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Global Prominence of Higher Educational Institutions in the era of Pandemic

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Abstract:

The integration of the virtual economy and the usage of information and knowledge being disseminated and utilized is the major concern of this era of a pandemic.The higher educational institutes are the driving force for the nations to strengthen the economy and converting the changing scenarios into opportunities and surviving the economy in a better way in the existing era. Findings show that higher educational institutions faced multiple challenges in the form of lack of resources, training/expertise, support, and equity pressure under the umbrella of remote learning, ICT backwardness, and administrative barriers. Furthermore, this exploratory study identified the various opportunities for HEIs to leverage during the pandemic that is broadly categorized as blended learning approach (interactive and engaging learning environment, promotion of high-quality online learning tools) and collaborative work environment (collaborative teaching and global boundary less education system). Even in this pandemic, higher education particularly private universities and institutions carry on developing and evolving the mission of global higher education to the creation, exchange, and implementation of education beyond the boundaries.

Keywords: Globalization, Technology, Higher Education, Economy, Virtual Learning

I. Introduction

In response to the outbreak of COVID-19, several governments and tertiary institutions have come up with the various strategies to resume teaching-learning activities as schools were closed in order to refrain the spread of COVID-19 (Hidayatulloh et al., 2019). Such initiatives are to be taken all over the world as a backup plan for the facilitation of education. A large number of measures are to be taken in evolving and normalizing the use of digital and electronic technology to access

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academics outside the traditional classroom by several modes of education such as e-learning or online classes potentially at national level during the pandemic situation (Martin et al., 2020). However, a lack of consensus is being observed related to teaching policies such as teaching methods, modes of teaching, curriculum designing, teaching-leaning environments and workloads, along with fair implications to meet the high standards education (Videla et al., 2020). The significant issues of e-learning related to physical systems (infrastructure) of education, the inexperience of teachers for digital mode of education, the information gap between the teacher and the students due to inefficiency of the technological facilities, intervention of domestic environment and so on (Karakaya et al., 2021). Irrespective of all the incompetence, the current situation brought a dire need to stratagem in order to prevent any considerable academic loss to students. For this purpose, China came up with an effective program, *"Suspending Classes without Stopping Learning"* to rest assured the progress of learning in the national lockdown. It is expected of the governments and tertiary educational institutes to promote the construction of extensive electronic network for the instant transfer of educational information, along with providing students and teachers with standardized online learning and teaching equipment respectively (Gandolfi, 2021). In addition, the essentials of online education will be met by training teachers for online teaching and students for online academic research (R. H. Huang et al., 2020).

UNESCO reported that the rapid global spread of COVID-19 by the end of 2019 resulted in more than 3000 casualties. Thereby, till 12th March 2020, forty-six institutes declared the closure of institutes as one of the initial measures to stop the spread of the virus. Still 200 million students were not viable to attend their institutes due to national lockdowns (Ozili & Arun, 2020). Therefore, UNESCO stated in the '*Education 2030: Incheon Declaration and Framework for Action'* that countries ought to provide alternative modes of education for all the students who are not attending the institutes (Ozili & Arun, 2020). Not only this, the countries ought to establish equivalency and bridge state-accredited programs to rest assured the modifiable mode of learning in both formal and informal settings even in the time of crises (R. H. Huang et al., 2020).

In order to address the above cited recommendations, The Chinese Ministry of Education took an initiative unl; bbo9/der the title of "Disrupted classes, Undisrupted learning" to facilitates the hundreds of millions of students with at home teaching services (R. H. Huang et al., 2020). In wake of the pandemic, the rapid evolution and advancement of Information and Communication Technology (ICT) fairly explained through its noticeably high efficiency that why the integration of ICT with education has always remain the subject of consideration (Amir et al., 2020). However, it requires a competent teaching staff to prop up themselves to get along with the new breed of learners with distinctive outlooks. It is because of the current lineage of learners are the natives of technological explosion and are well-adapted to it.

The outbreak of COVID-19 set challenges for the schools and higher education institutes in resuming and regulating their teaching-learning systems due to the drawn-out closures of their institutes. In special reference to this, this study was led by the following research question:

- What are the challenges faced by educational institutes during pandemic situation and how they overcome it?
- What are the opportunities for the educational institutes to leverage in the amidst of the pandemic situation?

