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Editorial: Japan and Reproductive Choices

This July 2021 issue of EJAIB includes a dozen papers exploring the ethical issues that we face across different cultures. It explores the concept of vulnerability that is faced by people in many different circumstances with different needs and desires for what is a good life. The first paper by Croydon explains how arbitrary rules of the Japan Society of Obstetrics and Gynecology continue to restrict the access of people living with disability to reproductive technologies that are main stream in many countries for three decades. It is time for physicians and medical providers to open up the restrictive markets of reproductive care to be informed choices of persons who just want to have a child. Many people living with disability experience tremendous socio-economic burdens and poor quality of life that they do not wish to pass on to children. Although there are international ways to overcome these arbitrary barriers to reproductive choice, it would seem to be ethical that developed countries respecting informed consent and informed choice should provide these services to patients or clients in the country. The fact that there is no law to restrict the services, suggest that there has been no social and legal consensus to restrict the rights of persons to selective implantation of embryos that carry a serious disease. Although some physicians offer such services in the past ,they are often subject to quite severe negative publicity that makes it difficult for them to offer these services to clients. The difficultiies of determining vulnerability are also explored in the case of sex determination by Iwam and Sumiyoshi.

The paper by Saeideh and Macer explores how historical texts can be applied for sustainable living, although it is difficult to read exactly the meaning of texts that are written 1000 years ago, it is not unreasonable to see people were facing challenges of the environment in historical times. We can see a number of cities in civilizations which became extinct because of drought or because of other environmental pressures, and it is reasonable to assume that the philosophers and policymakers at that time, which certainly did exist because of the sophistication of some of the cities which were over one million in population around the world, considered relationships between humans and the environment that would be profitable for a long-term future. Maboloc also explores the issues of water rights later in the journal.

We also have papers from Uzbekistan, Japan, the Philippines, Thailand, England, and Pakistan. There are several on education and the challenges of delivering a good education in the pandemic times with lessons that may be applicable for further online education platforms. It's often difficult to ensure a good quality of education when we don't have face-to-face contact with students, on the other hand for some learners this is a good platform that provides a very solid method for development of the love of learning which is critical for taking on board lessons that life gives to us.

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Barking Up the Wrong Tree: Who Really Limits Preimplantation Genetic Diagnosis in Japan?

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Abstract
Japan possesses a comparable prowess and know-how in medical technology and clinical practice as developed Western nations. Yet, in comparison to these nations, the implementation of the procedure known commonly as Pre-implantation Genetic Diagnosis (PGD) in Japan is strikingly limited. This article considers what factors account for this small scale of PGD application. It argues that whilst the Japan Society of Obstetrics and Gynecology (JSOG) serves, as many point out, as the gatekeeper to PGD domestically, their conservative stance on the matter of who can avail themselves of this procedure is determined by parts of the disability and feminist groups. To illustrate this, the article draws attention to the interactions of the JSOG with such groups over their proposed expansion of PGD to couples with heritable conditions that have early life onset.
Keywords: *PGD, Japan, life selection, eugenics, JSOG*

Introduction
Japan was a late comer to the PGD implementation scene. Indeed, it was precisely the absence of even a single case of PGD application until as late as 2004 that prompted geneticists Santiago Munné and Jacques Cohen, two of the scientists who were involved in the development of this genetic profiling procedure for embryos and who understandably were hoping that its application would spread, to pick up on the Japanese case (Munné & Cohen 2004). Perceiving the lack of PGD cases in this country as an imposition of a moratorium by the Japan Society of Obstetrics and Gynecology (JSOG), these two scientists argued for its lifting. "The Japanese Society of Obstetrics and Gynecology", they wrote, "disapproves of this practice because it discriminates against people with genetic abnormalities [but] patients [have a right] to have a healthy baby, if necessary by the use of PGD". "[This procedure] complements the current nature of prenatal diagnosis and avoids the need for abortions in case of afflicted embryos", they argued.

More recently, despite implementation of PGD having begun in Japan, the rate at which it is performed can be found to be conspicuously lower in comparison to that in many other developed nations. To cite data released by the body that Munné and Cohen see as controlling the Japanese PGD situation – the JSOG, by the end of March 2015, there had been 125 cases in which this procedure had been performed for the purpose of avoiding the transmission of a genetic disorder (JSOG 2015). Given that in 2004 there had been zero cases of PGD in Japan, it might be concluded that 125 cases for a period of just over a decade represents a substantial enough number. However, on the background of the fact that the number of cases of PGD in other developed countries often runs in the thousands for a single year, this figure of 125 cases overall historically in Japan appears rather meagre and therefore remarkable. To provide specific context in which this Japanese figure could be understood, a single facility in the UK (Guy's Hospital in London, to be more precise), performs over three times as many cycles involving PGD in a single year (namely, 370 PGD cases in 2014) as there have historically been in Japan. Similarly, although it is difficult to obtain a comprehensive data about the scale of PGD practice in Europe as a whole, from information published by the European Society for Human Reproduction and Embryology, which reflects the practices between 2011-2013, it could be established that the latter is significantly bigger than in Japan – indeed there were as many as 71 European PGD facilities and 1,755 babies born there for this two-year period (De Rycke *et al.* 2017).

What is further important to notice with regards to the Japanese case is that, in contrast to other countries, here PGD is far from recognized as a standard clinical procedure, with a clear indication as to the heritable genetic conditions for which it could be applied. Instead, a separate examination takes place of each individual application made to the JSOG by the couple who want to use it for reproduction and their doctor. As the JSOG statistics cited above indicate, the possibility for patients to become recipients of PGD treatment is entirely dependent on that body's Ethical Committee, with rejection being a real possibility. To specify again by citing JSOG's data until 2015, whilst 125 applications for PGD had been granted approval, there had also been six that met the fate of rejection (JSOG 2015). Although this rejection rate might appear rather low and unremarkable, it is not beyond the inconceivable that patients and their doctors might be discouraged by this process from applying for PGD in the first place. Indeed, for couples who are yearning for a baby and who ought to operate whilst considering their biological clock, a process such as that of JSOG might well appear rather time-consuming and uncertain in terms of the outcome. This might well be the reason why the very number of PGD applications in Japan stands so low, with only 138 having been filed with the JSOG by 2015, as per the Society's own report (JSOG 2015).

This article considers the obstacles to implementing PGD on a larger scale in Japan. With a view to establishing that the voices that dominate the PGD debate in Japan in public are those of the section within the disability and feminist communities who see this procedure as a threat to their own existence, the article looks through the prism of the most recent debate on the subject.

Looking beyond the JSOG
The aspect of the Japanese PGD regime highlighted above, of it hanging on the JSOG whether a patient obtains access to this treatment or not, might appear to support the suggestion made by Munné and Cohen that it is therein that the obstacle to PGD expansion lies. However, just because JSOG acts as the gatekeeper to PGD in Japan in practice, it does not follow that they are necessarily against expanding the application of this procedure. True,

it might well be that the examination process that the Society has put in place puts off many patients to start with from applying, with the option always existing that for them to seek cross-border solution to their predicament. It is not negligible indeed that patients might worry about how soon they might hear the decision of the JSOG Ethical Committee and whether the genetic condition they have would be viewed as "severe" enough by its members. The low number of applications filed with the JSOG could be seen as a strong indication that perhaps such misgivings on the part of patients are at play in Japan. Nonetheless, to automatically attribute the limited implementation of PGD solely to JSOG, concluding that it is their conservative attitude towards this procedure that hinders expansion in implementation, seems premature.

Since no organization makes its decisions in isolation of broader factors and trends in society, it seems important to explore what other dynamics exist in Japan with regards to PGD more generally. Indeed, it would be misguided to conclude that just because the JSOG has adopted a conservative position with regards to PGD implementation, they as a whole or the majority amongst them, are necessarily against applying this procedure on a broader basis. The process of coming up with a decision on a certain matter in any organization is but a messy business, with many outside pressures impinging on that ruling. The consciousness of those in charge is often affected by the existing social debates and interactions in society. Beyond the JSOG's involvement on this issue, what are the interactions in the public surrounding this procedure? There certainly appears to be a need to pay attention to the backdrop against which the Society's policy was formed.

The 1990s row over PGD

When the history of interactions with regards to PGD in Japanese society is examined, it becomes clear that there was loud opposition from within the disability and feminist communities to its implementation. In particular, the first Japanese PGD case, which was the culmination of an initiative taken as early as 1992 by a group of doctors at Kagoshima University's Medical School to help a couple with a child already afflicted by Duchene Muscular Dystrophy, was characterized by a wide-spread opposition from these circles.

The principal agent behind the blocking of the implementation of this case for nearly a decade was the now defunct so-called Network Questioning Eugenic Thought (*Yūsei shisō wo tou nettowāku*) – an Osaka-based non-profit organization representing various handicapped and women's liberation groups. Liaising with other older organizations of this nature, such as the *Zenkoku Aoi Shiba no Kai* (Green Grass Organization), *Boshi Hoken-ho Kaiaku ni Hantai Suru Josei-tachi: Osaka Renraku-kai* (The Women Objecting to the Changing for the Worse of the Maternal and Child Health Act: The Osaka Liaison Group), the Network was galvanized into action when it heard the news that the Kagoshima team are preparing for the implementation of this procedure (Shirai 2001; Toshimitsu 2012 & 2014). Their view was that PGD is not only putting undue pressure on women (as in to reproduce in a particular way), but that it is also discriminatory towards disabled people, also threatening the existing diversity in society and by extension the tolerance towards those handicapped.

Following in the media how the Kagoshima doctors' application cleared various preliminary stages of the approval process, members of the above-mentioned Network broke without permission into the Headquarters of JSOG during the Ethical Committee's deliberation of the Kagoshima case, shouting in opposition of the procedure. This action, and the petition they compiled listing 47 individuals and disability groups opposed to PGD (including the Japan Muscular Dystrophy Association), eventually succeeded in persuading the Society to put the case on hold until "a thorough debate is conducted, incorporating all sections of society".

The moratorium on PGD would continue into the 2000s until a scandal occurred whereby a gynecologist from Kobe, Dr. Tetsuo Otani, was revealed to have conducted a similar procedure in multiple instances without permission from the JSOG. The procedure which Dr. Otani would offer is for checking the chromosomal make-up of an embryo to determine, as the creators of this test claim, the potential for live birth. Even though the Network and its allies would go on to issue statements of protest to both Dr. Otani and the Society, as announcements unfolded of babies being born following Dr. Otani's procedure, arguments would become more prominent within the public that there is room for permitting this kind of procedure. This is indeed what led to the Society's adoption of the strict guidelines for PGD application that yielded the figures cited above.

The current state of interactions

Most recently, in 2021, the JSOG has been considering the expansion of PGD application, facing yet again objections from within the disability and women' liberation community. In particular, the Society proposed allowing PGD to couples with heritable genetic conditions which are not necessarily life-limiting or with an early-life onset, which were the two yardsticks against which permissibility was gauged (HNK 2021). Amongst the conditions for which the JSOG appears to be campaigning to expand PGD application is Retinoblastoma, which is characterized with tumors in the eyes. The specific case highlighted by the JSOG in the public in its bid to bring about greater social consensus on the expansion of this procedure, is that of 37-year-old Maiko Noguchi from Osaka, who suffers from Retinoblastoma.

Mrs. Noguchi had applied for PGD to the JSOG in the past, with her application having been rejected by the Society, since her condition could not be considered "serious" as per the Society's published interpretation of this term from 2010. Mrs. Noguchi had been diagnosed shortly after birth with eye cancer and had undergone operation to remove her right eye (Sankei News 2019). Later, tumor was found in her left eye too, but with treatment she was able to preserve her vision. The second time this genetic illness impacted greatly her life was upon marriage. Her second son was diagnosed soon after birth with Retinoblastoma in both his eyes, and even though he underwent treatment, his vision was so reduced that he could only see, in a blurred way, close objects. Wishing for a third child, Mrs. Noguchi did not resign herself after receiving the news of rejection from JSOG, and in April 2019 she applied a second time through a clinic in Osaka, commenting that she wishes for her affected son too to one day be able to avail himself of PGD.

With Mrs. Noguchi arguing that it is hard for her to accept that her child would also suffer from the same illness as her, the JSOG opened in 2020 public discussions regarding cases such as this, where a danger of blindness in the child exists but its longevity would not be impacted. On 7th of February 2021 an online discussion was held, with this being the last of a series of three such gatherings since January that year. The JSOG proposed a revision of the 2010 interpretation of its 1997 Guidelines, with regards to the term “serious genetic diseases” so that illnesses where there is currently no effective treatment and which put a significant burden on a person’s daily life, including with the symptoms beginning after reaching adulthood, also become included in this category (Asahi Shimbun 2021; Nikkei 2021).

In reaction to this JSOG proposal, objections soon emerged from academics in the field of bioethics, members of disability and women liberation groups, and other professional medical societies, amongst which the Japanese Society of Neurology. One of their voiced arguments was that it would lead to application of PGD for too many genetic diseases. For them, it was significant that within the genetic illnesses there are those where the symptoms do not become manifest until old age and where it is possible to lead a completely healthy life for decades. It was within no one’s purview, it was implied, to deny the right to exist to such people. Furthermore, with regards to diseases for which there is no effective cure in existence, there is the possibility, they argued, of an effective treatment being discovered in the future. An academic from Meiji Gakuin University, Azumi Tsuge, was also shown commenting that the question of PGD application cannot be left solely to patients and their doctors because society also has a stake in the outcome.

On a more fundamental level, however, it was clear that the PGD opponents considered ethically questionable the fact that the procedure is currently permitted for any type of illness at all. Where this is evident is in their argumentation with regards to “life selection (*senbetsu no senbetsu*)”. Specifically, the opponents of the procedure say that even though they understand and can sympathize with the anxiety of passing on a disease, the concern remains, and is equally valid, that the PGD procedure represents “life selection” (Niigata Noppo 2021). Information is gleaned from the PGD procedure, they argued, with regards to the status of chromosomes such as 21 and 23 in an embryo (ref., three copies of chromosome 21 lead to Down’s Syndrome and a missing, or partially deleted, X chromosome manifests itself as Turner Syndrome – two conditions that are often compatible with life) (Niigata Nippo 2021). Insofar as this is the case, in their view, couples might decide against the transfer of an embryo of such characteristics, which is effectively “eugenics”. According to the PGD opponents, when considering whether to extend without inserting any limits the application of this technology, the question also needs to be appraised as to whether this would not eventually lead to a situation where only a certain type of children become born. Rather than going in that direction, they contended, society should abandon the term “abnormal (*ijō*)” and reaffirm the right of a variety of people to exist.

Whilst the social debate about PGD was revolving around this issue of the extent of its application, it is worthwhile noting that the issue was also raised as to whether the current procedure where everything is left to the JSOG is appropriate. On the one hand, the Society was of the view that it would be better for the examination of applications to be entrusted to the Ethics Committee of each medical facility where patients ask for it and that the JSOG’s role is restricted to just providing an opinion to the treating doctor. However, during the deliberations the two concerns were expressed that such a procedure would lead to unjustifiable variation in PGD implementation and that in some facilities might be impossible to appoint experts on the Ethics Committee (Niigata Nippo 2021). Ultimately, the discussion on this matter also did not result in any concrete conclusion.

