Research Article

Unveiling the Facets of Virtual Research Culture

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ABSTRACT

With the ongoing trends due to the sudden outbreak of COVID-19, the researcher aims to unfold the perspectives and experiences of teachers, students and administrators in the prevailing research culture of higher educational institutions in an online learning setting during the pandemic. Higher educational institutions aim to strengthen the culture of sharing knowledge, resources, and best practices especially in the area of research. A narrative inquiry was conducted among twelve (12) key informants. Thematic analysis and data triangulation was used in analyzing the data. The findings were three overarching themes which are features of virtual research culture, depiction of virtual research experiences and manifestations in sustaining research culture during the pandemic. The findings further recommended to have a strong and intact leadership which is clearly focused on sustaining the research goals and targets of an institution. This also ensures that the members of an institution embrace a rich and formidable research culture. Likewise having a compelling and research-oriented leaders may encourage the whole university to engage on research activities. There might be virtual limitations encountered but a positive and goal-oriented institution will survive even in the midst of the pandemic.

Keywords: *Virtual Environment, Research Culture, Research Activities, Narrative Inquiry, Data Triangulation*

Introduction

The sudden outbreak of COVID-19 shook the entire educational institutions in the world. Learning modalities shifted from the traditional face to face set-up to online or distance learning. Here in the Philippines, some higher educational institutions opted to used blended and online learning. Since the Commission on Higher Education implemented the flexible learning so that HEI's may innovate learning modalities that will facilitate the students access to quality education amid the pandemic. As stated in CHED Memo Order No. 4, s. 2020, by strengthening the culture of sharing knowledge, resources, and best practices, the paradigm shift of the teaching and learning process with support of the stakeholders would bring new transition and transformation among the higher education institutions. Online learning is not new in the Philippines

but because of the pandemic it became the trend in educational institutions.

Online learning is sometimes referred as e-learning or learning in a virtual environment. The student can attend classes, interact with his or her classmates and professors. Unlike the face-to-face set-up, online learning offers a variety of delivery styles. It is not necessary that both the students and teachers shall be at the same place and time. Teachers can assign task to their students and message them through the use asynchronous delivery style or may give them lectures and explanation through synchronous delivery style. According to Smith and Brame (2014), in order to have a significant learning process, teachers must be trained not only on how to use technology but also how to deliver the material in an online learning platform. In addition to this, online learning processes may boost the potential of students to become independent learners. School administrators also expressed positive views about online learning in terms of continuity in education even there is pandemic (Zincirli, 2021).

Benefits and Limitations of Online Learning in Research

Students who favored self-regulated learning values online learning. Since these students have time management and metacognition skills to reflect upon their own learning (Gilbert, 2015: You & Kang, 2014). Moreover, Miller (2019) cited that online learning may offer various benefits such as flexibility and improve technical skills for both the students and teachers especially in using technology. Taking research classes online may also lessen the expenses of education. Teachers and students can save transportation fares. Students can get more learning materials online and can save from buying printed learning materials. Zincirli said that the administrators shared their positive comments about online learning and that is technological competence for all and at the same time it prevents additional cases of COVID 19. In the study of Fadde and Vu (2014), online learning may offer various benefits but also brought challenges and hesitancy on some students and teachers. There are instructors who were challenged in preparing lectures in a digital format. Some were uncomfortable in using video cameras especially in recording their lectures for asynchronous sessions. Moreover, Abuhassna, Al-Rahmi, Yahya, Zakaria, Kosnin & Darwish (2020) stated that there are students who experienced technical difficulties since they do not have prior experiences in using the online platforms or software programs. Zincirli also found out that the administrators pointed negative views about online learning, these include the need for additional technical infrastructures and additional workload. In the Philippines it was found out in the study of Barrot, Llenares & Del Rosario (2021), that students experienced physical discomfort because of long exposure to gadgets, and financial challenges since they spend money in buying load for internet connection. Moreover, there are school administrators who bought educational online platforms to be used in this new learning modality. Teachers were required to attend webinars to have the mastery on the application of online learning not only in teaching research but also in other subjects.