This study contributes in the previously infrequent research area in home-grown literature regarding the coping strategies of tertiary institutions in the period of extended closures and in facilitating their students during pandemic situation. This may help the other related education providers in making up with their education policies and contribute in pedagogical reforms to add ICT knowledge in their curriculum (Favale et al., 2020). The finding of this study will provide a fine insight into the online learning and teaching methods through ICT which will help lecturers in upgrading their teaching skills and the higher educational institutes to strengthen their programs to excel in flexible dealing with the exigencies of the situation. It also marks the several group's attitude differences towards ICT in education (Albrahim, 2020). The recommendations of this study will be allowing the education institutes to set interactive grounds in the online learning environment such as Google Meet to meet the required purpose as it has found to be the most appropriate alternative of the traditional classroom because of its highly facilitating features (Rahim & Faud, 2020).

Globalization, the spread of information, technology, economy, culture, knowledge and business etc. across the borders, is the finest reality of 21st century that is substantially influencing higher education (Shehzadi et al., 2020). The progressive integration of world's economy, production of knowledge, advancement in technology etc. are beyond the control center of higher education institutes making the management imperative (Horta & Mok, 2020). The teaching-learning information will proliferate and the advancement in ICT will be on board for its effective implementation, somehow still lacking in providing assessment and evaluation applications at least until next century (Yordanova, 2020). Despite of world's essence of being a global village, a significant difference will be observed in the quality of higher education systems among different countries, reflecting in their regional quality (Albrahim, 2020).

The traditional universities that were designed on the purpose of knowledge production are facing the challenge of life-long learning with the growing need of education (Demeter, 2019). However, the advent of economic and technology advancement in an ICT based society have made life-long learning an obligation through its obvious influence (Horta & Mok, 2020). With this, the need to access higher education will not stop as each career requires additional education and enhanced socioeconomic security and success, so the education will become a necessity and for job mobility (Alshehri et al., 2020; Rose & McKinley, 2018). The pandemic has influenced the traditional physical systems of formal learning in college and universities in which students and teachers had face to face communication have been surpassed by informal and technological modes of learning (Ozili & Arun, 2020). However, the former systems were accountable for productive articulation and development of knowledge without being taken into account for their decreased funding and scarce resources. Therefore, emergent technology has snapped the traditional modes of formal learning but has economically compensated in the times of crises many folds through virtual learning and digital economy (D'Souza & Williams, 2017; Khabarov & Volegzhanina, 2018) .

II. Literature Review

A. The Necessity for Higher Education

Just like in the past, the higher education models have inevitably approached the traditional level of higher education. In the past, education was class, gender, and race conscious. Higher education models were used to promote power and economy such as, countries used them to endorse their economies to abolish British colonial support (Toutkoushian & Paulsen, 2016). The post-war models of higher education were also initiated by governing bodies to ensure power practices. For instance, the education was used for the socio-political goals by marginalized nations and as lead-in for violence and religious intolerance. Some used it for the medium to promote equality and address rights of the minorities (Videla et al., 2020).

The access to higher education is a universal right of every human. It is found to be the solution of a large number of socio-economic problems of money, coercive power, inequality etc. therefore, entitled as a "new global religion" (Alexander et al., 2019). But now, higher education is a profitable online business model, a corporate agency for marketing the products of knowledge and information, inviting new issues of knowledge imperialism and new marginalization because of inordinate division of global knowledge economy (Hadad, 2017).

B. Higher Education and Globalization

Researches foresee that advance education would be required from the 80% of the new jobs created in the current global knowledge driven economy. The college and universities are expected of to look into the missions and goals of their institutes and include motivation and free enterprise. It is the need of the institutions in order to lead-in the knowledge-based economy to act like a business entrepreneur, market themselves, establish alliances and establish rigor to accommodate impending technologies (Boguslavskii & Neborskii, 2016).

Globalization demands the higher education institutions to participate internationally to assess their contribution in the global system. Through technology, the world has expanded into global market for the higher education (Nguyen & Tran, 2018). Higher education, either historically or contemporarily, has always considered as a fine solution to all the socio-economic problems in every society. Thereby, eliciting development in various socio-economic aspects of a country (Hadad, 2017). The costs of higher education are rapidly rising which is not coordinating with the government tax revenues. The huge mass of students has become challenging for the institutes that traditionally facilitate free or highly funded tertiary education. Academic fee is considerably rising in Europe, look for the support of public higher education (Martin et al., 2020). Government is primarily promoting the higher education development for a country. It is thereby a fact, that countries happen to be highly productive which have sound higher education systems. The socio-economic development of a country takes root from the status of higher education of a country which in turn blossoms the quality of its education (Dolgui et al., 2020).