In the end of these interactions, there was no clarity on would follow. As far as the initiator of the debate is concerned – the JSOG, it left the public scene with the noncommittal note that its plan is to ask patients’ groups and other concerned medical societies for their opinion and that it would not make a formal decision on how cases should be dealt with without a consensus. The only other indication as to how this stalemate might be resolved was the comment that some members of the Society made that the political world should not “leave the decision-making to the JSOG (*maru-nage wo suru*)”, and that by picking on the issue in parliament, legislators could engage the public at large and help guide the practice.

Conclusion

This article has examined the issue of restricted PGD implementation in Japan. I have presented evidence to corroborate my argument that, contrary to what has been hitherto argued, the factor that accounts for the small-scale application of PGD in the Japanese context is the fierce opposition by disability and feminist groups who define this procedure as a eugenics practice. Since it was the JSOG that proposed in public the expansion of PGD application, there clearly is considerable support for this within it. It is thus inappropriate to conceive of the doctors’ community as the barrier to wider PGD administration. Indeed, the foreign proponents of PGD are barking up the wrong tree when they direct their criticisms of the Japanese situation to the JSOG. As I have highlighted, it is the members of the disability and feminist groups who cannot see beyond PGD’s “life selection” aspect that are blocking a more widespread application.

With regard to this anti-eugenics activists, even though it might be surmised that they represent the voices and the interest of the whole disability and feminist communities, this is far from the case. Whilst they appear to be fighting on behalf of anyone with disability or any woman, and in the interest of protecting their rights, their demand to abolish PGD, or least keep it restricted, is in effect hurting, and curtailing the rights and options of, those within these same groups who are of reproductive age. When remembering the first case of PGD application made to the JSOG in Japan, for instance, it does not appear at all to be an act of solidarity on the part of the members of the disability and feminist groups who petitioned against this case to deprive their fellow citizens with Duchene Muscular Dystrophy of the option to use this treatment. In this sense, it could be concluded that the purpose of the anti-eugenics community is defeated by them blocking the way to PGD.

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Reflections on the Appropriate Epistemology for an Integrated and Sustainable World including Reference to Ibn 'Arabī

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Abstract
Every civilization has its own worldview that determines its approaches towards subjects such as human beings, nature and God. Most modern humans have tried to control all nature as property. Nature, therefore, was considered as the booty, which should have been used entirely. Now, the modern perspective has revealed problems including emerging and dangerous diseases, resistant bacteria, and extinction of many animals, global warming, climate change; air, sound and light pollution, and so on. The problem is that human beings cannot continue these attitudes as a viable survival strategy. In this paper, using conceptual analysis, we try to explain the epistemic gap regarding the positions of humankind and nature which happened after modernism and then present the image which Ibn 'Arabī, a traditional sage and philosopher depicted for the integrated world. He developed a comprehensive perspective of the world, considering it as a manifestation of an Existence (God). He considered humans as the God's vice-regent who must manage the earth and keep the creatures as God's representative.

Key words: *integration, sustainability, Ibn 'Arabī, vice-regent, environmental ethics, nature, philosophy.*

1. Introduction

During the past two hundred years, a number of scholars have been obsessed with many controversial discussions about natural resources. The philosophy of science, philosophy of technology, and some other fields have witnessed some debates about the way that human beings follow for using natural resources and creating new technologies. After modernism, human beings have been encountering lots of problems as a result of new crises, including new diseases, new generations of bacteria and virus infections, climate change and so on.

In this article, we presuppose two perspectives, pre-modern and modern perspectives, then show how the modern attitudes towards the position of the universe, humankind, and God affected, and continue to affect how we view nature.

Muḥyī l-Dīn Muḥammad b. ʻAlī b. Muḥammade al-ʻArabī was born in Murcia in 1165 AD in Andalusia (Spain). He is known as mystical philosopher. Over 800 books are attributed to Ibn ʻArabī and Osman Yahya, one of the editors of his books, estimated that 700 are authentic. He wrote some books in mathematics and astronomy (Sayari and Marsuki, 2014). His ideas are very common in plurality and the unity of the religions. After examination of some of these writings, we argue that Ibn ʻArabī's perspective indicated a coherent, sustainable image of the universe in which God, humankind, and nature are not separated from each other, but human beings as the divine form include both the divine attributes and the attributes of the universe, and in such a way humans are the medium between God and the universe. We note that there is ongoing debate over whether all these writings attributed to al-ʻArabī were actually authored by him.

Although the two great schools of thought in Greek scholarship (Aristotle and Plato) had some different motives, they did not have an aggressive attitude towards nature. Plato was preoccupied with the corporeal world as a cave for human souls. The souls were said to be created before bodies, and the natural world is a vast prison from which these souls have to be relieved. In the world of becoming, everything *"comes to be and passes away, but never really is"* (Plato, 1925a, p. 28a). For Aristotle (2006, p. 27), this world was representative of the majesty, the order and the beauty, which makes humans bewildering, and motivates us to ask questions about the quality of ways in which the world acts.

Around the 15th century AD, a new movement, humanism, appeared in the Western tradition. In their theory, humanists focused on the human being, not as metaphysical souls, but as the real rational adventures. Although in philosophical and religious classical doctrines humans were the center of the world based on the idea that all the phenomenal world has been created for them, so the human position as a passive agent had been reduced to being an obedient servant of God and the gods. The new anthropocentrism met Cartesian's rationalism and Locke's empiricism. The three-dimensional combination appeared in Newton as a scientist who opened the horizons of science. He utilized Descartes' mathematization as a language for discovering the natural laws. Locke and Newton affected each other; Locke tried to use the natural law in politics. Meanwhile, the most important aspect in common was the nature of their philosophy which was empiricism (Rogers, 1978). Newton's anthropocentrism manifested itself in his attitude towards the power of human beings to discover and explain all the natural laws in the world in mathematical language.

These philosophical bases paved the way for upcoming scientific events in the eighteen and nineteen centuries and after. During this period, science developed in numerous and various fields. What remains of the earlier worldviews are fragments of the ethos in the hands of experts which were often reduced to interactions of parts or fundamental entities. New technologies arrived, and human beings have the most complex instruments achieved by now. However, the opposite side of the coin gradually appeared. For example, Carbon dioxide, a greenhouse gas, is one of the most important pollutants, which is warming the Earth. The living things emit carbon dioxide when they breathe, but it is widely considered a pollutant when associated with cars, planes, and other human activities that involve the burning of fossil fuels such as gasoline and other natural gases. In the past 150 years, such activities have pumped so much carbon dioxide into the atmosphere raising its level. Another example is the problem with some other greenhouse gases such as methane and chlorofluorocarbons (CFCs), and CFCs are also problematic for the earth's ozone layer. Climate change, biological weapons delivering toxins and microorganism for inflicting disease among people, animal and agriculture, genetically modified crops, and the extinction of species are a few examples of the results of human activities.

On the other hand, in social sciences, new economic policies, namely cost-benefit analyses as a central tool of trade, have made challenges to the environment. This new policy defined all society functions and goals through economic methods. These consider nature and all its potential capacities as an instrumental force in developing human life, the pioneers of new science strategy neglected to appreciate the cohesive connections between human beings and nature, and the cultures and values.

The philosophers of science and other philosophers began to revise the principles and theories in science and the philosophical basis on which the palace of science was built. Philosophers ask "are we happier than human beings living in the past before the modern age?" What was wrong with the new perspectives towards the nature? Now, what are the options, at least, for reducing the concomitants of these activities?

2. The Philosophical perspective

Traditional thought considered knowledge as a collection of all kinds of consciousness, including natural science, philosophy, and other fields. So-called "modern" thinkers separated the natural part as a science, reducing it into empirical knowledge. Claiming to be value-free became the most important feature of science. The scientists claim to seek a value-free rational truth. The scientists encouraged the use natural resources for a more comfortable life continually. The other feature of the worldview of the science is that in the past people thought that the universe is a creature of God and looking at natural processes and nature means looking at God's signs, but the new worldview of science states that to know the nature means to make nature meaningful in its own without a need for the concept of a God of the Gaps in our knowledge (Macer, 1990). Therefore, the universe became empty because God was removed. In the past the universe was symbolic and mysterious to us, but now it is simple, and mechanical without any spiritual entity.

Hence, scientists considered the universe by putting in big theories.

Another thing is that the question of "why" shifted into "how". In the past, scientists asked why the phenomenon works in such a manner, in fact; they searched for the ultimate goal of the universe. In the new age, what is important for scientists is the quality of its function. In this way, one of the most important concepts that lost its meaning is humanity and human self because asking for the meaning is meaningless. The reductionism (Polkinghorne, 2002) and the specialism changed the integrated image of the universe into some divided fragments that should be investigated one by one. The other feature of the new science was that everything that we cannot explain in the way of quantity, would not be considered as a scientific event. Therefore, sociology, psychology, metaphysics, and so on may not be considered by natural scientists as scientific and it means that they are not valid to research as empirical subjects. That fallacy is that since the scientific method is materialistic and it just seeks the material causes, non-material cases cannot be investigated by scientific methods and scientists should put them aside. The image which gave us the new scientific worldview was mechanical, material, and reductionist. The dominance of this image isolated other parts of human life, such as values, ethics, and existential realms and it has led to crises and unsustainable situations in the global level of human beings as a result of the lacking of transcendental support.

3. What is Sustainability?

Key concepts of sustainability include the need for the sustenance, survival and flourishing of a process, an organism or a resource. The entity to be sustained often consists of a large variety of interacting factors in a complicated position (Polkinghorne, 2002). Now the problem is how the necessary and sufficient situation for sustainability can be defined. It seems it depends on the nature of the object in question like the natural entity, physical phenomena and human actions and life. A description of sustainability identifies, classifies and explains crucial factor for the sustainability of a phenomenon or entity (Polkinghorne, 2002). In fact, there are three fundamental questions along which the philosophies of sustainability are categorized: What are we to sustain? Why should it be sustained? How do we sustain it?

Three following concepts can provide various answers to these questions:

1-Natural sources should be sustained only because they have an instrumental role for human well-being.

2- To sustain the irreversible natural sources, whether or not they are regarded as critical to human well-being because of their intrinsic value.

3- The nature has an intrinsic value generally. Holland (1994) argues "the recognition that nature, and its various component events and processes, is a particular historical phenomenon should be valued as such."

4. Interdisciplinary approach

The new challenges in science agitate new approaches. After restructuring of knowledge in the late twentieth century, new calcifications in the definitions, research priorities and fields of studies increased the need for borrowing from other disciplines to unify the perspectives, and created the tendency and capacity to go over traditional fields of knowledge. The permeability of the boundaries of knowledge, and blurring and mixing genres promoting in the postmodern developed some activities labeled "interdisciplinary." (Klein, 1990). Turning to an interdisciplinary approach, researchers and scholars work in team groups in order to find a range of objectives such as solving the complicated problems, addressing broad issues, introducing some fields between traditional disciplines and going over disciplines for taking integrated knowledge. The field of bioethics is one of emergent interdisciplinary and multidisciplinary approaches to knowledge production (Macer, 1994).

Although the term interdisciplinary has been developed in the modern era, it is not a completely new term. Philosophers and sages have used it without mentioning. In philosophical and mystical schools which appeared after the advent of Islamic thought, some schools of thought considered the features of unified knowledge. One of them is transcendent theosophy which originated from the ideas of mystical philosophers such as Ibn ʻArabī. The features of mystical philosophy include blurring and mixing themes such as the realities and symbols, and accepting the variety in the existents and phenomena as a necessary rule for the manifestation of the divine attributes. In Ibn ʻArabī's worldview, rational existence is one of the God's attributes.

5. Human beings and development

One of the most important distinctions between the modern and the pre-modern tradition is the position of the human reason or rationality. Considering the reason as an absolute value, the modern age validated individualism and even gave an absolute value for the individual. Hence, one of the main cornerstones of the modern development is the highest position of human reason which is the heritage of the Cartesian, Newtonian, and their followers. As Kevin Kelly (2002, p. 46) explains after the Western scientific revolution, a paradigm shift occured so that humans were displaced from the center of the universe, and there came a shift in our ability to give a unified explanation of the world.

To survey the effects of this shift, we can consider two realms. One that is related to the human life in physical parts such as the advances in medicine to control diseases and to rescue many people, finding easier and faster instruments for communications, development in education and information technology, accessible facilities for increasing the creativity and so on. Here, the question is that if the mentioned development is a sustainable one. In other words, does it include all physical aspects of human life? Have the developments guaranteed the new medicine to be safe and efficient? Have the new technologies, for example, communications technologies, been safe and harmless for the human body? Unfortunately, in most cases, we are not sure, and in some cases now, we think that they may be harmful. We know that some medications have dangerous side effects for the (human) users and even for other species exposed to them through the environment. One case was mentioned in *Nature.* The story is about a kind of antidepressant named *Fluoxitine*. The article reported that this medicine is excreted in the urine of people taking it and reaches lacks and waterways and affects fish reproductive behavior seriously (Lovett , 2012). We know that insecticides, fossil fuel, nuclear waste, and many developments, in fact are detrimental to the environment and nature. It seems our knowledge to understand a comprehensive development has been inefficient.

Another realm is related to the non-physical part of our life, such as our feelings, faith, hope, rights, happiness, love, freedom, and so on. There is no doubt that rationality has yielded the valuable achievements of human beings such as human rights, women's emancipation (although not complete), social institutes, children's rights, and so many other rights. Now, are we happy with all achievements? Are we hopeful about our future? Bertrand Russell (1917) wrote:

"That man is the product of causes which had no prevision of the end they were achieving; that his origin, his growth, his hopes and fears, his loves and beliefs, are but the outcome of accidental collocations of atoms; that no fire, no heroism, no intensity of thought and feelings, can preserve an individual life beyond the grave; that all the labours of the ages, all the devotion, the inspiration, all the noonday brightness if human genius, are destined to extinction in the vast death of the solar system, and that the whole temple of man's achievements must inevitably be buried beneath the debris of a universe in ruins – all these things, if not quite beyond dispute, are yet so nearly certain, that no philosophy which rejects them can hope to stand. Only within the scaffolding of these truths, only on the firm foundation of unyielding despair, can the soul's habitation henceforth be safely built (47f)"

Hossein Nasr believes that modern man, who feels at home on earth, tries to conquer earth and becomes more *natural* while he losses his own existence within it. Nasr (1968) explains that *"modern man learned the laws of the physics of the earth" and also other laws of science, then all of his knowledge became terrestrial. Hence, when man no longer makes spiritual flights try to fly with a capsulate to the other planets."*

To consider human beings as a machine or a mere combination of atoms or rational animal cannot provide us with a comprehensive perspective of human beings because human being is something more than these reductionist aspect. An extension of love to other species could be considered under the concept of stewardship (Macer, 1990). Stewardship can apply to both the way people use other humans and the rest of nature (Macer, 1998). It has often been neglected, but has a long history in many religions, being central to a Judeo-Christian doctrine of creation. Usually people prefer to ignore it and to think of dominion of humans over the earth, treating the earth with little value in the mechanistic manner of what we have called "rational" science, however we see what problems this has caused. There are numerous pollution problems that we can readily see, which affect humans and other species. Throughout time many have considered nature has intrinsic value, but usually these calls have been neglected. Alfred North Whitehead (1925) in *Science and the Modern World* said "The western world is now suffering from the limited moral outlook of the three previous generations ... The two evils are: one, the ignoration of the true relation of each organism to its environment; and the other, the habit of ignoring the intrinsic worth of the environment which must be allowed its weight in any consideration of final ends". The intrinsic value of nature can be argued by Christian and Buddhist values, as shown by Schumacher (1968, 1974).