Research Culture in the Universities During the Pandemic

Research culture, as stated by the Royal Society in the University of Stirling (2019), includes the behavior, values and norms of the whole university. High performing research units have diverse and happier staff who exhibits more productive and positive culture towards research even in the midst of pandemic. Many higher educational institutions have foster good research culture. Rosas (2013), wrote that higher education institutions encapsulated their teachers to do research not only to bring utilization to classroom but bring significant contributions in the different fields to provide solutions to the problems in the society. As stated by Galang (2014), one of the primordial concerns of the Commission on Higher Education is to promote strong research orientation among higher educational institutions. It was also stated that a strong research culture may increase the research productivity of the universities. Furthermore, to establish strong research culture, a synergistic partnership between the school administrators and faculty shall be feasible. To support such partnership,

strong research practices are recommended and these are financial assistance and incentives, social and personal support, access to linkages, promotion, reduction of teaching loads, faculty development, and availability of research facilities. Research culture is quite evident in the actual learning set-up by knowing its research practices and research outputs (Olvido, 2021). In period of pandemic, almost all institutions were forced to be closed and shifted the means of school activities into online learning due to this, according to Baker (2021), research projects in the universities were delayed because researchers are unable to use the research laboratories and some do not have virtual contacts or number to persons of concerned that they are supposed to study. Furthermore, it was also stated, that there were faculty researchers who juggles their time with childcare since nurseries and schools were locked down.

There were a number of studies which tackle research culture in HEI's; however, since there was shift on learning and working modalities in the schools, there were limited literatures on how was the research culture in the HEI during the pandemic or how do the universities maintain or continuously integrate research culture in their respective learning communities. There are questions in mind, if the pandemic brought change for the better or worse for the pursuance of research culture in the universities. For this reason, the researcher aims to unfold the perspectives and experiences of teachers, students and administrators in the prevailing research culture of higher educational institution in an online learning setting during the pandemic. Specifically, it sought to answer the following questions.

1. How do the key informants describe the prevailing research culture in an online learning environment?
2. How do the key informants describe their experiences in research undertakings in an online learning environment?
3. What are ways to sustain strong research culture in an online learning environment during the pandemic?

The researcher believes that this study would be beneficial since it will provide data if the research culture is still manifested during the pandemic Knowing and understanding these facts will help the school administrators to make or substantiate decisions in fostering research culture even during the pandemic period.

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Methods
Research Design
The study employed the qualitative approach and utilized the narrative inquiry design. This enables the researcher to investigate and examine the informants' insights and experiences. Though data gathered is subjective and based on the experience of the informants, the use of data triangulation ensures to eliminate biases and judgement.

Sampling Technique
To gather pertinent data, key informants were selected through stratified purposive sampling. Each sampling frame were divided into stratum and each stratum corresponds with the criteria set by the researcher (Omona,

2013). Each stratum was represented by administrators, teachers and students. All key informants are engaged to research in terms of writing, logistics (process of managing and support research) and participation. The teacher and administrator key informants are consistently committed to any research undertaking for at least three years in the university. While the student-key informants are enrolled in any research subject/ or finished a research requirement.

Informants of the Study
A total of 12 key informants were involved in this study. Three (3) administrators, three (3) faculty-researchers and six (6) students shared their perspectives and experiences in the study. All key informants were purposely selected since they were all qualified based on the set criteria.

Research Instruments
The researcher prepared a semi-structured interview guide. This was content validated by three (3) research specialists whose area of specialization is related to the area of inquiry. It was subjected for pilot testing. Upon the collection of data, all responses were considered accordingly. The interview guide has undergone revision and verification processes.

Setting of the Study
The study was conducted in a well-known university in the region. This university implements the research practices identified by Olvido in her study which were considered as indicators of research culture.