The information and communication technologies are facilitating human interaction and intercultural communication, thereby contributes in economic development and knowledge intensive production (Alshehri et al., 2020). The above cited

aspects help in required editions through ICT knowledge and networking in globalization, thereby defining the power and inequality dynamics, globally.

C. Globalization-viability for students

The global educational market has habituated students to quick, on hand access to education beyond time and space (Kaup et al., 2020). The ever-present learning is comfortable for career-oriented learners who manage both home and job. The technological innovations have set grounds for the knowledge-based revenue resources for post-secondary institutions. Hence, standing at entrepreneurial model of education is the requirement at national as well as international level (Dinsmore & Alexander, 2016; Eko et al., 2020).

The viability of tertiary institutions is based on the constant upgrading and changing for the reasonable adaptation for its integrity and survival to wash out its traditional worn-out paradigms. The physical universities are now working on multi-dimensional education model i.e. physical classroom or/and e-learning. The purpose is to facilitate the diverse group of students with education at any time and place (Bergmark & Westman, 2016; Lindenlaub, 2017).

D. Higher Education-a Public Good

Not only the historical concept of education which has always been regarded as a public good for its non-discriminatory services for all in a society (Alexander et al., 2019). All the educationists and other social scientists know the historical public good qualities even in the higher education systems, serving the two prime agendas; firstly, the spread of benefits from an educated community cannot be limited to a small population but it will blowout for a bigger service. Secondly, the amount of benefits received by some citizens cannot be affected by the level of benefits others receive (Mohmmed et al., 2020). However, higher education is facing two service impairments in its progress and sustainability. Firstly, least support is being observed from the governments around the globe in public higher education followed by the tremendous increase in the expenses. Secondly, governments are imposing on the universities to validate the values of degrees in instant, quantifiable marketing measures (Becker et al., 2017; Castañeda & Selwyn, 2018).

The recent literature on the public good in higher education has raised some important notions on the debate of academic integration in higher education affected and influenced by national policies. International education is a lead-in to have access to higher education, but the unintended concerns of equity are not finely addressed in this matter (Beech, 2018).

E. Technology and Higher Education

In higher education, technology has jumped into the new era to open many global markets since the education medium holds the strength for the multi-relationships and unceasing flow of resources (Englund et al., 2017). In this way, technology is contributing in globalization and global change through socio-cultural and economic reconstruction. The initiation of international universities rest on the structural and resourceful aspects of globalism i.e. education and students (Jääskelä et al., 2017).

The technical innovations have upgraded the knowledge and skills required to be a functional member in an information and communication-based society among students. This is what education, supposes to do (Castañeda & Selwyn, 2018). Since, the society is in the limelight of global focus and is supported by technological innovation, higher education systems are expected to provide high quality education to the students particularly technology literacy or IT competence, thereby highlighting the fact that technology do not put end to an education but rather helps the students in achieving the end through competence (Alexander et al., 2019; Becker et al., 2017).

F. Economic and Financial Considerations of Higher Education

The globalization of higher education across the cultures is challenging as it focuses on the content and course of the education along with unintended global ramifications due to its provision. This is why it is considered as the reasonable source of economic development (Nabi et al., 2018). Most perceive higher education as a costly service yet, consider that it is instrumental to economic development of a country. Hence, institutions are recently subjected to financial accountability since they are running out of public dollars and yet experiencing enormous increment in students' number (Marginson, 2018). Hence, this model is failing in maintain the balance due to increasing demands for healthcare, safety and quality of life. Another issue of demographics is also pertained to challenges to higher education institutes as they are imposed to compete for talent with each other, resulting in recruitment from other universities and keeping their own students at home (Beech, 2018). Also, the growing diversity and immigration requires high resources to meet the diversified needs of the minorities (Sá & Sabzalieva, 2018).