6. Wisdom of the traditional sages: Ibn 'Arabī's perspective

There are many theories about human beings and their nature and the aspects of their life. There are also a variety of world-views of nature (Rai et al., 2010). The sages from all traditions have accepted that humans are not a mere material object or rational animal. For some sages such as Ibn 'Arabī, human reason is one of God-given gifts to manage the material life. Depicting a complete portrayal nature of humankind, the universe and God, Ibn 'Arabī indicates the inseparable relationship between humans, the universe and God. The names of God are a Qurā'nic theme which he used in his texts. Regarding the theory of the divine Names and the theory of syntheses of divine Names in the human being (Adam as a symbol of man), he explained the position of the human being and the universe.

All the creatures are the Names of God. They are manifestations of God. The nature and the entire of the creatures are the relationships and modes that God manifests himself in the universe (Ibn 'Arabī, 1946, p. 52). Adam as a symbol of human being is syntheses of all divine Names, on the other hand, he includes the entire universe. It means man has all the aspects and attributes that all creatures have. Humankind is not limited just to one or two features of being, and because of his specific trait (synthesis of all features of the creatures), God put him as His vice-regent on earth (Qurā'n, 2:30), and God puts Adam as a governor of God on earth.

Here for our aim, and as a result of the discussion, what are important in this system of thought are two points; the responsibility of human beings as a vice-regent of God and the attitude of human beings towards the universe, at least, as believers in God. Someone who believes in God cannot behave towards nature in a careless way, because nature and all its sources are sacred in the meaning of a valuable gift. Humans have many capacities and talents such as rationality, consciousness, spirituality, mercy, and other attributes that God endowed us as His vice-regent. Therefore, humans has to use our appropriate talents in the appropriate position. Our rationality helps us to control and manage the natural sources in the way that it provides us with the possibility of sustainable life. Looking at the world through consciousness and spirituality gives the insight to the human being for making the world meaningful as a manifestation of God. Then, can humans ethically destroy the natural resources? Can he just think of his capricious desire to intervene in nature irresponsibly?

God created human beings in his form based on the Ibn 'Arabī's idea. Ibn 'Arabī, in *Futūḥāt,* explained three levels of the manifestation: outer (*ẓāhir*), inner (*bāṭīn*) and the intermediate that is the human being who possesses two aspects: the inner and the outer form (Ibn ʻArabī, 1911, Vol. 4, p. 2). In another book, he mentioned that because of these two forms, the human being has the real form of God (Ibn ʻArabī, 1946). Then, Ibn ʻArabī interpreted the meaning of the form of God. He stated that God created the human being in His form by transferring all of His attributes to him. Also the human being includes all forms of the universe which exist in God. He argued that if human beings did not have all the names of God, we could not be His vice-regents on earth. Ibn ʻArabī emphasized that God refers to the dignity of the human being who has been created with His two hands (Qur'ān, 38: 75) or the divine form and the form of the universe (Ibid). The vice-regent must be capable to bring all the requirements of his servants since God protect his creatures through man (Ibn ʻArabī, 1946).

God said "I will create a vice-regent on earth." (Qurʾān, 2: 30). In addition to this command, God put all of His names and the attributes in the human being to manage the nature and keep the creatures. Humans cannot exercise their power and authority over the other creatures without the divine form, and they cannot know how should use their power and authority without knowing the realities of the things in the universe. Therefore, humans need to have a comprehensive image of themselves, the universe and God. This image lets us, as the vice-regent of God, exercise our power to protect the nature.

For Ibn ʻArabī, the perfect man is someone who can completely be God's representative on earth. William Chittick (1989) explains that the most perfect man is someone who actualizes the divine names in the complete equilibrium in accord with his divine form. Nevertheless, there are variations of the perfect men who manifest one or more divine names in the complete form. The most important feature of the perfect man is his knowledge, according to Ibn ʻArabī (1911, p. 2). This knowledge originates from the divine names which God put in the human being and based on that, humans have the divine form. The divine form includes the features of the universe and God's attributes. Therefore, a human being who has knowledge of things is God's representative on earth to manage it. Ibn ʻArabī (1957) connected the servitude (*ubūdīyyah*) to the vice-regency. They are intertwined. It will be dangerous to be the vice-regent without being a servant of God because the integrated image which originated from the intertwined connection of servitude and vice-regency will be lost. Claude Addas (1994) explains that vice-regency is a hazard for the human being since we may even proclaim to be God or a person can deems that they are completely autonomous. Then, people forget that vice-regency really does not belong to them, but God bestowed them to be His representative. In fact, vice-regency gives people the power and authority over other creatures while the servitude indicates that each one of us is responsible for our deeds. The power and responsibility before God are two important features of the vice-regent. If people take the power and authority and leave their responsibility, they will lose their reality as the manager of other creatures in a comprehensive sustainable universe. This situation causes people to descend from their dignity to an alien being to other parts of the creation.

7. Conclusions

The epistemic gap in our modern age is that we forgot the relationship of humankind, God and the universe. We forgot our responsibility as a vice-regent of Him, and in the other words, we reduced the comprehensive, integrated image of the existence into the separated fragments while we overemphasize one of our capacities, namely rationality, but forgot the others. Ironically by doing that we are not even that rational! Without that integrated map of the existence, and without revising all his aspects as a human being, people cannot reach to the integrated and sustainable life. Humans as vice-regents of God have power through which they can govern over other creatures and nature. Meanwhile, humans are also responsible before God and His creation. Unfortunately, after modernism, humankind took their power and left their responsibility, and in such a way we destroyed the comprehensive and integrated image of existence on earth. Now, we need to examine the epistemology of reductionism and rationality. Further research and exploration of our foundations will be timely as we grapple with approaches to deal with the environmental challenges and opportunities that we face. The wisdom of some of our historical scholars, such as Ibn ʻArabī can be useful reminders that there is more to life than Cartesian science and epistemology.

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The Roles of Bioethics in the Formation of Professional Competence of Students of Medical Universities in Uzbekistan

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Abstract
The knowledge of future doctors about a person is not limited to biomedical natural science, it also presupposes a humanitarian dimension and spiritual fulfillment, therefore ethical issues are inseparable from any type of medical activity. This article points to the relevance of the study of bioethics, which appears as a practical philosophy of life and as a value orientation of future doctors.
Key words: *bioethics, humanization, humanistic paradigm of education, value imperatives, humanism, bioethical worldview, human dignity.*

Global trends in the development of higher education include the constant adaptation of educational programs to current and future needs; increasing the adequacy of higher education with a long-term focus on achieving social goals and quality improvement. In the twenty-first century, these and other qualities of higher education must become an integral part of the global project of continuing education for all. Thus, global trends in the development of higher education reflect in their strategies, the transition from a technocratic paradigm to a humanistic orientation. Today we are in the space of a still functioning technocratic and emerging new humanistic paradigm of education. The present and future well-being of civilization largely depends on how soon the humanization of education will become an effective practice of the social institution of education [1].

The globalization of health problems in the development of mankind, on the one hand, and the success of biomedical research, on the other, have radically changed the face of medicine as a form of knowledge and activity, defining the actualization of its value component in a new way. Today, the development and implementation of the value imperatives of bioethics in medical education, in the activities of medical personnel, necessary for the formation and development of their professionalism, is of great importance.

The concept of "professionalism", in contrast to "profession", implies not only the form and type of human activity, but also the degree of mastery of special knowledge, skills and practical skills acquired as a result of special training or work experience, as well as the quality and originality of knowledge related to to this profession, related to it and inherent in it.

Do physician morality and ethical imperatives relate to the professional competence of medical personnel? What moral qualities are important and are the main ones in the professionalism of a doctor? To try to answer these questions, it is necessary first of all to answer the question about the peculiarities of the moral and ethical foundations of medical practice.

Modern concepts of humanism and humanization of education are undergoing changes. As you know, humanism is one of the fundamental foundations of social consciousness, the essence of which is the attitude of a person to other people as to the highest value. It manifests itself in altruism, the desire to sow good, in mercy, compassion and the desire to help others. The definition of humanism as a "set" of views expressing the dignity and value of a person, his right to free development, and affirming humanity in relations between people, reflects only one - the subjective side. The essence of humanism can be defined as a set of objective and subjective attitudes towards each person as the highest independent value. The essence of humanism lies in any manifestation of one person's concern for the well-being of another. But today this provision sounds problematic. Can it be called humane, despite the obvious manifestation of concern for human well-being, for example, euthanasia, the use of fetal tissues of the human embryo in vivo and posthumous donation of human organs and tissues? Human values should be pluralistic, eternal, democratic, global, supporting the universal provisions of the declaration of human rights, based on family values and ethics. This is possible through education. Then, not theoretical, but practical questions arise about the organization of bioethical education: which course to teach, whom to teach? At the Tashkent State Dental Institute, the Department of Social and Humanitarian Sciences with a course of bioethics (UNESCO Department) prepared textbooks and teaching aids, monographs, the teachers of the department actively participated in the creation of a standard program for medical universities of the Republic, which ensures that the theoretical part of bioethics will be conducted in coordination with the humanities :

philosophy, law, religion and other subjects. Answering the question - who needs bioethical education at the modern level, the following groups of people should be noted:
- first of all, the medical workers themselves: doctors and researchers (doctors, pharmacists, geneticists, biologists);
- students of medical colleges and universities;
- representatives of authorities and legal institutions that make laws and decisions in the field of biomedicine and health care;
- members of bioethics committees with medical, but not special ethical education;
- subjects, information about which presupposes the presence of at least some "preliminary knowledge" in the field of modern bioethics;
- the population from which the subjects are "recruited" and whose public opinion has a certain influence on the direction of biomedical and genetic research in society [2].

Insufficient ethical and educational level of the above categories is a problem not only of modern Uzbekistan and the regions of the post-Soviet space, but also of many other countries. This puts us before the need to form a new ethical and humanistic attitude of doctors, biologists, geneticists, politicians and ordinary citizens, which is achieved through bioethical education.

In modern philosophy, it is recognized that the "basis" of any action is its goal. The goal of medical knowledge and medical practice is to save a person's life and help him maintain health. Among the reasons for the formation of the profession of a doctor, and this is one of its features, the determining factor is not only economic, not only cognitive, but also moral - "decisive action for the benefit of a suffering person." Therefore, throughout the history of its existence, both at the level of theory and at the level of practice, medicine has thousands of threads associated with the values and worldview of people. The professionalism of a doctor is determined not only by how well he knows the etiology and pathogenesis of diseases, methods of their diagnosis and treatment, but also the ability to recommend, teach, find contact with the patient and instill in him confidence in the success of treatment. Knowledge about a person is not limited to natural science - medical and biological, but also includes a social and humanitarian dimension, spiritual content, therefore ethical issues are inseparable from any type of medical activity.

Since the time of Hippocrates, it has been generally accepted and indisputable that the moral culture of a doctor is not only the characteristics of his personality that deserve respect, but also the qualities that determine his professionalism. In fact, the high cultural level of a doctor is inextricably linked with the purity of his moral image. This truth is perfectly expressed in the well-known aphorism: “There will not be a good doctor if he is not a good person ...” [4]. The progress of biomedical science and practice in the late XX - early XXI centuries led to the strengthening of social and value aspects in the activities of the modern medical worker.

The globalization of health problems in the development of mankind, on the one hand, and the success of biomedical research, on the other, have radically changed the face of medicine as a form of knowledge and activity, determining the actualization of its value component.

Modern medicine addresses a wide range of new problems using the achievements of genetic engineering, biotechnology, organ transplantation, which have a pronounced moral, philosophical, religious, socio-cultural character. In defining the psychosomatic and sociocultural nature of health and disease, medicine has to turn to the psychological, economic, political and legal components. The modern physician has the means to significantly control fertility, life and death, and human behavior. The doctor's actions can affect demographics and economics, law and morality. The value imperatives of modern medicine are becoming deeper and more in demand.

In these conditions, philosophical knowledge and education play a special role in the formation of the professional qualities of a doctor. Philosophy as the self-awareness of society and the quintessence of the spiritual and moral values of culture is an indicator of a person's education and general culture. It is aimed at the formation of theoretical thinking, a systemic vision of the world and self-reflection. Therefore, a philosophical education helps not only to develop the mind, but also helps understand the value foundations of culture, to develop life attitudes, to form the spiritual and moral orientation of the individual. Philosophy as a reflection on culture is a purposeful activity aimed at realizing value-significant orientations of human life in the world, among which the life and health of a person are becoming more and more relevant
[4].

Today, biomedical research on animals and humans continues to be a necessary form of existence for medicine, biology and clinical disciplines.

But conducting research on a person can pose a threat not only to his health and life, but also leads to a violation of his rights and dignity. And in these conditions, the task is protection of the object from the risk that experimental science inevitably exposes. Society begins to look for forms of this protection. One of the forms of such protection is bioethics, its theoretical and practical approaches and imperatives.

New opportunities in biology and medicine, associated not so much with treatment as with the management of human life (for example, genetic correction of human characteristics, permission of donation without consent, destruction of life at embryonic stages, organ and tissue transplantation from a living and dead donor, resuscitation or refusal and the termination of medical care for a hopeless patient) conflict with established moral principles and values. Because of these contradictions, bioethics emerged as a system of knowledge about the limits of permissible interference and manipulation of human life and death, as "a systematic study of human behavior within the life and health sciences, conducted in the light of moral values." and principles ”[3].

The subject of bioethics is the moral attitude of society and a person to the other person, to his life and health, and to all living things. Bioethics seeks to understand the moral issues of biomedicine and society by rethinking the approaches and values of modern life. In these conditions, bioethics acts as a practical philosophy of human life and as a value direction for future medical personnel.

The practical form of bioethics itself is the existence and activities of ethics committees. This practical form of bioethics was discovered by members of the World Medical Association in 1964 in the Helsinki Declaration. Its "Basic Principles" section, paragraph 2, reads: "The overall design and plan for each type of research should be clearly described in the Protocol, which is submitted for review and approval of the special Commission. The members of the Commission must be independent on

the people conducting the research and the sponsor of the research. The composition of the commission is formed in accordance with the legislation of the country in which research is being carried out "[2]. The first bioethics committee was organized under the Ministry of Health of the Republic of Uzbekistan in 2000, it was headed by academician M.S. Abdullakhodzhaeva. With her active participation, the first congress of bioethics with international participation was held in Uzbekistan in 2005. In 2013, the Bioethics Committee of the Association of Doctors of Uzbekistan appeared. [5]. The main provisions of the Helsinki Declaration become legal norms in many national legislation, including the legislation of the Republic of Uzbekistan. In recent years, Uzbekistan has adopted a number of laws regulating the reproductive rights of citizens (2019), the law on organ and tissue transplantation (2018), on palliative care for seriously ill patients (2013), etc., which contribute to the regulation of biomedical problems in modern society.

Biomedical ethics is a modern stage in the development of medical ethics and medical deontology, where the problems of duty, honor, dignity of a doctor, moral and ethical regulation of relations in the field of medical activity are raised to the level of respect and protection of the rights and freedoms of the patient, his life and health. Biomedical ethics is a practical philosophy of the medical profession of a physician-scientist, as it protects basic human values - the human right to life and health, autonomy and freedom of choice, developing modern ethical positions of medical science and practice, helps to recognize moral principles. dilemmas and conflicts that are characteristic of medical practice and are equally important for both the doctor and the patient.

Thus, the formation and improvement of the professional competence of medical students includes both a constant striving to deepen medical knowledge and mastering special skills, and a purposeful, conscious determination of medical activity by the highest ethical approaches and moral values.