Data Collection
The researcher sought the permission to conduct the study and follow the immediate protocol to prevent the spread of COVID-19. Virtual interviews were conducted separately through the preferred social media platform of the informants. To further understand the information provided, the researcher also sent clarificatory questions and also content verification through email and messenger platform.

Limitations of Virtual Interviews

Virtual interviews were used to collect the data needed in this study. The researcher asked the key informants their preferred schedule and video conferencing platforms. Zoom and google meet were used for the actual interviews. Individual interviews were conducted All key informants were informed about the purpose of the research and the procedure in the conduct of virtual interviews, such as recording in the use of zoom platform. The researcher also used an audio recorder google meet, since the platform do not have a recording feature. Some informants opted to close their camera since they have problems with their internet connection.

Data Analysis

Data were analyzed using Braun and Clarke's thematic analysis. To increase the validity of the findings, data triangulation was also employed.

Ethical Considerations

In this research, ethical considerations were followed and applied in the study. These were data privacy protection, informed consent, respect of informant's right, confidentiality and anonymity.

Findings and Discussion

The main objective of the study is to unfold the perspectives and experiences of the selected key informants pertaining to the existence of research culture in the university. Three overarching themes were identified. These are the views on the occurrence of virtual research culture, depiction on the virtual research experiences and manifestations on how to sustain research culture in virtual set-up. Each theme has a corresponding subtheme to further explain the needs of each research questions.

Table 1. Summary of Key Findings

Views of the Key Informants on the Occurrence of Virtual Research Culture	
Features of Virtual Research Culture	Strong Advocacy in Writing Research
	Committed and Motivated Researchers
	Professional Growth in Attending Virtual Research Presentations
	Research Collaboration
	Challenges in Writing Research
	Research Requires Time and effort
	Research Conceptualization
	Communication
Demonstration of Virtual Research Practices	Conduct of Virtual Webinars and Capability Trainings
	Attend Virtual Research Conferences
	Research Support from the Administration
Depiction of Virtual Research Experiences	
Virtual Exposure and Practice on Research	Interaction with Foreign researchers
	Exposure in relevant activities by attending Research Conferences
	Opportunities for Research Collaboration
Collaboration and Virtual Access to Research Professionals	Virtual Research Engagements
	Invitation as Speaker for Research Activities
	Membership in Professional Research Organizations
Research Working Conditions and Attitude in an Online Environment	Adjustment to New Work Set-up
	Problems Due to Poor Internet Connectivity/Power Failure
	Limits Communication
	Data Gathering Hindrances
Manifestations of Sustaining Virtual Research Culture During the Pandemic	
Strong leadership and Clear Research Goals	Research Oriented Leader
	Research Program for the Implementation of Virtual Research Activities
	Implementation of New Research Policies
Virtual Trust Builds Harmonious Relationship	Collaborative Effort
	Constant Participation in Virtual Research Activities
	Cooperation
	Knowing their Roles and Function

Views of the Key Informants on the Occurrence of Virtual Research Culture

Through cross examination of the data, all key informants shared common viewpoints on their description of research culture in the midst of pandemic. These viewpoints were categorized into two subthemes: Features of Virtual Research Culture and Demonstration of Virtual Research Practices.

Features of Virtual Research Culture

Research culture, as defined by Olvido (2021), is reached when the institution produces quality research outputs, consistently conducts research activities and grasped steadily on the needs of the academic community. Based from the narrations of the key informants, the university has established research culture prior the pandemic period and still consistently implements these activities virtually even there was a locked down in the whole country. All administrator-informants interviewed expressed that the university upholds a strong advocacy on the promotion of research even there is COVID-19. Online set-up in education is not seen as a hindrance in the conduct of research. It was also stated that the university sustains the research agenda of the university. All these activities were supported by polices as stated in the university research manual. This was also supported by the narratives of the faculty-informants, who viewed that research culture is still manifested in the university. They mentioned that they are still motivated and committed to do research although they were tasked to work at home. They are motivated to write research papers because they can use it for promotion and also given research incentives. Aside from these, when they presented their research, they gained exposure and professional growth since they can present their papers in virtual conferences. Two faculty-informants also stated that their research provides source of information and were also used as basis for technical projects used in some areas in the province for extension purposes. Majority of them agreed that they can work on their manuscripts even they have other assigned workloads. Time management is the key to describe their working conditions. Another is that, they are more at ease in writing

and can easily conceptualized research topics because they work in their areas of comfort zone, and have internet access. They can still communicate with their fellow researchers online and do some collaboration.