Higher education institutes work for the psycho-social development of students through finance, talent and recreation. They attract high scorers, ingenious faculty staff, prestigious research awards, and other income opportunities to generate revenues, hence provide leadership for future novelties and advancement (Huang et al., 2016; James-MacEachern & Yun, 2017).

III. Methodology

To explore the phenomenon of global higher education during pandemic Covid-19, relativistic school of thought is found suitable as it viewed about the relevancy of truth with the particular context or frame of reference (Mohajan, 2018). Whereas, subjectivism is used as the epistemological stance of the study as individual have multiple experiences and opinions to construct its meanings (Fletcher, 2017). An exploratory research design was found to be most appropriate to unveil the salient intricacies associated with online learning especially in wake of COVID-19, the worldwide lockdown and social distancing (Akhtar, 2016). By adopting the basic qualitative research, data has been collected from Vice Chancellors/Rectors/Deans/Directors etc. by using the focus group discussion and observations method for expressions, body language, tone of pitch etc (Brinkmann, 2014). As there is no standard of sample size in basic qualitative research that is completely depended upon theoretical saturation (Creswell & Zhang, 2009). So, the researcher used purposive sampling technique to select the sampling frame of 12 participants for focus group discussion from executive positions of public and private sector (5 from public sector and 7 from private sector) academic institutions across the Pakistan. Total 3 focus groups were conducted having 4 participants in each focus group to understand the phenomenon of global higher education during pandemic Covid-19.

Later, by using strict verbatim style, the focus group discussions are transcribed to generate textual data out of discussion and observations. Moreover, researcher used Gioia methodology for data analysis purpose relies on the assumption that participants are the knowledgeable agent who constructed the meanings in their own way based on their experiences, thoughts and feelings as well (Gioia et al., 2013; Pantano & Vannucci, 2019). However, 1st-order, 2nd-order and aggregate dimensions are extracted from textual data to reach the essence are applied to investigate the answers of research questions with similarities and dissimilarities among codes and categories (Gioia et al., 2013).

IV. Findings and Discussion

This section exhibits the analysis of focus group discussions Researcher transcribed the focus group interviews and used N-vivo 11 for initial coding and the nodes were developed in accordance with the research questions.

A. Profile of informants

Table1 presented the profile of the respondents. The informants include the 12 executives (Vice Chancellors/Rectors/Deans/Directors etc) of higher education institutions of Pakistan. The profile of respondents is presented as below:

Table1: Profile of informants (n=12)