Education and training of medical personnel is based on the cognitive achievements of modern science and the axiological imperatives of bioethics. Knowledge of biomedical ethics and the conscious acceptance by students of moral and ethical norms and rules will allow them to purposefully study basic subjects and maintain the dignity of a medical professional, knowledge and skills that should ensure that the achievements of modern science, medicine, and biology are only for the good both in the interests of society and the individual, based on the principle of respect for life [6].

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Ethical issues regarding full disclosure to women with primary amenorrhea associated with disorders of sex development in Japan

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Abstract

In this study, we assessed the age of women with primary amenorrhea associated with disorders of sex development at the time of full disclosure (FD), examined the appropriateness of FD based on their subjective views, and investigated inhibitory factors and ethical issues of FD. The corresponding narratives from interview data of

19 women aged 25 years or older were classified. The patients were divided into two groups according to whether they considered the timing of FD to be appropriate (appropriate group) or late (late group). The appropriate group included nine individuals with ages at FD of 18.3 ± 2.29 years, whereas the late group comprised 10 individuals with ages at FD of 25.2 ± 5.77 years ($p < 0.01$). The number of years between diagnosis and FD was significantly higher in the late group (13.2 ± 10.69 years) than in the appropriate group (1.9 ± 5.70 years; $p < 0.05$). The preference of parents and pediatricians was often the reason for delayed FD. Many patients showed confusion in their gender identity at the time of FD. These findings highlight the importance of FD and the need for careful and continuous support.
Keywords: *disorders of sex development*, *full disclosure, gender identity, amenorrhea, women*

Introduction

Disorders of sex development (DSD), characterized by external genital abnormalities as a core symptom at birth, are estimated to occur at a frequency of 1/4,500 births in Japan and worldwide, accounting for 0.022% of the global population (Hughes et al., 2006; The Committee on Disorders of Sex Development and Adrenal Disease, the Japanese Society for Pediatric Endocrinology, 2016). DSD include abnormal development of secondary sexual characteristics, chromosome abnormality, and abnormal hormone levels. The highest prevalence rate, as determined by an international survey, has been reported to be 1.7% of the population (Blackless et al., 2000).

DSD are incurable diseases leading to decreased quality of life (QOL) owing to gonadal tumor development, infertility, external genital abnormalities, and abnormal development of secondary sexual characteristics (Ogata et al., 2011). However, DSD can be a hidden disease; therefore, the actual status of DSD has remained unclear (Oyama, 2011). Moreover, medical policy has recommended not notifying patients of their exact physical condition to avoid emotional and physical trauma (Callens, 2017). Thus, patients were advised not to speak to others about their physical conditions (Money, 1994).

Recently, full disclosure (FD) of available nonbiased information about DSD has become the international standard (Van Lisdonk, 2014), directing attention to the psychosocial health status of DSD patients and their families (Bean, 2009; Jurgensen, 2014; Sandberg, 2017) and to the importance of educational support (McCauley, 2017). However, no standardized guidelines for FD and support for DSD patients have been published, despite international guidelines for Turner's syndrome (Gravholt et al., 2017) and educational programs for patients with congenital adrenal hyperplasia. In Japan, only three medical institutions have a team care system consisting of multiple professional members (Yeo, 2019), resulting in a delay in patient support.

In East Asia, where DSD tend to be hidden, some parents and medical professionals still hesitate to disclose DSD to the patients themselves, and legislation for such disclosure has not been established (Tejima, 2019). Particularly, in women with DSD, FD often involves notification of problems with chromosomes and fertility, which can lead to long-term issues with QOL, including psychological conflict and confusion, fluctuations in gender identity and identity formation, and treatment refusal.

As stated in the World Medical Association Declaration of Lisbon on the Rights of the Patient, patients' rights to information about their own diseases and receive sufficient information before providing informed consent should be protected. However, in Japan, many families and physicians still feel that sufficient information should not be given to the patient to avoid psychological damage. This problem has been left unsolved for several decades.

Accordingly, in this study, we aimed to clarify the current status of FD from the standpoint of patients to determine the appropriate timing of FD and factors and problems related to delayed FD.

Methods

Participants

Participants were recruited through members of self-help groups and physicians belonging to specialized institutions in Japan who agreed to cooperate with the research. Participants were DSD patients who spontaneously clarified their intention to participate by e-mail or other means. The participants were required to meet all of the following criteria: women aged 25–59 years who were diagnosed with primary amenorrhea associated with DSD and who were notified of the name of their disease; patients who belonged to a self-help group for DSD patients or who were attending a medical institution with extensive experience in the treatment of DSD located in the Kansai or Kanto region among core institutions for DSD (Japanese Society for Pediatric Endocrinology website: 28 institutions as at 2018); and patients who were mentally calm and competent to provide information regarding their own experience, as judged by the representative of the self-help group or an endocrinologist. The following patients were excluded: those whose participation was not approved by the self-help group representative or endocrinologist, despite their wish to participate; those who had a past history of disease other than DSD; and those aged less than 25 years. Twenty-three women expressed their intention to participate in the study, and 19 women eventually provided consent for participation.

The participants included nine women in their 20s, five in their 30s, four in their 40s, and one woman in her 50s (mean age: 32.8 ± 8.66 years). The average interview time was 63.8 min (range: 42–134 min). The diagnosis was complete androgen insensitivity syndrome in 10 individuals, 46,XY DSD in 5 individuals, partial androgen insensitivity syndrome in 1 individual, ovotesticular DSD in 1 individual, mixed gonadal dysgenesis in 1 individual, and 46,XX DSD in 1 individual. Of these patients, 14 had undergone gonadectomy, and 4 were married. All participants except two were full-time employees (Table 1).

Data analysis

The period of implementation was between November 2018 and May 2020. Each participant was interviewed by the same researcher once for approximately 1 h according to the one-on-one semistructured interview method based on an interview guide. The participants were asked to speak freely about the following interview items: history of medical consultation, timing of definitive diagnosis, timing of FD, institution/person making FD, course of treatment, reason why a long time was required until FD, and emotional condition at the time of FD. The content of the interview was recorded after obtaining permission from the participant, and anonymized word-for-word transcripts were prepared.

For analysis, passages from the transcripts, including timing of definitive diagnosis and FD, medical institution, and understanding and acceptance of the disease at the time of FD, were read carefully, and psychological condition with regard to understanding and confusion at the time of FD were classified. The participants were then divided into two groups according to whether the timing of FD was appropriate or late. IBM SPSS Statistics V24.0 was used for statistical processing at a significance level of less than 5%. Intergroup comparisons were made by independent t-tests and Fisher's exact tests. The validity of the study was confirmed based on the advice and guidance of an instructor of qualitative nursing studies. The study content was reviewed by one physician who was a study intermediary, and the lack of biases and errors in the results of analysis and their interpretations was confirmed.

Ethical consideration

This study was approved by Niigata University Ethics Review Committee (approval number: 2018-0169) and by the ethics review committees of two medical institutions (approval number for institution A: 1139; approval number for institution B: 2019b-57). The intermediary explained the outline of the study verbally and in writing to eligible participants and referred them to investigators after consent was obtained. The investigators provided verbal and written explanations of the study aims and guidelines, particularly consent issues. Then, participants provided written informed consent for participation.

Results

Definitive diagnosis and timing of FD

Based on the transcripts of the participants, the participants were divided into the appropriate timing group (appropriate group; n = 9, 47%) and late timing group (late group; n = 10, 53%). No participants reported that FD was given too early. Table 2 shows the characteristic features related to FD in these two groups.

The mean ages at the time of survey were 26.1 and 37.3 years in the appropriate and late groups, respectively ($t(17) = 3.16$, $p = 0.006$). Although there was no significant difference in the timing of presentation between the two groups, most patient presentations occurred when they were in preschool or when they were in high school or older. In the appropriate group, the timing of presentation was in preschool for three (33%) patients and in high school or older for four (45%) patients, whereas in the late group, there were six (60%) patients with presentation in primary school and three (30%) patients with presentation in high school or older

The mean age at FD was 18.3 years in the appropriate group, which was lower than that (25.2 years) in the late group ($t(17) = 3.47$, $p = 0.005$). FD was given at 15–19 years in seven (78%) patients in the appropriate group and one (10%) patient in the late group; FD at 20–24 years was given in two (22%) patients in the appropriate group and five (50%) patients in the late group. FD at age 25 or older was given only in the late group (25–29 years in one [10%] patient and 30 years or older in three [30%] patients). There were significant differences between the two groups ($p = 0.013$).

Definitive diagnosis and FD were made in the same department (pediatric or gynecologic department). Pediatric departments included specialized children's hospitals and pediatric departments in university or general hospitals, and gynecologic departments included gynecologic departments in university or general hospitals and gynecologic clinics. FD was given by a gynecologist for six (67%) patients in the appropriate group and three (30%) patients in the late group. FD was given by a pediatrician for three (33.3%) patients in the appropriate group and seven (70.0%) patients in the late group. Although there were no significant differences between the two groups, the timing for FD by pediatricians was late.

Table 1: Participant Characteristics (N = 19)

Characteristics	n (%) or mean ± SD
Age (years)	32.8 ± 8.66
20–29	9 (47.4)
30–39	5 (26.3)
40–49	4 (21.0)
50–59	1 (5.3)
Gender identity (female)	19 (100.0)
Diseases	
CAIS	10 (52.6)
46,XY DSD	5 (26.3)
PAIS	1 (5.3)
Ovotesticular DSD	1 (5.3)
MGD	1 (5.3)
46,XX DSD	1 (5.3)
Gonadectomy	14 (73.7)
Married	4 (21.1)
Employment status	
Full-time employment	17 (89.5)
Part-time employment	2 (10.5)

Table 2: Characteristic features related to FD in participants

Personal characteristics		Appropriateness of timing of FD		t	*p* value	
		Appropriate (n = 9)	Late (n = 10)			
		n (%) or mean ± SD	n (%) or mean ± SD			
Age at the time of survey (years)a		26.1 ± 6.8	37.3 ± 8.6	3.16	0.006	**
		range (25–42)	range (25–51)			
Timing of presentation (Age)b						
	Preschool (≦ 6)	3 (33.3)	6 (60.0)		0.570	
	Elementary school (7-12)	0 (0.0)	0 (0.0)			
	Junior high school (13-15)	2 (22.2)	1 (10.0)			
	High school or older (16 ≦)	4 (44.5)	3 (30.0)			
Age at implementation of FD (years)a		18.3 ± 2.3	25.2 ± 5.8	3.47	0.005	**
		range (15–23)	range (18–37)			
Breakdown b	15 – < 20	7 (77.8)	1 (10.0)		0.013	*
	20 – < 25	2 (22.2)	5 (50.0)			
	25 – < 30	0 (0)	1 (10.0)			
	≦ 30	0 (0)	3 (30.0)			
Clinical department for FD b	Pediatric	6 (66.7)	3 (30.0)		0.179	
	Gynecologic	3 (33.3)	7 (70.0)			
Time interval from definitive diagnosis to FD (years)a		1.9 ± 5.7	13.2 ± 10.7	2.63	0.020	*
		range (0-16)	range (0-29)			
Reason for long time required until FD b						
	Decision by physician and parent	2 (22.2)	3 (30.0)		0.363	
	Parent's wishes	1 (11.1)	4 (40.0)			
	No long time required	6 (66.7)	3 (30.0)			
Acceptance at the time of FD (consent)b						
	Yes	4 (44.4)	8 (80.0)		0.170	
	No	5 (55.6)	2 (20.0)			
Confusion in gender identify at the time of FD						
	Yes	6 (66.7)	7 (70.0)		1.000	
	No	3 (33.3)	3 (30.0)			

a: Independent t-test b: Fisher's exact test SD: standard deviation * $p < 0.05$ ** $p < 0.01$

The mean time interval from definitive diagnosis to FD was 1.9 years in the appropriate group, which was significantly shorter than that (13.2 years) in the late group ($t(17) = 2.63$, $p = 0.020$). For two (22%) patients in the appropriate group and three (30%) patients in the late group, the long time until FD was related to the physician and parents deciding to withhold information. In contrast, in one (11%) and four (40%) patients in the appropriate and late groups, respectively, the reason for the delay was the parents' wishes. There were no significant intergroup differences.

Understanding and acceptance at the time of FD
Shock, surprise, or anxiety was felt at the time of FD in 13 (68.4%) patients, including 7 (78%) in the appropriate group and 6 (60%) in the late group. In contrast, acceptance at the time of FD was reported for four (44%) patients in the appropriate group and eight (80%) patients in the late group. Generally, patients who thought the timing of FD was late tended to be able to accept the content of FD.

Confusion of gender identity due to notification of the 46,XY karyotype occurred in six (67%) patients in the appropriate group and seven (70%) patients in the late group. Therefore, explanation of the pathological condition caused confusion of gender identity.

Discussion

Difference in timing of FD according to the clinical department
Herein, we found that most patients tended to feel that the timing of FD was late; patients who were given FD in their teens felt the timing was appropriate. During the development of secondary sexual characteristics, women experience various changes, including breast budding and menstruation. However, women with primary amenorrhea associated with DSD have none or only some of these physical changes and therefore feel some anxiety or doubt about their own bodies. A lack of such developmental characteristics in young individuals in adolescence may affect identify formation. We found that promptly making a definitive diagnosis and FD without hiding anything from individuals could result in feelings that the timing of FD was appropriate, despite initial shock immediately after FD.

FD was implemented in the late group in the 20s to 30s; many patients received FD at 10 years or more after definitive diagnosis. Particularly, visits to adolescent outpatient clinics or specialized gynecologic departments were delayed because patients had been treated at pediatric departments since infancy, resulting in a longer time until FD.

There were differences in the timing of FD at different clinical departments in Japan. Notably, there are differences in patient age between pediatric departments and other departments treating adult patients. In gynecologic departments where adult patients are treated, informed consent can be obtained from patients themselves; however, in pediatric departments, FD is given to parents or legal representatives first when the patients are minors, and disclosure of the disease to children is limited to explanations that are easily understood. This may have contributed to the difference in timing of FD for different departments. Children are still developing cognitive abilities, and protection of their rights by informed assent rather than informed consent is recommended. This may lead to delays in implementation of FD in pediatric departments (American Academy of Pediatrics, Committee on Bioethics, 1995).

Parents have the legal right to represent their minor children. In Japan, individuals aged less than 20 years are minors. Therefore, the right to make healthcare decisions is given to persons with parental authority. This applies not only to decision-making related to medical interventions but also to explanations given to children. In cases of DSD, parents often object to FD (Sawai, 2018). We found that non-implementation of FD related to parents' objection was common in the late group. Because DSD include matters related to sexuality, the essential part of the patient's identity (Iwami et al., 2019), physicians may consider the wording and timing of FD carefully, resulting in FD delays.

Confusion and acceptance at the time of FD
Patients in both groups showed confusion with gender identity. This confusion occurred at considerably high frequencies, although there are variations in the degree and duration of confusion among individuals. Patients with primary amenorrhea associated with DSD were more deeply shocked by their infertility and the presence of XY sex chromosome than by issues of appearance, such as the absence of breast growth and menarche. Because having DSD affects the self-image with regard to gender (Alderson et al., 2004), the self-image of female patients may be damaged by the idea that they are "not fully qualified" as women (Callens, 2017). Therefore, it is important that all information is given to help patients accept their physical status (Alderson et al., 2004; MacKenzie et al., 2009). Our findings suggest that thoughtful wording when providing information and continuous psychological support are important, rather than merely notifying a patient of their diagnosis and the mechanisms of the disease.