Moreover, working online has its benefits especially in providing an ease access in communicating with their students and even respondents. It also helped them to be "techy" meaning gaining additional knowledge in using technology. On the part of the student-informants, they were involved in research because it was a requirement in their course. At first, they were hesitant because their classes were conducted online. All student-informants shared that it was quite a challenge because everything was done virtually, from research conceptualization up to gathering information. Just like any research undertaking, it requires time effort and patience. But eventually because of the untiring helped of their research instructors and advisers, they found the value of research. As some of them even published their thesis on journals and presented it abroad in a virtual manner. Though there were also notions that doing research activities virtually has its limitations.

All faculty, two administrators and three student informants shared their sentiments that research project is quite hard to develop and produce in this type of educational set-up. These projects require laboratory and field testing which cannot be done because of the pandemic.

Research Culture in an institution is evident if there is a period of stability in research activities. In the present time because of the pandemic, for me I can still see that the university is still capable in engaging faculty and students in research activities. There are series of webinars attended by both faculty, administrators, staff and even students. Continues implementation of university-in-house reviews were conducted. - ADMN1

In my point of view, research culture is still evident in the university. Administration wise, we keep on encouraging our faculty members to write research. I, myself is a researcher. Students who were required to write their thesis are also doing research. They learned from their research

teachers on how to write their thesis. It became a practice in our department were most of the faculty are engage in research. - ADMN2

Apparently, I am not going to speak for the majority, but I think motivation plays an important factor to keep them on writing research even in this learning modality. Incentives were given right away once they have complied in all the needed documents in their research. Even students are also encouraged and motivated by their research teachers or advisers to have their studies to be presented and published in journals. - ADMN3

Research culture is based from the quality and quantity of research produced by the institution. These research studies have influenced or helped the people in the community. At this moment, I can say there were numerous research conducted and presented but I cannot fully say that there were a lot of research which helped the people in the community. As far as I know there were more information and dissemination type of research rather than the project-development researches. - FM1

In the webinars they have sponsored, respectable resource speakers were invited to help the faculty and students to do research. Even though, we do not physically see each other as often as before, our research coordinator keeps on updating the faculty and students about research activities of the university. -FM2

It is quite hard but we can still manage especially if we need a tool or an equipment for our project- ST1

Downside probably is that there was research that needs to be undertaken within the university especially if they need to test it in the laboratory or an equipment is needed. But as far as I know, faculty can ask for permission. They just have to follow the proper protocols. But there were cases that the province was in high-risk list, then that was the time that I think research projects for development and testing had encountered problems. If I am not mistaken most of the research presented were more of information and dissemination. – ADMN1

Existence of virtual research culture is evident. Administrators, teachers and students may work separately in continuously fostering research culture in the university even in wake of pandemic. It is inherent in them to work on research and engage to its activities because they all knew the value of research. Online learning environment is not seen as a barrier to accomplish their task essentially in the line of research. Virtual platforms are not just one way to be online but these can also be used as places where individuals interact and learned innovative strategies. Faculty and administrator-informants agreed that there are still enormous outputs of research among faculty members of the university since they presented their research studies in the university-in-house reviews done virtually. Student-researchers from different colleges, campuses and departments presented their thesis in colloquiums through online platforms.

Demonstration of Virtual Research Practices

Transparency of research culture can be seen through the research practices of an institution. According to Casci & Adams (2020), in fostering research culture research trainings, research presentations, research engagement, research support practices and other relative initiatives that will support the success of researchers shall be developed. In this theme, all informants shared their views pertaining to the virtual research practices of the university. They speak for commonality in terms of these activities. All stated that university research office and colleges held webinars which were focused on research capability trainings, intellectual property protection, data privacy, research publication and research utilization.