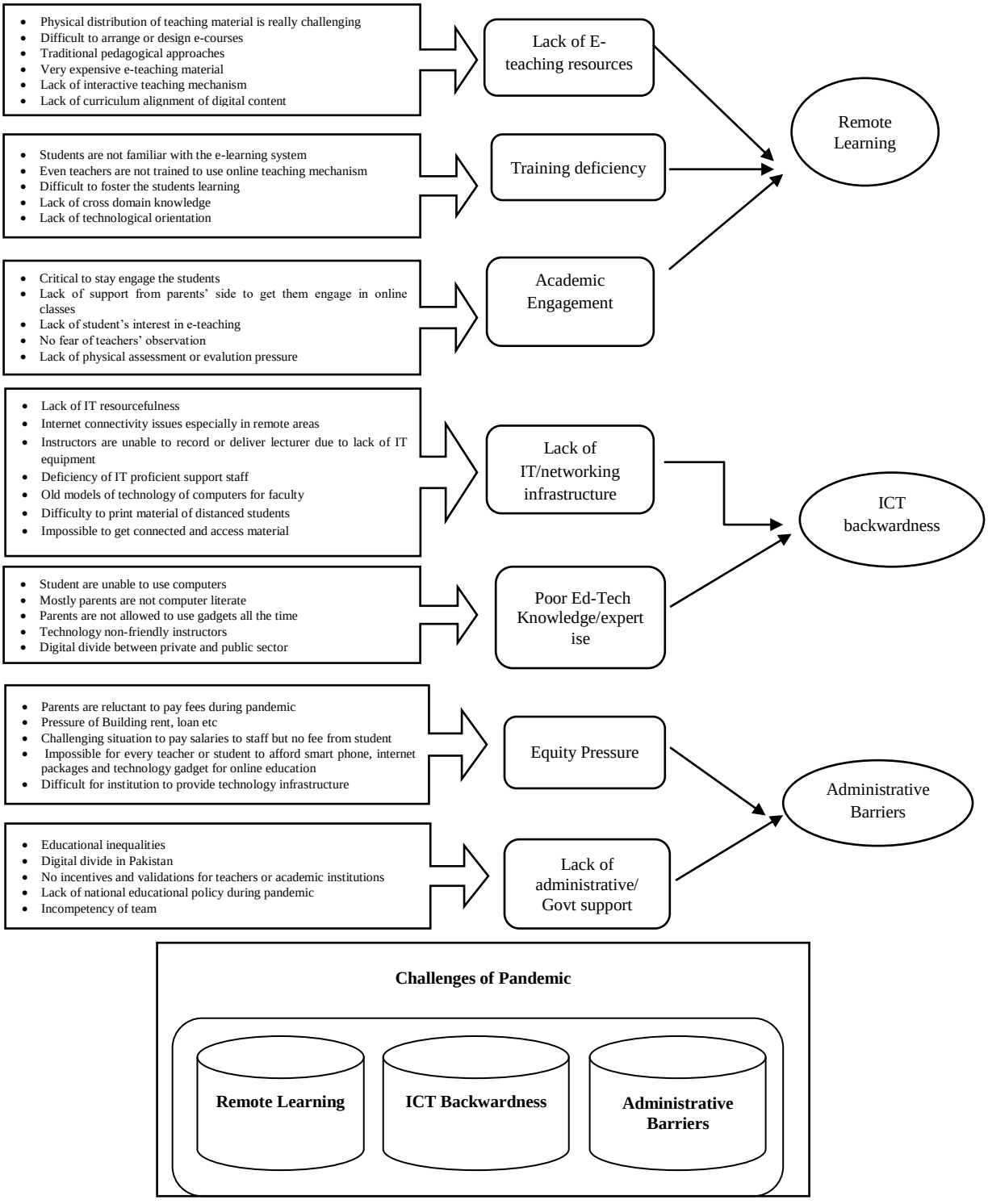
Informants	Sector	Gender	Designations
5 informants	Public Sector	• 1 Female • 4 Males	• 1 Vice Chancellor • 3 Deans • 1 Director
7 informants	Private Sector	• 2 Females • 5 Males	• 3 Rectors • 2 Deans • 2 Director

Researcher conducted only 3 focus group discussions (4 participants each) by achieving the level of theoretical saturation. From which, 5 informants are public sector academicians and 7 informants from private sector. The sample size of 12 informants includes 3 females and 9 males. While according to their designations in the relevant institution, 1 Vice Chancellor, 3 Rectors, 5 Deans and 3 Director became the part of focus group discussion to explore the untap phenomenon of Global higher Education during pandemic. Previous researchers highlighted the importance of informants' profile in expressing thoughts and perceptions about the nature of problem, its intensity and hidden complexities behind it (Ranjit, 2019). So, the researcher consciously selected the group of informants for the specific focus group in line with the research objectives.

To retort the research question about challenges faced by educational institutes during pandemic, Senior executives including Vice Chancellors, Rectors, Deans and Directors have a specific viewpoint about the phenomenon of 'global prominence of Higher Educational Institutions during Pandemic. For this Gioia methodology is used to analyze the concepts divided into Theme nodes, child notes and parent nodes. The challenges explained by informants are saved as 1st order concepts, while emerging themes are saved as child nodes/2nd order themes and aggregate dimensions of child nodes are saved as parent node.