Regarding acceptance at the time of FD, we found that patients in the late group tended to accept their disease status better, suggesting the underlying deep and prolonged distress of the patients. For example, a diagnosis of 46,XY DSD may be overlooked until reaching adulthood or may not be definitive in some cases (Massanyi et al., 2013; Thyen et al., 2014). Therefore, later FD may give patients more time to become suspicious of their condition, leading to increased feelings of acceptance and reassurance that there is a medical explanation for their condition. However, patients in the late group stated that they would have liked to have been notified of their disease status at an earlier age. The need for earlier disclosure highlights the promotion of early FD in the field of pediatric care.

Implementation of FD in DSD patients in Japan
Disclosure of all information to patients is now a standard policy in DSD care, in contrast to the former tendency to hide information from patients (van Lisdonk, 2014). However, only recently was an active approach to implementation of FD to children with DSD used in Japan (Iwami et al., 2019). Timely provision of accurate information is important for helping patients understand their disease. Moreover, a well-planned and stepwise approach is necessary for deciding the timing of FD; we found that the best timing was the late teens. Because people have both the right to know and the right to not know, it is necessary to confirm whether the patients want to know. Accordingly, clinicians should be careful to consider patients' concerns and provide psychological

support to patients based on their understanding of the disease and treatment as well as their growth and development.

Herein, we found that parents tended to avoid implementation of FD, likely owing to parental anxiety and lack of correct understanding of the disease (Bennecke et al., 2015). Particularly, in cases in which a diagnosis of DSD is made at birth or in childhood, the priority is support for parents in understanding and accepting the disease. This could improve the child's understanding and acceptance of the disease in the future. Additionally, coordinated healthcare by a support team, including nurses and psychologists, is effective for providing support for DSD patients and their families (Fisher et al., 2016).

Conclusion

The appropriate timing of FD in women with primary amenorrhea associated with DSD was found to be the late teens. Many patients reported confusion regarding their gender identity at the time of FD. Thus, continuous and well-planned support for patients and their parents based on knowledge and psychology is necessary after FD and at the time of FD.

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Perspectives of students on teacher's online instructional competence during the COVID-19 pandemic

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Abstract

The sudden shift of the mode of instruction of many schools from the conduct of face-to-face classes to online classes because of Covid-19 pandemic has brought different challenges not only to the students but to the teachers as well. To be able to prepare their teachers for this new trend, Cor Jesu College has provided avenues for the teachers to be oriented on how to manage online learning modalities such as google classroom, zoom and other social media platforms to provide relevant and meaningful learning to the students. This paper focuses on the perspective of students on the online instructional competence of their teachers. Results revealed that some students experienced unfavorable learning situations due to problems of internet connectivity, content and work overload, time constraints in submitting tasks and the monotonous mode of delivery. However, most of them acknowledged the competence of teachers in handling online classes by manifesting passion, flexibility, mastery of content knowledge and ICT integration. They also felt the compassion and consideration of their teachers to their varied circumstances. This paper highlights the need for additional training for teachers to create more interactive and collaborative learning approaches to maximize students' learning experiences in the new normal.

Introduction

Lockdowns, social distancing and limited travels are some of the measures implemented by governments around the world to lessen the number of cases of COVID-19 in their countries. Because of that, all forms of actual physical gathering were prohibited. Because of this, educational institutions in many parts of the world were forced to shift to online classes/distant learning modality from the usual face-to-face learning modality (Li & Lalani, 2020).

The global data from UNESCO revealed that as of March 2020, about 1.38 billion learners from pre-primary to tertiary levels are out of the classroom resulting in a dramatic change in education, with the distinctive rise of electronic learning whereby teaching is undertaken remotely and on digital platforms. This shift of instruction delivery was seen to be the best option that schools may still be able to deliver for quality education to students.

However, several studies revealed that because of the sudden shift of curriculum, teachers and students experienced difficulty. In fact, the study of Islam, Rahman, Danesh & Kabir (2020) revealed that students in Bangladesh had a great challenge over the lack of facilities, limited interaction with their teachers, and personal and psychological well-being. Because of that, learning was not that effective to them.

In the Philippines, particularly in the hinterlands of Mindanao where Internet access is lacking, many schools were forced to prepare modules and Learning Activity Sheets (LAS) for the students (Bayod, R. & Bayod, C., 2020). However, this has brought different challenges to many students not only in terms of ensuring sufficiency of learning among the students given the fact that there are no teachers who can really assist them, but also economic challenges to their parents since they are forced to spend money for their fare to go down the schools every week to get the modules of their children (Bayod & Morante, 2020). In addition, parents of indigenous people experienced different struggles and difficulties with the implementation of modular and/or distant education of their students during the pandemic as reported in the study of Bayod et al. (2021) among indigenous parents in Davao del Sur, Philippines. It was reported in that study that indigenous parents have difficulty assisting their children in the modules because they are not equipped academically to be able to guide them. While all of them are willing to help their children, they have also many works to do for their economic survival. Thus, they hope that face-to-face classes will be implemented again by the Department of Education (DepEd).

It is not only the students and parents who experienced difficulty in online delivery, but teachers as well. For instance, Delgado (2020) pointed out that in Guatemala only one out of four teachers was prepared to hold online classes. Many of them are not oriented in doing virtual class. Similarly, the study of Joshi, Vinay & Bhaskar (2020) revealed that teachers in India had problems too in this sudden shift of curriculum. Some of those include lack of training on conducting online classes, lack of technical support from their schools and lack of clear direction in regards to the implementation of online class. As such, teachers do not know if they are doing the online class the right way to let their students learn.

In Southeast Asia, teachers had voiced out their worries, too. Most of the difficulties experienced by the professors and teachers in the region are related to delivery of lessons and low Internet connectivity (Jalli, 2020). Aside from internet connection, there are also cases that some teachers did not receive proper training on how to conduct online classes. For instance, in Indonesia, Angdhiri (2020) reported that teachers had not experienced training on how to implement online classes. As a result, students were stressed out because of the new way of teaching and the number of tasks given to them. This is supported by the study of Irfan, Kusumaningrum, Yulia & Widodo (2020) when they reported struggles by teachers especially on writing mathematical symbols and on managing their classes. In Cambodia, the study of Heng & Sol (2020) revealed that the country's educational institutions, teachers, and students were generally not ready for this unexpected disruption in traditional teaching and learning methods pointing out technological infrastructure and digital competence among the challenges they are experiencing.

In the Philippines, the height of the pandemic fell within the course of the regular opening of the school year in 2020. In June, the Omnibus Guidelines of the national government's Inter-Agency Task Force (IATF) through its 43rd resolution on June 2020 prescribed that youths aged 21 and below were prohibited to go out of their homes (Official Gazette of the Republic of the Philippines, 2020). With college students mostly falling within the given age range, schools were forced to take the online modality of learning as the best option to continue delivering education in the tertiary level. This posed a challenge to many if not all who are part of the academe since the shift in the mode of instructional was new in the context of Philippine education. In fact. as far as tertiary education is concerned, professors were airing their apprehensions about online teaching as most teachers are generally seen to have only limited knowledge of computer and had not undergone training before the start of online classes (Moralista & Oducado, 2020). As a result, they had doubts on the integrity of their classes and exams as well as the quality of the delivery of their instruction. This is supported by the result of the study of Reyes-Chua et. al (2020) when it was reported that in Region IV of the country, teachers experienced lack of resources, poor internet connection and lack of training, thus affecting the quality of online instruction.

Though there was a form of orientation of how to conduct online classes, but some problems are still encountered. The study of Alpos et al. (2020) revealed that teachers had struggled on the use of technology, on engaging students on their discussion, and on choosing the appropriate teaching strategy in online classes. Also, students had encountered problems in their online classes. The problems they faced were low internet connection, unclear lesson delivery, and the number of tasks given (Bernados, Dingding, & Mangcal, 2020).

It can be seen that teachers and students had encountered difficulty in the sudden shift of instruction. Because of that, we would like to find out how the students perceive the on-line competence of their teachers especially because some studies revealed that they lacked training. We would like to see from the perspective of the students if their teachers had been effective in delivering online classes. The result of this study may give ideas for teachers to improve their online class delivery and may provide data for school administrators help their teachers in providing quality online education.

To be able to gather the different experiences and views of the students as regards their online classes, we asked them the following questions: What are your experiences as regards to online instruction conducted by your teachers? Do you find your teacher competent in handling online classes, why? What are your insights on your teachers' online instructional competence?

Methods

Since we wanted to know the perspective of the students on the online instructional competence of their teachers, we interviewed them and asked them about their experiences. For our study participants, we have the following selection criteria: That he or she should be third year college student of Cor Jesu College and that he or she must have good standing in the attendance of his/ her online class; thus, she or he is active and does submit all tasks on time. In the selection of the participants, we made sure that each college has a representative to make this study comprehensive and encompassing. There were 20 key informants in total. Each researcher had to select two students to be interviewed based on the prescribed criteria. In the collection of data, we used Google Meet and FB messenger to get responses from the students. After this, we met as a group and together made collaborative analysis on the responses of the key informants and identified emerging themes. Ethical consideration was practiced from the moment we asked permission to conduct the study and do the interview. We also oriented our informants that their responses would be for research purposes only and their identity would not be divulged in the writing of the research report .

Experiences as regards to online instruction conducted by teachers

This study explored the actual experiences of tertiary level students in the online modality of learning. Going through the experiences shared by the participants, we were able to identity that the teacher's competence in online instructional delivery were manifested through Pedagogical Practice and Information Technology Infrastructure.

The way how teachers handle and manage their online classes were pointed out by students to be a crucial factor in the quality of student' learning. Students pointed out that when classes shifted to virtual or online learning from the traditional face-to-face classes, their teacher's methods and practices became more pronounced to them. Also, the Information Technology (IT) infrastructure which in this context is the quality of internet connectivity was noted to be a significant player in the quality of teaching-learning experience.

When it comes to Pedagogical Practice, one of the notable experiences as reported by most of key informants was the Interesting and Well-planned Lessons of their teachers. They expressed that even on the new normal mode of learning, they enjoyed their lessons because they were easy to follow and that they were self-directed and that they were learning a lot. For instance one informant shared: *"I enjoyed the online course. Online instructions conducted by our teachers were well planned and laid out and easy for me to follow".* This is supported by another informant when she said: *"I also enjoy learning in online instruction because it made me more responsible where the learning is self-directed".* Another informant also said, *"lessons are delivered in the most comprehensive and easiest ways that students are able to understand and learn from".* Similarly, another informant said: "There are modules that are simplified already which is very helpful to us". These experiences of students manifest the creativity and preparedness of the teachers in crafting lessons. Students feel that even if the lessons are delivered through a virtual meeting, lessons can still be engaging and enjoyable.

The prioritization of the roles and competencies of online teachers varies in the literature depending upon the context where online teaching takes place. For instance, technology-related competencies (Egan & Akdere, 2005), communication competencies (Williams, 2003), and assessment-related competencies (Aydin, 2005) can be more important than others depending on the context and culture within the online teaching environment. These can be the factors why students still find virtual meetings enjoyable and engaging because of the capacity, innovativeness and strategies that the teacher employs to facilitate learning during the conduct of online classes.

Moreover, many informants also cited that the online instructional delivery in the new normal promoted Interactive Discussion between teachers and students. This is beautifully captured by the sharing of one informant when he said: *"some of my teachers help us to understand more about the activities, they are open to answer questions".* In addition, another informant shared: "The subject is already fun to learn and then the activities that are given by our teacher are very exciting". This is in the same line of thought with the answer of another informant when she stated: "Our teachers encourage us to share our opinions and insights in the class". The students' experiences suggest that even in virtual learning, it is possible for students to still experience interactive discussion despite the limitations of their learning experience. The skills, values and attitudes of the teachers are very crucial in ensuring interactive, fun-filled and relevant learning even if the classes were held virtually.

Despite the fact that shifting to the virtual face-to face was sudden and urgent due to the pandemic, delivering learning to students posed some positive observations. The pandemic has posed challenges to the learning experiences of students but many teachers remained enthusiastic and positive in their approach to the new normal. The same is also observed in other countries. For instance, the study of Fatani (2020) in Saudi Arabia showed that students were satisfied with their teachers' teaching quality despite the technical issues that their teachers face. Similar findings are also presented by Chakraborty, Mittal, Gupat, Yadav and Arora (2020) claiming that the students felt that professors have improved their online teaching skills since the beginning of the pandemic (68.1%). Many students also believe that online education is a viable alternative in the current circumstance (77.9%).

The study of Scull, Phillips, Sharma & Garnier (2020) highlights the significance of engaging learners through making personal connections. The study draws attention to the benefits associated with using various tools to differentiate the curriculum and to optimize the participation of all learners. If the teachers explored other options to engage students using the online platform during class discussions, the students feel the concern and dedication and this encourages them to ask questions and provides them opportunities to share their insights; thus, it becomes an interactive form of learning.

However, not everyone shared the same experiences. While there were students who reported that their teachers promote class interaction, there were also those who experienced Ineffective Instructional Delivery. There are students who expressed they have teachers who have not given the quality of teaching they believe they deserve in the new normal. To cite one, an informant said: "during class, the teacher is focused, allowing everyone to speak compromising the discussion". The same sentiment was expressed by another informant who shared that: *"It's not that they are not trying, but the way they do classes is like it's constricted, to the point that it feels repetitive and bland".* In addition, another informant said: *"I can say that many teachers changed in their instructional delivery.* There are teachers who performed very well during the physical face-to-face but did not sustain when classes shifted to the online class, they cannot explain sufficiently anymore the lesson. They used to be very good before during the face-to-face classes. Some teachers do not even give modules regularly". We found out that many of our students knew their teachers very well. They have been with their teachers during the face-to-face classes and during the on-line classes. Thus, they have established a kind of baseline measurement as to the effectiveness of their teachers. However, it is a fact that face-to-face teaching is very different from on-line teaching. For one thing, the challenge of internet connectivity is always present to disrupt the momentum of the on-line classes both from the teachers as well as from the students' end. In addition, since the mandate of the Commission on Higher Education (CHED) is to give on-line lecture for only one hour a week, teachers made sure that during this schedule, important concepts must be discussed. Likewise, to ensure that students will have something to do to continue their learning during the days when there are no on-line classes, teachers have to prepare modules or student activities for their independent learning. This has provided another concern for the students as reported by our participants.

These findings show that the source of students' frustrations or satisfaction was the ways on how teachers carry out their lessons together with their attitude towards how to carry it. These experiences are supported by the findings of Mcdougall, Orlov and McKee (2020) which revealed that the switch to remote teaching brought about by the pandemic took a toll on student learning emotionally and academically pointing out that online classes could be one possible reason. Similarly, Chakraborty et al. (2020) reported that students in India did not feel better that teaching is done online compared to when they held classes in physical classrooms. More so, according to Adams (2020), the pandemic has caused teachers to lose their ability to confidently gauge student levels of engagement and motivation jeopardizing the quality of interaction in the online class and even caused some students to get bored.

Research shows that students are mostly sufficiently skilled to take part in digital lessons, but the development of these lessons by teachers turn out to be a lot more difficult (Aslan & Chang 2015). It has been observed that since institutions shifted the mode of learning, many teachers struggled in terms of adjustments and coping with added tasks like making modules and attending to scheduled online classes. There are teachers who are really comfortable delivering the lessons through face to face learning and since the pandemic started and modality of teaching had various changes, some teachers were not prepared for the sudden shift of online teaching; thus, they are still in the period of adjustment.