Furthermore, faculty and student informants also mentioned that they experienced to present their research studies in national and international references virtually. Some of these conferences were free of charge, while there were also some charging fees for registration and e-certificates. These registration fees as stated by the faculty and administrator informants can be reimbursed from the university. As mentioned by one administrator-informant, that this was stipulated in research manual of the university in order to help faculty and student researchers in financial terms.

The University Research Manual is the basis. So even there is the occurrence of COVID, what is

indicated there is still implemented by the University Research Office. There were a number of faculty who presented their papers in regional/national and even in international conferences. Students also presented in the said research conferences and some even won and acknowledged as best presenters. Probably the administration is continuously giving support financial and logistics especially for faculty and students. As stipulated in the manual, research conducted and presented were incentivized. - ADMN3

We attended many webinars related to research. Prior the pandemic, the research office never stops in conducting webinars- FM 6

Based from their records, there was a tremendous increase of faculty and student researchers who presented their papers in international conferences during the period of pandemic in comparison to the numbers of paper presented before the pandemic. This is supported in the recent study of Sarabipour (2020), where it was indicated there was increase of diversity of attendees in virtual research conferences. It was also stated that online conferences have allowed higher participation of researchers from different sectors. Majority are faculty members, students and women who cannot easily travel because of culture. Financial grants were also given to faculty and student researchers. One student-informant shared that they received financial incentives from the university since they won best paper category when they presented their paper in an international conference. Faculty and administrator informants also shared that the university gives incentives to those who were able to publish their papers in reputable journals and rewards to those recognized faculty researchers.

I presented my papers in international conferences because of the incentives. But of course, I am proud to say that, I was able to share the results of my study. – FM4

We were able to present our paper in international conference with the help of our research adviser- ST5

Depiction of Virtual Research Experiences.

In this theme, the researcher unfolds the description of the key informants on their rich experiences in their virtual research engagements. These are categorized into three sub-themes: Virtual exposure and practice on research, collaboration and virtual access to research professionals and research working conditions in an online environment.

Virtual Exposure and Practice on Research

All key informants have shared their experiences in attending webinars and other research engagements online. All had experienced to attend webinars related to research. They said that the webinars added more ideas on how to publish their research and write credible papers on different areas like gender and development. On the part of the student-informants, the research webinars helped them to formulate research topics and additional ideas on how to select the proper approach in writing research. Plenary session and research colloquiums also gave way for their exposure in research. Administrator-informants on the other hand, see to it that they can motivate and encourage their faculty and students to attend these research activities. All administrator-informants shared that they all participated in these activities and even wrote research articles since they knew how relevant research is as one of the key agenda of the university. All faculty and student-informants and one administrator-informant agreed that their experiences in virtual research presentations are unforgettable. Two-faculty informants noted that it was nice to interact with other foreign attendees in such conference and gained international access to other research professionals. One student informant on the other hand experienced to be noticed by one author, who was mentioned in their related literatures. All student-informants claimed that attending international conferences boost their confidence to write more research. Moreso, another student-informant shared that she did not expect that their paper will win in an international event. Based on the narratives of all the key informants, exposure in research helped them to grow professionally and provided more opportunities for collaboration.

In our research colloquium, there were plenary speakers who shared their paper as well as

their experiences. We were also required to attend webinars related to research, which I found to be helpful especially in writing our thesis. Topics about approaches of research and statistical tools were discussed. – ST5

In the conference one of the authors in our related studies congratulated our group and wished us Goodluck. It was quite an experienced, I never considered that there will be a time that foreign authors will notice our paper- ST4

I am proud and happy, our paper won in an international conference. It boost our confidence to be engaged more in research. Experience wise even it happened virtually, at least we gained the experienced.