Table 2: Challenges Faced by Higher Education Institutions during Pandemic

1st Order Concepts **2nd order Core Themes** **Aggregate Dimensions**



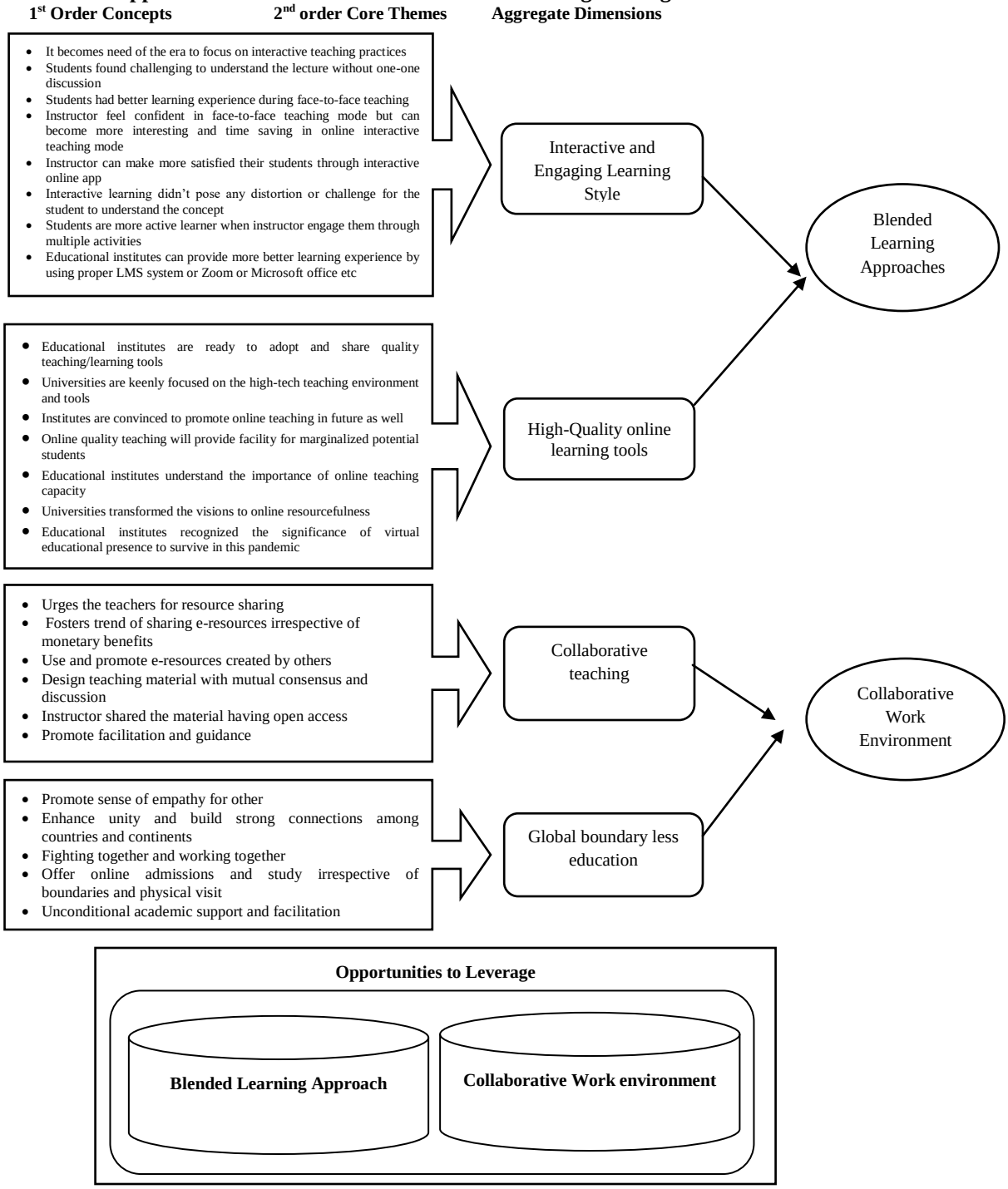
Research pertains that Covid-19 poses the multiple challenges for the educational institutes that were highlighted by various informants as it becomes very difficult and challenging for the educational institutes to design the e-learning resources and its physical delivery for the students specifically remote areas. This is the complete paradigm shift from physical teaching to e-learning that is proved as challenging task to integrate e-learning into existing systems and academic structure. The same challenges presented by Aboagye et al. (2021) & Dewart et al. (2020) in the transition phase from conventional learning to e-learning.