As to the actual experiences of students alone, it was revealed that teachers' instructional delivery is a combination of positive and negative ones. It means that the pandemic has not fully brought catastrophic effects to education. These findings reveal that teachers play the important role on how the teaching-learning will take place in the virtual classrooms.

Another issue that concerns students is the Content Overload and Time Constraints in Performing Tasks that they experience in online learning. For these students, online classes have brought so much work with too little time to complete tasks or activities and so many contents to learn which f is not good in general. One informant said: *"There are teachers that seem like always in a rush when discussing. Not that they talk so fast but because they present a lot of lessons in just one meeting, information overload".* This goes true to another informant when he said: *"Some of our lessons become vague because some of the teachers present too much of their lessons more than students are able to comprehend which gives information overload".* The same sentiment is expressed by another informant saying: *"This is one thing that makes online learning difficult for me, because some of our teachers have been giving either too many tasks (number of tasks or the difficulty of them) or too little time to do it (deadline)."* Similar experience is claimed by still another informant who said: "Sometime I feel the pressure especially in times when teachers altogether give tasks, not just one task but many from one teacher". Moreover, another informant said: "The teachers attempt to finish the lesson regardless of we understand or not".

Apart from a sense of urgency and experiencing the added value of Information Communication and Technology (ICT), the short transitioning period due to the Covid19-pandemic has left many teachers unprepared (van der Spoel, Noroozi, Schuurink, & van Ginkel, 2020). One of the factors that hamper professionalization in terms of ICT competency is limited time to become familiar with technology (Almekhlafi and Almeqdadi, 2010; Ungar and Baruch, 2016), as well as a lack of knowledge and skills to support learning with use of ICT (Koehler, Mishra, and Cain 2013). A final impeding factor is absence of adequate training focused on teachers' teaching practice (Baran 2014; Hadar et al. 2020). These are all true most especially in slow developing countries when coping with technological advances is not a priority in academic institutions. There are instances when teachers find it hard to balance lecture and giving online tasks that burden students in coping with their academic requirements.

Indeed, there are many challenges that students encountered in the implementation of online classes. But many of these challenges are brought about by Internet Connectivity Problems. Many of our informants said that they have regularly experienced intermittent internet connection while attending classes. Many students who avail of online learning modality are using either WiFi connections or 3G or LTE data using either mobile phones or laptops and our respondents expressed that this is a common barrier in online learning. For instance, one informant shared: *"Sometimes our lessons are not clearly explained maybe because of time constraints and internet interruptions."* The same experience was shared by an informant who said: "I encountered various challenges such as internet connectivity problems and power interruptions which cause delays of submission and difficulty in attending classes. The worst part of poor connection is it may fail you in exams especially when exams are done by Google forms." Similarly, another informant said: "Sudden internet connection loss makes me rush to catch up with lessons from meetings I was not able to attend".

According to Kapasia et.al. (2020) students were also facing problems related to poor internet connectivity (32.4%), followed by absence of a favorable environment to study at home (12.6%). This also corroborates the findings of Mishra, Gupta & Shree (2020) and Amir et.al (2020) who claim poor internet connectivity and video issues due to remote locations contribute to problematic online learning. In fact, students residing in rural and remote areas face poor internet connectivity. Moreover, poor economic conditions might lead to an unfavorable environment and lack of a separate room for their study. Students with no internet connectivity really find a hard time coping with online classes. Some are very eager to learn but they get discouraged especially when there is limited internet connectivity.

Based on the experiences shared by the informants, we found that students have mixed of positive and negative experiences with the online instructional delivery of the their teachers. Most of the experiences they pointed out relate to the methods and practices that their teachers employ during online classes. Many of these challenges are brought by internet connectivity problems. When the students are cut-off from the online discussion because of poor internet connection, they cannot wholly experience everything that the teachers did during the lectures. Their intermittent internet connection also resulted in intermittent on-line class participation. Thus, they cannot totally benefit from the entire on-line discussion and activities given by their teachers. Considering that teachers have different educational backgrounds, trainings, pedagogical knowledge, levels of information technology literacy, and unique personalities, teachers may vary in their approaches during online classes. Some may have plenty of activities to ensure students' interaction while others may only resort to pure lecture to cover the topics. Thus, it is expected that students share a mix of experiences just like any other learning situation and set-up.

The online learning process is often discriminatory. Many students face enormous challenges in e-learning and a substantial proportion of students could not attend online classes. Students from remote areas and marginalized sections mainly denied online learning due to the lack of electricity and internet connectivity. Poverty further exacerbates the problem of digital learning in this unwanted crisis (Kapasia, et.al, 2020). Thus, teachers play significant roles in facilitating students' online learning. The roles were defined within the online discussion context, in which the pedagogical role meant facilitating the learning in discussions; the social role meant encouraging and promoting working together; the managerial role meant organizing and designing the logistics of the discussions; and the technical role meant providing a transparent technology environment to the learners (Berge, 2009; Berge & Collins, 2000). There is certainly the need for adjustment in both the teacher and the students to cope with the demands of the pandemic in order to sustain in this challenging time.

Teachers' competence in handling online classes

Among the 20 student participants, 14 (70%) commended that teachers showed competency in doing the online class while six (30%) expressed that teachers in this new normal learning modality are performing with incompetence. Most of them agreed that their teachers possess technology literacy having the ability to use the technology to organize their lesson and communicate information. Their perspective on the teacher's competence as well as incompetence are based on the following themes: ICT Skills Content Knowledge and Pedagogical Skills.

When it comes to ICT skills competence of teachers**,** five students complimented that the ICT skills competence transpires during the conduct of online classes. One student said, *"They have enough technical skills and they teach with passion in order to meet our learning needs."*. The exact line from another student speaks his confirmation as he uttered, *"Yes. Technology and media literate, flexible and creative teachers."* These multi-literate teachers know how to use various technologies in teaching according to De Leon (2020) as a tool to communicate information that make their online classes interesting and interactive.

Apart from being multi-literate, teachers maintained their *content knowledge competence* and they were able not only to deliver the lesson but also transfer the learning to the students. One student remarked that "*Yes, contextualized and comprehensible inputs*". Other students supported as they added: "*teachers have subject matter mastery*" and *"they deliver quality lessons"*. Barnett and Ceci (2002) articulated that the hallmark of true learning is when the transferred knowledge or skill can be applied in a different context. Transfer signals that a learner's comprehension allows them to recognize how their knowledge can be applied effectively outside original learning conditions. Evidently, to teach all students according to today's standards, teachers need to understand the subject matter deeply and flexibly so they can help students create useful cognitive maps, relate one idea to another, and address misconceptions. A focus on conceptions, and in many cases a particular interest in student misconceptions, acknowledges that accounting for how students understand a content domain is a key feature of the work of teaching.

However, the compliance of the new normal modality risks the quality performance of several teachers especially those who are not technologically adept. Some students firmly said that their teachers lack technology competence that affects their online class performance like by coming in late or creating a boring class. These are the exact words from the student who was asked if his teachers are competent in handling online class. "*No, come late, not tech savvy, boring class."* Additionally, two participants said: *"Pedagogically, some teachers really have to improve ICT integration"*, and they are: *"becoming pedagogically incompetent*," since they manifested inconvenience in the use of technology as stated by two of our informants. Other teachers as well are *"struggling to be competent in online classes."* as observed by another informant. One must be proficient in using a variety of technology tools to solve problems, make informed decisions, and generate new knowledge (Raob, Al-Oshaibat & Ong (2012). Nonetheless, they added that many of our educators lack the necessary skills themselves to be comfortable in the integration of technology into classrooms. This argues to the point of Koc & Baker (2010) that the role of the classroom teacher needs to change significantly as technology is used in a more widespread manner of instruction.

Challenged by the utilization of a wide array of technological tools to assist them in online class platform, teachers turn to a dispenser of knowledge making the class less engaging and causing students saturated and overloaded with information. When asked if teachers are competent in handling online classes, one informant answered: *"No, because of too much focus on the content/ materials to be covered"* and another participant said: *"No, content of the lesson not enough to be discussed once a week."*

The statement above signifies that teachers attempt to cover many lessons regardless if students are learning or not because of time consumed in manipulating the gadgets and connectivity; hence,"becoming pedagogically incompetent" commented a student participant. In the study of Chen, Pedersen & Murphy (2012), computer-mediated communication (CMC) has been used widely to engage learners in academic discourse for knowledge construction. Due to the features of the task environment, one of the main problems caused by the medium is information overload. The results indicated that although information overload did not affect every student because some seemed to have learned how to manage the saturation of information, yet, it influences students' participation and levels of cognitive processing in online discussions.

Further to say, the effect of the pandemic threat affects the continuous dramatic change of education that also influences the teaching performance of teachers. Nevertheless, the resilience among the teachers keep them composed by sustaining their flexibility and passion for quality teaching. Five students categorically mentioned that teachers exhibit online class competence by being passionate in delivering the lesson. These are some of the informants' utterances:

"Yes, passionate in teaching who sees the value of developing and working with others." "Skillful, passionate, positive and can easily adjust." "They teach with passion in order to meet our learning needs." "Yes, ensures that students maximize their potentials."

Teachers are passionate for excellent teaching as complimented by other students because their teachers established class engaging classroom in online modality. They said in verbatim: "*Yes (conducts engaging strategies.)"* and *"Yes. (engaging class discussion)"*. One student added: *"Yes. delivers quality lessons, considerate, make time to have make up classes, creative".* Whatever the call of adversities, teachers must possess passion in the teaching profession to ensure that students are motivated to learn under their guidance and care (De Leon, 2020).

The teaching quality of teachers in this COVID pandemic is indeed challenged. Yet, despite the unpleasant situation, teachers reveal their flexibility and adaptability as they balance several responsibilities at once, like learning the technicalities of technology, and still making students smile and feel appreciated in the online class. The students as well expressed their appreciation as stated by one of the participants: " *Yes, I am really pleased by the adaptability and positivity of our teachers in approaching them*." He added that the teachers are "*Skillful, passionate, positive and can easily adjust*". Another participant complimented on the flexibility and adaptability of teachers in doing online modality as he said: "*Yes, adapting to the new ways of teaching*" while the other one commended: "The teachers are mostly flexible because they know how to find alternatives. I also noticed that this time the teachers in CJC are very creative whether young or old, they have many ideas."

Hence, having flexible teachers and experiencing interactive online classrooms provide fun in learning amidst adversity. Being flexible according to De Leon (2020) enables teachers to adapt to various learning styles and needs of the learners. They can still facilitate the learner-centered teaching in the midst of the significant surge of teaching on digital platforms and sudden shift away from the classroom brought by recent pandemic. Consequently, any threat to teaching performance cannot weaken teachers as they are prepared for alternative modes of delivery and are online teaching competent in this new normal modality.

Insights of the students on teachers' competence

The pandemic due to Covid 19 has created a different setting for learners to experience learning through cold and heartless devices like cellphones and laptops. Challenged and distressed by the new normal learning modality, the student participants shared their insights on their teachers' online instructional competence. The insights of the students fall into the following themes: High Satisfaction and Confidence on Teachers' Online Class Competence, Emphasis on Student-Centered Approach in Teaching and More Compassionate and Understanding Teachers.

High satisfaction and confidence on teachers' online class competence.

Most of the informants expressed high satisfaction and confidence on their teachers' ability to deliver the lessons through the online modality. One of the informants said: *" I'm very much contented on how our teachers have built a well-designed instructional method that has led us to continue our learning in an active and productive manner*." Moreover, despite the hassles of intermittent connectivity during online class , one student expressed her joy in her observations on how her teacher managed to come up with relevant learning tasks and a well-organized class and on how her teacher valued them. Her words are: *"I am glad that our teachers present learning materials in a clear and organized manner and gives learning tasks with clear purpose. They also demonstrate expertise in their respective subjects. They encourage us to improve our grades and always motivate to do our best and to be honest during online exams."*

Furthermore, another informant commented: *"Almost everyone is competent. I have seen the way my teachers are conveying their thoughts about their topic. Though some are not into technologies and how to manipulate such, but still they're giving their best."* With their words, students can still see the efforts of teachers to maximize the opportunities for learning.

Emphasis on student-centered approach in teaching.

Though most of the students commended on the competence of teachers in handling online classes, few were frustrated and unsatisfied on the manner their teachers conducted their classes, on the kind of learning tasks their teachers gave them, and on the attitude their teachers showed towards them. One of the students commented:*"With the instructional strategy of teachers in online classes, sometimes they forget to make the discussion interesting and lively. Sometimes, I felt sleepy due to the ineffective approach of the teachers that made the class boring."* Similarly, dismayed with non-interactive class discussions, one informant demanded: "Make the class interactive, allow students to talk because there are teachers who just lectured hurriedly." This lack of active engagement among learners is supported with statements of another informant:

"... but some are just really being stagnant with the lecture approach and interaction in class is just like limited to 'can you read this? Okay, now explain.' I feel like we can do more than that....These days it's just always been the teacher, and there's a part of me that wants to interact but just can't , because that's the kind of vibe that has been established."

The students want more from their teachers. They want their teachers to involve them and make them part of the teaching and learning processes despite the distance. They need to be engaged actively to find meaning in their virtual meeting. As active social individuals in a very dynamic realm, learners want active learning settings (Dziuban et al., 2003). Petress (2008) believes that active learning is making the learners "as an engaged and motivated partner in the learning process" which allows learners to immediately apply what they have learned. Moreover, according to Ediger & Rao (2013), teachers should create learning experiences that are interesting, purposeful, and relevant to the lives of the learners for them to learn. The class is for the students; thus, they must take part in whatever is happening in the virtual classroom.

The experience of the online class to a few of the students is demotivating. One student expressed: "The impact to me is that I am not anymore motivated to study; it is all for compliance only. I am not motivated to do advance reading anymore."

Student participants could not hide their desire for the teacher to improve their online teaching strategies to create a more student-centered teaching approach. They suggested that teachers should undergo more workshop and training in using technology as the major teaching device during this new normal or post pandemic learning modality. One student said: "to provide online instructional competence, teachers need to take part in training sessions … and hone their abilities in using technology … and this will allow both teachers and students to achieve learning goals or objectives in online courses."

It cannot be denied that teaching in the new normal brought about by the COVID pandemic is challenging. The shift to online modality becomes more difficult because of the unpreparedness of teachers in terms of unavailable learning modules and lack of technological skill (Bilbao, Dayagbil & Corpuz, 2020). However, the pandemic cannot be used as an excuse for not delivering lessons competently because students deserve meaningful learning whatever the condition is. Moore (2009) points out that "faculty preparation for teaching online measurably improves learning effectiveness and satisfaction" (p. 90). Thus acquiring set of technological skills and competencies must be acted on by teachers to provide opportunities for effective learning (Bigatel et al, 2012).

More compassionate and understanding teachers. With the new normal learning modality, students need their teachers not only to teach them the lessons but also to understand their present condition. Though they do not experience the hassles of going to the physical classroom, they still feel the pressure and difficulties while having their online classes.

