational philosophies require converting theories into practical actions. Therefore, educational leaders and educators, as well as students at this time, do not only rely on head knowledge of a cluster of leadership skills but they must embrace contemporary trends in building self-confidence, becoming technocrats, and finding joy in resolving conflictual situations that may sabotage organizational goals and objectives.

Through this purposeful and humble leadership philosophy, they could position themselves and the employees in overcoming the challenges of the present and future volatile, uncertain, complex, and ambiguous economic, social, cultural, political, and environmental instabilities that have cankered the well-being of schools and sustainability.

The practical implication is that higher education authorities of different educational institutions (SMEC higher education institutions in particular) should use the insight from this timely study findings and equally exploit contemporary leadership competency practices with the aim to overcome the challenges of VUCA eroding our educational environments and unforeseen eventualities.

The study limitation was on the methodology, a quantitative method was used in this study, however, future researchers may utilize qualitative and/or mixed-method which may help in shedding greater insight into the concept of leadership competencies in a VUCA environment among SMEC higher education institutions and future researchers may extend exploration into public universities.

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