Another important challenge of remote learning is the deficiency of teachers and students training to get familiar with the technology usage to disseminate the knowledge or access the learning material. Training deficiency is also highlighted by Peterson et al. (2020)&Fuller et al. (2020) in the form of lack of experience and familiarity with the online teaching practices. Moreover, student's engagement in academic activities during pandemic is one of an important concern of educational institutes as students didn't bother to get in touch with instructor, attempt the duly assessments or respond instructor timely (same as mentioned by (Ahmed et al., 2020; Sharma & Bhaskar, 2020) . In this situation, parents' role is found unaddressed to focus on child's learning. As one the informant highlighted the said concern in following words; *'As per the policy guidelines of HEC, we are trying to put our all resources in use to create e-learning system for our students to continue their leaning to protect them from Pandemic life threat, but we didn't get back responsible attitude of parents to engage their kids. This is two-way relation that need complete bonding and strong coordination.*

Moreover, another challenge highlighted by educational institutes is the 'ICT backwardness' backed by the child nodes; a) lack of IT/networking infrastructure b) poor ed-tech knowledge/experience. The same challenges and constraints were presented by Jena (2020) that Educational institutes were following traditional learning mechanism and approaches in which they are deficient with the proper IT infrastructure to foster online teaching and learning culture during pandemic. These challenges were expressed by the on the informant that *'We being a newly established university in remote area, deficient in IT infrastructure and a a large group of students who have no access of internet to attend online classes.*

Similarly, administrative barriers are also tinted as a major challenge of educational institutes during this pandemic. Equity pressure and lack of Govt support fall under the umbrella of administrative barriers (Queiroz, 2020). It is noticeable that from last one decade number of students got access to the mobile and internet that make the online learning possible but no one can deny the fact that everyone cannot afford to have digital devices for online learning. Likewise, educational institutions found it difficulty to bear financial expenses in the form if faculty salary, rent, loan or other administrative expenses (same as expressed by Sunasee (2020)). In this context, lack of Govt/administrative support is even more alarming that can bring the educational institutions to bankruptcy. The same thoughts were shared by one of the informants that '*This pandemic creates financial pressure for the educational institutes, we are unable to pay the salaries of our staff, parents are not willing to pay the dues as their kids are sitting at home and not interested in online education. Govt should introduce financial support for the educational institutes as well.*

Table 3: Opportunities for Educational Institutes to leverage during Pandemic



The figure 3 diagram exhibits the opportunities of educational institutes to leverage during pandemic. It is known fact that Covid-19 badly destroyed the economic, social, and educational system across the globe (Toquero, 2020). Millions of students have remained at home to prevent the spread of virus and Government of Pakistan ordered the universities to shift to online teaching. As it smashes unlimited threats and challenges for the educational institutions, it also exploits opportunities to untap and leverage it for the long-lasting benefit (Adedoyin & Soykan, 2020; Vlachopoulos, 2020). The analysis of concepts presented by informants drags out attention towards two most important opportunities; blended learning approach and collaborative work environment.

This pandemic made online learning is most efficient and effective learning approach, introduced the high-quality online teaching tools and created technology friendly environment (Daniel, 2020; Willan et al., 2020). As one the informant expressed the opportunities created by Covid-19 for educational institutes in the following words; *'This pandemic made us realized the importance of buildings e-infrastructure for long lasting benefits but it also makes us understand that interactive and engaging teaching is the best practices. So, we should brighten our academic future with blended learning approach rather thenlakeerkayfakeer as reactive. We should be proactive to sense and scan the external environment and devise the policies accordingly.*

Moreover, the pandemic created the collaborative work environment in the form of collaborative teaching, boundary less education system, sharing and caring practices (Dhawan, 2020; Donitsa-Schmidt & Ramot, 2020). This challenging era portrays the significance of distance learning system offered by international universities. It transformed the whole academic working structure. These benefits were highlighted by informants 2 as *'This pandemic promotes the sense of empathy and unity among the academic stakeholders. It encourages the strong connection, harmony of knowledge sharing and its extension across the boundaries and nation'.*

V. Conclusion

Across the globe, Covid-19 pandemic adversely affected the educational near to collapse its spread and effectiveness. This paper intended to explore the consequences of this pandemic for educational system in the form of posed challenges and opportunities to get benefit out of it for upcoming betterment. The findings of the study highlighted that educational system confronted the challenge of remote learning, ICT backwardness and administrative barriers related to equity burden and govt support. Educational institutions faced problems in designing and embedding existing curriculum and learning resources and digital system due to lack of proper IT infrastructure and related expertise to run it efficiently and effectively. Contrarily, this pandemic created some opportunities for education system as it promotes the blended learning system and collaborative work environment. Educational institutes are convinced to adopt high quality online learning resources and fit in with the interactive learning environment. Moreover, it influenced the working behavior of academicians to plan, design and implement the academic target collectively.

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