Most of the student participants desired that teachers empathize with them by considering their present condition as online learners. They want their teachers see their struggles to be able to participate in class actively and to respond to their assignments or tasks excellently. For instance, one student participant expressed: "… teachers have to be considerate and compassionate to their students at this time." They must listen to the students' challenges and difficulties and to help them deal with these problems." Regarding the kind of learning tasks teachers gave, two informants commented: " Teachers have to consider the level of difficulty of the tasks they give their students and the deadlines." and "… it's the given tasks which caused pressure in me". The students find it more difficult to learn in online classes because they do not find them valuable and inspiring, and they cannot feel the concern of their teachers in their struggles to get connectivity and comprehend the course content. According to Coskun (2019), "compassionate teachers are able to reflect on characteristics of passion, inspiration, motivation, and openness to the students. With the aid of these, the teachers are likely to make the lesson happen with positive outcomes."

Conclusions

The sudden shift of curriculum delivery from the traditional face-to-face classes to online classes has brought challenges to Cor Jesu College teachers as well as to the students. While the school administration gave orientation to the teachers on how to conduct and manage online classes, some teachers faced challenges in handling and managing online classes. Some of them are perceived by their students as not as competent enough compared to the way they handled classes before in the traditional face-to-face classes.

There are many factors to consider in the assessment by students of online competence of their teachers. For one, the internet connectivity problem has affected the creativity and competence of teachers in handling online classes. Second, since many of the teachers are used to having face-to-face classes where they can see and evaluate the physical as well as emotional reactions of students, many teachers also find online classes boring since they cannot see whether the students are really interested in the lesson or not. In most cases, teachers do not oblige or even categorically discourage students not to turn on their video camera during classes so as not to disrupt the internet connection. There are no other means to check if students are really attentive or not except when teachers make a random call of students to answer some questions or share their insights on the topics. Students can also make the internet connection issue as an excuse why they cannot answer to their teachers. As a result, teachers are often content only on delivering lectures during the online classes. Third, considering that teachers have only one hour to deliver their lesson, they are most often focused on employing purely lecture method and occasionally ask questions to their students to check if they are still present in the virtual classroom. Because of these, some students said that the competence of their teachers had declined. Not surprisingly, those who said that the competence of their teachers had declined are education students or students who prepare themselves to become teachers. Since they are trained on teaching methodology as future teachers, they can assess the competence of their teachers based on their knowledge of the teaching profession and their previous experiences with teachers in different classroom activities as education students. Similarly, those who said that their teachers were not really technological savvy are mostly coming from the College of Engineering and Technology (CET). These students are quite advanced in terms of ICT skills as compared to many teachers who are not teaching professional subjects in engineering, information technology and computer science.

Regardless of what college or what program the informants belonged in the school, the results of this study have provided several implications to the teachers and to the school in general. On the part of the teachers, they may consider creating and implementing different tasks that will let their students interact and connect with their fellow students even during online and modular classes. Teachers may come together and discuss tasks that will integrate disciplines or subjects so that there will be duplication of tasks. This is to address the clamor of students about heavy workload. It would be good for teachers to devise tasks that can cater to the different learning domains of students. Lastly, teachers may employ activities and questioning techniques to ensure interactive class discussion. On the part of the school administration, they may provide additional training to teachers as regards management of online classes. They need to look into the internet connectivity issues and address these issues by building more infrastructures that will help aid the speed of internet connection.

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Learning by teaching during the COVID-19 pandemic: Improving students' social and technical Skills through peer editing pedagogy

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Abstract

Because of the COVID-19 pandemic, most schools in the Philippines, especially in Mindanao were forced to shift the mode of curriculum instruction from face-to-face, to Radio-Based Instruction (RBI) and Television-Based Instruction, among others. This mode of delivery posed challenges to teachers who are handling technical subjects which need to have hands on instruction. For students under the Science, Technology, and Engineering (STE) Program, academic writing is a skill they need to master. They are required investigatory projects, essays, etc. However, students' writing deficiencies are evident. The purpose of this classroom action research was to determine if there is an improvement in their writing quality when peer editing is applied. There were 20 students participating in the peer editing activity and in the key informant interviews. Findings showed that the most common writing problems or errors of the students were capitalization, punctuation, subject-verb agreement, tenses, irrelevant materials, order, vocabulary use, and run-on sentences with the latter as the most predominant. Results showed that, after applying peer editing, errors significantly decreased. Findings further showed that not only the technical aspect was enhanced but also the personal, and social dimensions were addressed during the peer editing activity. Students who got bored due to lockdowns have found something worthwhile to do. This in turn, enhances their self-esteem as well as their empathy and sense of respect to their classmates. It can be argued that peer editing as intervention strategy was able to improve not only the writing quality of students but also their humanity.

Introduction

Writing is no easy task as it involves various skills that many may lack or may not be able to develop completely (Carnegie Mellon University, 2021). According to Heaton (1989) varied skills are necessary for better writing which can be grouped into five main areas. These areas are: first, language use is the ability to write correct and appropriate sentences. Second, mechanical skill is the ability to correctly use capitalization, spelling, and punctuation. Treatment of content comes third, the ability to think creatively and develop thoughts excluding all irrelevant ideas and information. Fourth, stylistic skill is the ability to manipulate sentences and paragraphs, and use language effectively. Lastly, judgment skill is the ability to write in an appropriate manner for a particular purpose and a particular audience, together with the ability to select and organize information.

At this point, Grade 9 students of Digos City National High School (DiCNHS) under the Science, Technology, and Engineering (STE) Program are asked to craft different types of essays, research papers, science investigatory project, and other types of academic writing tasks. However, based on submitted write ups, deficiencies are obvious in their writing skills. There is incompetence in syntax, order and coherence, idea expansion, sentence placement, mechanics, organization, lack of vocabulary, and inappropriate use of vocabulary.

There are many writing tasks assigned to these students. As a teacher whose task is not just to check papers, time is too limited to provide comprehensive feedback. Upon submission, teachers reads, make corrections, assigns grades, and record them. This is the reality in English classrooms in the Philippines. It cannot be denied, that students would just accept whatever the grade is (and sometimes the teacher does not even provide feedback). If there are about four sections with 40 students in a class, it would literally mean a huge task.

Much more so, the current COVID-19 pandemic adds to these limitations as it deprives students of the face-to face mode of instruction necessary in giving better monitoring in terms of their writing. At this point, basic grammar and other mechanical skills of the students are supposedly the least concerns of the researcher (as their English teacher) in the students' writing. However, bigger problems arise in the higher writing tasks when the fundamental errors are not addressed and resolved. To make their writing better, giving grades for their work is not enough. The students need other strategies to improve their writing.

The writing deficiencies, the huge workload, and the current pandemic have pushed the researcher to look for intervention to bridge the gap. Though, it is not expected from them to have fully mastered all the writing skills based on Heaton's (1989) criteria; students are expected to have learned the basic writing competencies and skills such as grammar, organization, and mechanics.

Therefore, the researcher intended to apply peer editing to the students. Peer editing is a strategy used by students in the process of sharing, revising, editing, or evaluating a writing. In applying peer editing strategy, students are given the opportunity to share their work with another classmate for corrections, and suggestions on how to improve their writing. It is hoped that the students' mastery of the basics of writing improve while editing another classmate's work. It is learning by experience as a two-way process of engaging (Ord, 2012). In short, the objective of this research is to see how peer editing improves students' writing skills.

Peer editing

According to Oshima & Hogue, (2007), peer editing is an interactive process of reading and commenting on a classmate's writing. It is teaching students to critique a work constructively. Providing comprehensive feedback is the most challenging part in teaching writing, and many studies show that peer editing as a strategy of giving feedback has been an effective tool in teaching writing proficiency. Responding to student writing is basically provided by the teacher; however, despite the fact that it is so time-consuming and so rigorous, it is unfulfilling because teacher corrections, whether detailed or less detailed, does not guarantee students' learning and understanding of the responses. Much more so, Zheng (2007) added teacher correction sometimes affects students' confidence and motivation as they suffer "death by the red pen."

Students who did peer editing produced better compositions from the usual feedback, a better understanding of each other's mistakes, and a good honing of their editing skills which will have long-term effects (Siew, 2011). Accordingly, Fahriyana (2005) agreed in a study conducted on the value of peer editing in a writing class that students responded positively to peer editing and considered it very valuable. It was also found that the peer editing process resulted in improved motivation in writing and in writing quality (Katstra, Tollefson & Gilbert, 1987). Pasca (1987) studied the effects of peer editing in pairs and found significant improvement in the quality of students' writing.

Calimbo, et al. (2016) concluded that allowing students to evaluate their own outputs enables them to see their own errors, thus harnessing critical thinking skills. This poses a challenge for language teachers to design writing activities which can help students to become more independent and more responsible for their own learning. Among the evaluation methods, peer editing resulted in better writing performance. This finding reaffirms the value of collaboration among students especially in the cognitively demanding task of writing. It was also highlighted in the study that the teacher's mediation in the process (by providing editing checklists or by giving specific editing instructions) is very significant. This finding should encourage language teachers or writing teachers in particular, to continue exploring novel approaches in getting students more involved in the learning process. The study dealt only with editing which is one of the stages in the writing process. While student collaboration in the prewriting stage and evaluation stage may work well if properly mediated by the teacher, it would be more challenging if students are asked to come up with a collaborative writing output.

The main purpose of this classroom action research was to determine if there are improvements in the writing quality and social skills of Grade 9 Students of STE Program in DiCNHS when peer editing is applied. The research questions were:

1. What happens to the writing quality and social skills of Grade 9 STE students when peer editing is applied?
2. What are common writing problems encountered by Grade 9 STE students?
3. What are the contributions of peer editing to Grade 9 STE students to improve their writing?

Methodology

This classroom action research is qualitative in nature as it took place in its natural setting and it was "emergent than tightly prefigured" (Cresswell, 2003). According to Greenwood and Levin (2007) action research is a combination of action, research, and participation. There have been several models of action research spiraling cycles (Kemmis and Mc Taggart, 1990), the helix model (Stringer, 2004), and the five-step action process models of Sagor (2000) and Calhonn (1994). In this study, the spiraling model of Kemmis and Mc Taggart (1990) was employed, which involves (a) planning, (b) acting, (c) observing, (d) reflecting, and (e) re-planning.

The study was conducted at Digos City National High School, (DiCNHS) Digos City, the Philippines. Participants of the study were Grade 9 students in the Science, Technology, Engineering (STE) program. The selection of participants was purposive in nature. The current government protocol due to the COVID-19 pandemic does not allow under 15 years old to leave home. For the purposes of convenience and safety of participants, students are limited to those living within Digos City alone. A total of 20 students from three English 9 classes under STE program participated in the study.

I formulated simple mechanics of peer editing to be implemented as the strategy to intervene in the students' writing problems. The researcher then set up online classes about basic grammar and mechanics to refresh students. A general question was prepared as common basis for the participants to write an essay. The criteria of success of this classroom action research was also determined in this step, i.e. this research was considered successful if there was a decrease in the total number of error occurrences in the essay of the students after peer editing was conducted.

Acting. I requested students to write essays. Two days later, essays were collected from students at their houses. After the essays were retrieved, the teacher conducted online discussion on the basics of writing compositions to refresh students. Included in the discussions were the presentation of the nature and purpose of peer editing activity. Students were assigned randomly to edit an essay written by a classmate. Since these students are generally under 15 years of age, and mindful of the government protocols, the researcher delivered the papers to the students. Students were given two days to edit the work of the student assigned to them. After two days, the papers were collected. The results of editing in terms of writing errors occurred as identified by the editors were recorded. The researcher returned the papers to the owner. Students were asked to make necessary revision on their essays based on the comments and suggestions of the editors. Revised essays were finally collected. During the collection, the researcher made use of the opportunity to interview each participant about their learnings in the peer editing activity.

Observing. During the course of peer editing activity, the researcher monitored the students' status of drafting, editing, revising, and making the final paper. The researcher entertained any questions, clarifications and discussions raised by the participants. This was done through online meetings and social media individual conferences. Alongside these, the researcher recorded the students' feedbacks and responses putting an emphasis on the improvement these students claimed to have. She also collated the common writing problems identified by the peer editors. Secondly, the researcher did the final evaluation of the writings of students comparing the paper before and after editing. She compared the common errors made by students on capitalization, punctuation, subject-verb agreement, tenses, irrelevant materials, order, vocabulary use, and run-on sentences. By comparison of the initial paper and the final paper, the teacher evaluated whether there was a significant improvement in the student writing or not. This was done by identifying if there was a decrease in common errors made by students before and after the peer editing.

Reflecting. The researcher analyzed whether this action research achieved the purpose or not. When the research results showed decrease of error occurrences in the essay by students, it was considered successful and the researcher stopped the action.

Re-planning. The result of this classroom action research led the researcher as English teacher in looking for ways to improve the implementation of peer editing. She continues to identify appropriate development to make peer editing responsive to the needs of the students.

Data collection

Two methods were utilized to collect data to identify if peer editing contributed and improved the writing quality and social skills of Grade 9 students under STE Program, and to determine common problems encountered by the students. First, notes were written down promptly after peer editors identified errors in the essays. Students' writing samples were observed and noted. Second, the Key Informant Interview (KII) was conducted to all 20 participants to draw out their learnings from the peer editing activity.

Ethical considerations. Full consent was obtained from the participants prior to the study. Protection of the privacy of participants was ensured. There was confidentiality of the data, and anonymity of individuals participating in the research.

Results and discussion

Thematic Analysis was employed in the interpretation of data. The results presented are mainly based on the experiences described by the participants.

Table 1: Common writing errors identified by editors before editing

	Frequency of error before editing	Rank
Capitalization	11	8
Punctuation	32	4
Subject verb agreement	27	6
Tenses	36	3
Irrelevant materials	21	7
Order	41	2
Vocabulary use	31	5
Run-on sentences	43	1

Most common writing problems identified by peer editors

Table 1 shows the writing errors editors encountered in essays they had edited. Common writing problems identified were run-on sentences (rank 1), order (rank 2), and tenses (rank 3), punctuations (rank 4), vocabulary use (rank 5), and subject-verb agreement (rank 6). They also had problems with irrelevant materials (rank 7) which includes information, or examples that is out of the central idea. Capitalization problem ranked eight (8).

Writers had problems in sentence placement particularly with run-on sentences. This was reflected as well in their problems with punctuations (e.g. comma, semi-colon or period) which act as signposts within a sentence to help readers follow what the writer is saying. For example, an editor noted a run-on sentence on this statement: *"I managed to overcome my insecurities and I'm still trying to accept who I am, how I look, and how I function as human being."*

The editor is correct. It can be observed that *"I managed to overcome my insecurities"* is connected by a conjunction, *and*, to "*I'm still trying to accept who I am, how I look, and how I function as human being."* In the outset, the sentences involved are closely related and dividing them just doesn't seem right. However, they need to be divided by a *period* because the first sentence, "*I managed to overcome my insecurities"* already can stand alone and is totally a separate idea. While the second sentence, "*I'm still trying to accept who I am, how I look, and how I function as human being",* is not needed to support the first sentence as it presents another concept. In fact, a conjunction, *such as or for example,* must be added to make the sentence conceptually sound. So, it becomes: *"I'm still trying to accept who I am such as how I look, and how I function as human being."* The sentence is now clear to state that how one looks and functions become examples of who a person is as the writer seems to convey.