There were a number of faculty who presented their papers in regional/national and even in international conferences. I myself is a researcher and presented papers too in virtual mode. It was quite an experience. We do not need to travel abroad to present our papers- ADMN1

Paper presentation right now is easier compared before. As long as your paper was accepted, you just present your paper based on the guidelines either recorded or present it live in virtual meet. It was less expensive than before. - FM3

Collaboration and Virtual Access to Research Professionals

One administrator and two faculty informants stated that the university also supported faculty members to collaborate with other institutions. There were faculty members who were invited to speak about research in international conferences. All administrators agreed that collaboration with other institutions is increasing even there is pandemic but it is the decision of the faculty if they are willing to attend and accept the invitation. Faculty-informants on the other hand shared that being a member in a professional research organization gained them more virtual access to collaborate with other agencies.

Being a member in the professional research organization gave me the experience to linkage with other research experts- FM1

There were faculty members who were invited to speak about research in other institutions or even in international conferences. - ADMN3

Research Working Conditions and Attitude in an Online Environment

The new normal set-up has brought different experiences, these were in terms of adjustments and accommodating the new working and learning modalities. Challenges and difficulties were encountered but as months passed these were eventually addressed, in order to cope with the new trend. In this study, all student-informants described their online classes in research as a challenging journey. One mentioned that there were times that his group mates cannot attend online class because of power failure or sometimes they do not have load to connect for internet. While three student-informants cited that they see to it during synchronous classes in research that they can attend their online class. They found research as a very important subject because of their thesis. Majority mentioned that when they do research with their group mates, they have constant communication with their research instructor and thesis adviser. Considering that technology was the only way for them to keep in touch, it limits their ability to communicate with each other. On the part of the faculty-informants, one mentioned that it is much easier to finish their research at home. Faculty-informants stated that the challenged they encountered in writing their manuscripts is data gathering. In terms of collaboration with the other faculty, two of them mentioned that they can easily contact them since they are connected through social media. Their work is distributed and had set a deadline for submission. Another faculty said sometimes they can work at the same time by using a particular application online which make their work to complete on time. While the administrator-informants said that sometimes they need to juggle their time to attend virtual meetings, webinars, classes and personal matters. One administrator-informant said for as long as there is internet connectivity anything is possible for virtual work and research. This only shows that all key

informants exhibited optimism and perseverance. As stated in the study of Robosa, Paras, Perante, Alvez, Tuz (2021), that despite of the challenging set-up of the new normal as long as there is right communication and ability to understand the situation everything will be attained. It was also stated in their account that positive mind brings positive output.

Yes, speaking of workloads, actually even administrators have plenty of work but we see to it that there is a time for everything. Time management is important. - ADMN2

I prefer to write research at home, so for me working online is not a problem. You just have to balance your time in everything you do. – FM1

We have plenty of work but still we were able to accomplish all. There are lots of problems in the virtual mode but still its up to you as a teacher on how you can deal with these problems. You have poor internet connection, then upgrade. Just think that you can do it. I and my-co-authors just set a schedule then we communicate through google meet, which I find more accessible- FM2

Sometimes po, we have problems in our internet connection, but we looked for ways on how to meet. - ST6

Though there were times that they are quite hesitant to do research because of too much workload, still there were faculty who tend to be committed in writing and presenting their papers in the in-house reviews or even international engagements. -ADMN1

Manifestations of Sustaining Virtual Research Culture During the Pandemic

To continuously maintain research culture in a higher educational institution, it was found out in the study the manifestations of the key informants on how to sustain virtual research culture. These are divided into two subthemes.

Strong Leadership and Clear Research Goals

Culture of research may take years to establish but once it is developed it requires regular maintenance. In this period of pandemic, adjustments and new policies were formulated. These new policies pertain to the new trends of learning which were conducted virtually. In this study, the administrator and faculty-informants all agreed that strong leadership is one of the key points in sustaining the research culture in the institution. A research-oriented leader is driven with clear goals. The ability and capability of the school leaders can attest on the realization of the research agenda of the institution Similarly in the establishment and promotion of research culture in the whole university, where they laid out their plans and strategies to carry out their research goals to increase research productivity (Quitoras & Abuso, 2021). The research program of the university has a clear goal and sound structure in delivering virtual research activities successfully. All administrator-informants narrated that the management has an effective research strategy in attaining its goals even in the occurrence of COVID 19. They gave their full support in the implementation of all the research activities and engagements of the faculty and students. As the faculty-informants said, during their regular faculty meetings, their head constantly asked the assigned coordinators to give updates about research and encouraged them to write research.

In terms of support and research practices if these are the parameters of research culture, then I can say it is still existed in the university. Of course, we play the support factor in promoting research culture in the university. We can have faculty meetings virtually and can hear the qualms of the teachers. Students can also ask assistance virtually. Online learning environment has its own pros and cons but it is still on the attitude and perspectives of the administrators, teachers and students on how it can be implemented successfully just like any research activities or school activities for as long as you do not violate any rules or policy. If all the staff and students work hand in hand even if there is COVID or any disaster, everything will be successfully done. -ADMN1

Virtual Trust Builds Harmonious Relationship

It is not easy to establish trust, what's more if it is virtual trust. Ferrell & Kelsey (2018), stated that in order to achieve the highest peak of performance, members of the organization shall maintain trust and communication even

in a virtual manner. Recent problems brought by COVID 19 caused the changes in the physical environment limiting communication and relationships. However, advancement of technology eased out these problems and as expected communication is done through the use of online platforms and social media. In this study, all the key informants articulated that even though everything is done virtually, trust among the faculty and students is still evident. As the administrator-informants cited that the faculty are doing their work well not only in instruction but they also engaged themselves in research. They attended and participated in the webinars and trainings. Moreover, faculty-informants also agreed that success of any research engagements will not be possible without the help and assurance from the school administration. As one of the faculty-informants said that "it takes two to tango". Existence of harmonious relationships between faculty and administrators is evident even they do not see each other physically. On the part of the faculty and student informants, virtual trust is more elaborated in terms of the collaborative effort of all the researchers in a research undertaking. Majority said that they were able to produce research because the existence of trust among them even they do not see each other physically but through constant communication they can finish their target research on time.

Implication of Findings to Higher Education

The need to emphasize the promotion of research culture among the higher educational institutions is based from the implementation of their research programs and activities. Building research culture in any agency is not an easy task. It requires good leadership with strong advocacies towards research. The deepest foundation of research culture is inculcated within the values, ways and beliefs of the people in the university, where they also uphold and obey its research norms. It is an important element to increase the university research productivity and enhance its performance. At present, the pandemic may have brought several problems in the community, however, this shall not be seen as a hindrance to produce quality research papers or any undertaking. Instead, it is one of the challenges that disturb the educational system. It is a test on how strong is the research culture in the university. Adjustments on working conditions and other possible technical problems arose in the virtual set-up. Nevertheless, these are just problems, and solutions can be found through the use of research. Pandemic is not an ending point of research culture but it is the starting point of a new beginning to promote and sustain research productivity even in an online set-up.

Conclusion and Recommendation

This research discovered the facets of virtual research culture in a higher learning institution during the pandemic. Key informants of the study described the different features of the occurrence of virtual research culture and also elaborated the different demonstration of virtual research practices. They also shared their virtual research experiences and the perceived manifestations in sustaining research culture of the higher educational institutions in a virtual set-up. It is further concluded that even during the pandemic, higher learning institutions can still manage to sustain and promote research culture in a virtual manner. For as long as there is strong leadership, virtual research activities can be conducted with proper motivation and untiring support of the administration, faculty and students. Such kind of leadership sustains a formidable virtual research culture.

Thus, it is further recommended to ensure research culture will prevail in the institution, there must be a strong and intact leadership with a focus and clear research goals. Likewise having strong and research-oriented leaders may encourage the whole university to engage on research activities. There might be the virtual limitations encountered but a positive and goal-oriented institution will survive even in the midst of the pandemic.

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