Writers incorrectly fused sentences affecting significantly the coherence and unity in a paragraph. Coherence means creating relationship between ideas in a paragraph or essay while unity means that the entire paragraph or essay focuses on a main idea. Run-on sentences can generate mixed-up ideas in a paragraph especially if details are not actually supporting the main idea. The essay can become confusing, difficult, and intricate to understand. The paragraph below is an example of the use of run-on sentences. It does not have order in the structure and ideas, thus, it has no coherence and unity: *"COVID-19 pandemic has taught me to be more responsible, I learned to help in the household chores more frequently, it also help me to lessen the stress brought by face-to-face learning at school and enhanced my workflow to be more productive everyday."*

Moreover, tenses come along as rank three (3). Students had issues with keeping consistency in the use of tenses. According to Douglas(2020), mastering grammar takes years; mastering the use of tenses can be a nightmare for students, in particular, to maintain the same tense throughout a piece of writing. For example, an editor observed the inconsistency with keeping the tense on this part of an essay: *"Most of them have negative opinions about what was happening right now. Before the COVID-19 pandemic started, I was very busy at school and when I'm home I am always inside of my room. I don't think I communicated with my family that much because I'm always on my phone."* Besides problems of run-on sentences, structure, grammar, and comma splices, there is obviously a struggle in maintaining tenses. The writer confusingly starts with past tense, "*about what was happening*," but wants to describe the present "*right now*." The writer gets so caught up in the action that s/he unwittingly drifts from past, ***"****I was very busy at school,****"*** into present tenses "*when I'm home I am always inside my room***,**" and moves again into past tense then present.

Results after conducting peer editing

Table 2 shows the comparison of occurrences in errors before and after peer editing in the essay of Grade 9 students. It shows a significant decrease in the occurrences of errors in the essays of the students after peer editing. This indicates that students became conscious of the errors and corrected these errors accordingly. Surface error occurrences in punctuations, capitalization, subject-verb agreement, and vocabulary use have been reduced. The students have indeed improved in those areas. In the use of relevant information or materials, the table shows that students improved the most. By reading the essays, the researcher observed development in the sentence structure and ideas. Coherence and unity in their final paper became evident.

Table 2: Comparison of occurrences in errors before and after conducting peer editing

	Frequency of errors before editing	Frequency of errors after editing
Capitalization	11	2
Punctuation	32	5
Subject-verb agreement	27	11
Tenses	36	18
Irrelevant materials	21	4
Order	41	11
Vocabulary use	31	4
Run-on sentences	43	8

In most instances, peer editors were able to identify errors and made accurate corrections and suggestions. For example, in vocabulary use, a student wrote: *"Since March 2020, we have been ordered to stay indoors and be quarantined since there is a virus spreading."* After underscoring *"stay indoors and be quarantined,"* the editor made a note: *"I suggest that you use other terms since "be quarantined" has the same meaning with "staying indoors."* Another editor also commented: *"I admire your idea; however, avoid repetition of words in a sentence or in a paragraph."* One editor wrote rubber stamps comments that made him/her sound like the teacher: *"Not the best sentence construction. The thought's there but not properly conveyed." "I don't think it is necessary."* In other comments, they stated: *"I respect your answer but it would be nice and right if the main topic is stated in the introductory paragraph."* Another said***:*** *"It would be nice if this was found in the concluding paragraph."* The editors here wittingly corrected incoherence, thus, suggesting to put order in the paragraph.

Moreover, another editor noted a punctuation error: *"I suggest you put an apostrophe on 'mothers doing' to refer 'mother is doing'." "Make your commas distinguishable as well."* In another essay where a student wrote: *"It wasn't so easy to get use to it even now. I find out I can be independent on my own.****"*** The editor was quick to see the error in the tense. He noted: *" 'Use and find,' should be in the past tense."* An editor suggested: *"You could add sentences or phrases that could catch the reader's attention."* Though not part of the technical aspect, the editor went beyond suggesting creativity.

Tenses, though, proved to be difficult as it is the only area with the lowest rate of improvement that is from 36 error occurrences to 16. This can imply that students find tenses to be difficult. Douglas (2020) stated it well saying that there are so many tenses that fitting them into simple rules cannot happen. Thus, it is no wonder that students struggle so much with tenses.

Finally, it must be noted that although the results show positive results in the students' quality of writing, there is still so much to improve. The process of peer editing may pose problems. Accordingly, Calimbo, Arambala &Sususco (2017) noted Zheng (2007) stating that some students may not consider the comments of their peers and not all comments are always correct. More importantly, some linguistic errors are beyond the language proficiency level of the students. This may explain the occurrences of errors in the final paper.

Contributions of peer editing to Grade 9 students

When asked what they have learned from peer editing, the Grade 9 students commonly noted that it has given them the opportunity to see their own writing weaknesses and strengths while they are in the process of editing their classmates' works. It was learning by doing, so to say, an affirmation of Dewey's learning by doing concept or experiential learning (Ord, 2012). Moreover, four themes came out from the responses of the students: technical learning, personal learning, intellectual interaction, and social dimension.

Technical learning: Interviews revealed that editors realized the need to gain more knowledge, understanding, and application of the fundamentals of writing. To them, there is so much to master on the technical side of writing. Students indicated that they found peer editing 'challenging,' 'interesting', and 'useful.' They also stated that peer editing:

- Helps (me)see(my) own flaws in writing.
- Tells (me) that (I) have so much to improve in my own writing.
- Corrects my grammar, tenses, sentence structures, punctuation, etc.
- Gives me suggestions on how to make my essay more interesting to the readers.
- Helps (me) to use of words properly if (I) am to convey my feelings and thoughts.
- Helps (me) see that, in order to catch the interest of the reader, striking statements or figurative languages are useful.
- Helps me see my own life journey.

Personal and social dimension

Worthy to note is the line uttered by a student when asked to describe the whole peer editing activity. She said: *"It makes me feel like a teacher."* The statement implies a boost in the student's sense of self-esteem, confidence and responsibility. The activity provided her an opportunity to be empowered as she assumed the role of a teacher. Others were in the same position also as evident in their comments, such as: *"Make your commas distinguishable.", "You could add sentences or phrases that could catch the reader's attention."* A sense of authority can be observed.

Students showed openness and humility in accepting criticisms. They said: *"I learn how to accept criticisms, and taking them to heart. As I learn to correct others, I also see myself in their shoes."* Still another student learned to be honest in pointing out the mistakes by others.

The social interaction between students provided an avenue for affirmation of ideas as well as empathy and a sense of respect to their classmates. A student wrote: *"I need to stop focusing on the bad things and should start acknowledging the good things."* The editor affirms this view by responding: *"Yes, train your mind to see the good in every situation and start acknowledging it."*

The comments seem insignificant. However, students did not only concern themselves of the technical aspect of editing but also on how they interact with their classmates. Peer editing has functions other than quality checking. It functions in linking and developing social interactions. To further argue the social dimension of peer editing, interview results showed its collaborative aspect. Students were able to discuss their work with each other. Students experienced the sense of responsibility, communication, and empathy which are elements of social collaboration. Comments like "*I suggest that you use....," I admire your idea; however...," "I respect your answer but...," "It would be nice if...,"* showed an attempt by the students to be respectful and polite in making criticism and suggestions. Students became conscious enough of their responsibility towards others. One student said: *"I have to be careful in commenting so as not to offend the feeling of my classmate."* Another student stated: "*I learned to be patient with my classmate."*

Accordingly, they expressed that writing was not easy. Conceptualizing what to write, organizing relevant ideas and information, constructing correct sentences, using proper words and punctuations are just one side of writing process. Creativity, personal touch, emotions, and not dictating the mind of the writer are to be considered as well. In the study of Calimbao et al. (2017) they cited Diab (2010) saying that there is eventually cognitive development in students during their interactions through peer editing.

Finally, despite challenges that may arise during peer editing sessions which may make the task time-consuming and seemingly unrewarding, peer editing has positively affected the technical aspect of the students' papers. This should motivate students to work together more in order to improve their quality of writing.

Implications

Based on the results and insights from the experiences of the students during the peer editing activity implications are drawn. Peer editing can be useful not only for Grade 9 but to other Grade levels. It can be used not only in English subjects but in other subjects as well. Elementary students can also benefit from this activity since peer editing activity doesn't have standard system. On the other hand, the findings imply that peer editing, when well-planned and organized, can be effective to address the problem which teachers with huge writing classes cannot possibly accomplish.

Conclusions

Based on the responses of the participants, peer editing as an intervention strategy to improve the writing quality and the social skills of Grade 9 STE students of DiCNHS was successful. The intervention was able to help students become aware of their writing deficiencies through the editors' suggestions and error identification. and to improve their social skills. Therefore, students learned while they taught. The next cycle of action starts as the scope of peer editing expands its application to wider groups of high school Students.

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Bioethics education beyond the economics of biodiversity: The Dasgupta Review – Time for ecoACE?

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Abstract

2010 was the United Nations International Year of Biodiversity, which was followed by the Decade on Biodiversity that ended in 2020. However, the decline in biodiversity continues unabated at genetic, species, taxa and ecosystem levels. In February 2021, *The Economics of Biodiversity: The Dasgupta Review* was published by the UK Treasury. Like the WWF's report from more than a decade ago, it urges moving beyond GDP and valuing and managing natural capital as one would for any other portfolio. Further recommendations include restructuring food production and consumption patterns, and institutional changes in education and finance systems. The Dasgupta Review says many of the right things, but will it be instrumental in affecting the required change? The Dasgupta Review ends with a call for ecological and environmental education within all stages of education. This paper recommends that 'ecology' education be imbibed with the principles of bioethics and makes some initial suggestions of what this could include at different levels of education.

Introduction

The WWF's *Living Planet Report 2010: Biodiversity, biocapacity and development* listed several considerations for achieving a green economy. These included using measures such as the Human Development Index (HDI) or ecological footprint assessment rather than Gross Domestic Product (GDP) alone, investing in natural capital by protecting wild areas and the diversity within them, enhancing biocapacity, valuing ecosystem services and the equitable sharing of natural resources, and reassessing how we make provisions for food and energy. It identified failures in governance and markets as reasons why the global decline in biodiversity had become so apparent.

2010 was the United Nations International Year of Biodiversity, which was followed by the Decade on Biodiversity that ended in 2020. The *Economics of Ecosystems & Biodiversity* (TEEB 2010) report focused on the monetary consequences of biodiversity loss, putting a price on nature and ecosystem services; these concepts have influenced economic policies. However, the decline in biodiversity continues unabated at genetic, species, taxa and even ecosystem levels. The Living Planet Index for

2020 shows in average a 68% decrease in vertebrate species that were monitored from 1970 until 2016. The *Living Planet Report 2020* predicts further declines and greater economic costs if we carry on with a business as usual approach. It advocates further conservation efforts, sustainable production and consumption as well as adopting more nature based solutions. Mangroves, for example, although not as rich in biodiversity as some tropical hotspots, are habitats for many endemic species and provide flood security for some human societies, aand are sources of food and other resources for generations to come, if sustainably is cared for. So what needs to be done to stem the loss of biodiversity from nature?

Dasgupta Review

In February 2021, *The Economics of Biodiversity: The Dasgupta Review* was published by the UK Treasury with an introduction by Sir David Attenborough and acclaimed by the Prince of Wales. This is in good time, ahead of both the UN Biodiversity Conference (COP 15) and the UN Climate Change Conference (COP26) to be hosted by the UK. It has been hailed in the media as being a landmark publication. The Dasgupta Review, like the WWF's report from more than a decade ago urges moving beyond GDP to valuing and managing natural capital as one would for any other portfolio. Indeed Dasgupta had previously noted that the HDI that does incorporate education and health metrics still does not include natural capital and ecosystem benefits when accounting for human welfare (Dasgupta, 2008). Further recommendations include restructuring food production and consumption patterns, and institutional changes in education and finance systems. Indeed The Dasgupta Review says many of the right things, but will it be instrumental in affecting the required change? It does introduce some new terminology that helps to frame nature in economic terms, such as defining the mismatch between nature's capacity to supply and our demands on her resources as the 'Impact Inequality'. It lays the blame of this inequality largely upon governments who subsidize unsustainable activities, practices and systems. It emphasizes that we are within and a part of, rather being apart from, nature and therefore we can learn from studying ecosystem processes and limits on human economy and sustainable development. It recognizes that she provides us with more than just basic physical needs but also psychological, recreational and spiritual ones; and acknowledges that nature may well have more than purely instrumental worth. *"...like education and health, nature is more than a mere economic good. Nature nurtures and nourishes us, so we will think of assets as durable entities that not only have use value, but may also have intrinsic worth." (*Dasgupta, 2021)

This re-valuation of nature means that there are inextricable links with so many aspects of life and society. Gandhi connected the environment with polity, economy, health and development, concludes Moolakkattu (2010). It was almost a hundred years ago that Gandhi wrote: *"A time is coming when those, who are in the mad rush today of multiplying their wants, vainly thinking that they add to the real substance, real knowledge of the world, will retrace their steps and say: 'What have we done?'"* [1]

In line with internationally recognized reports that were reviewed by Dasgupta's team, such as IPBES (2019), Dasgupta urges for immediate action in economic terms, as the costs of unharnessed loss in biodiversity are unspeakable. This echoes planetary health proponents such as ten Have (2019), Myers and Frumkin (2020) and Cole (2018), Halonen *et al* (2021); an imperative that is welcomed by many as exemplified in this quote by the 15 year-old British conservationist Indy Kiemel Greene: *"As the British naturalist, Charles Darwin, once said, 'A man who dares to waste one hour of time has not discovered the value of life.' Time is against us. Life in all its forms is so precious. Without biodiversity we have nothing. Financial sectors worldwide have to take a lead from this vital report and invest in natural wealth, which ultimately will determine our own health."* (Greene, 2021)

Will the Dasgupta Review be instrumental in affecting change?

The Dasgupta Review has been compared to the 2006 Stern Review on the *Economics of Climate Change,* which is often cited as being highly influential. That review was not without critics, being accused of exaggerations and selective reporting that could amount to scaremongering, see Tol and Yohe (2006) for example. The Stern Review did, nonetheless, inspire a huge amount of subsequent economic research and has been quoted in many policy documents since that time. It called for new technology and interdisciplinary collaborations, both of which have been instrumental in seeing an exponential rise in construction of renewable energy systems around the world. Indeed changes in UK law such as the Environment Bill (2020) and policies like the phasing out of petrol vehicles as announced by the government in November 2020[2] could claim to be originally inspired by Stern's report.

Likewise, Dasgupta calls for prompt action based on discount modeling, as protecting nature now is cheaper than the costs of restoration at a later date. Lilley (2016) argued that the technological changes resulting from increased support for renewable and clean energy were most likely independent of the Stern Review. The hot air debate over the influence of such work epitomizes the drag on transformative change due to political processes while global warming continues with record temperatures

[1] A quote of Gandhi taken from Bombay Sarvodaya Mandal / Gandhi Book Centre [Accessed online 9-3-21.]

[2] In mid November 2020 a news story spread through the media that the UK government took a step towards net-zero with end of sale of new petrol and diesel cars planned to end by 2030. https://www.gov.uk/government/news/government-takes-historic-step-towards-net-zero-with-end-of-sale-of-new-petrol-and-diesel-cars-by-2030

being broken and increasingly common extreme weather events occurring year on year. A BBC report from early February 2021 optimizes this: *"The Public Accounts Committee pointed out that ministers had first pledged a decade ago to improve the natural environment within a generation. But it complained of serious delays in tackling "critical" issues like air pollution, water quality and wildlife loss. The committee - made up of MPs - said the 25-Year Environment Plan, published in 2018, lacked a coherent set of long-term objectives or interim targets."* (Harrabin 2021, *BBC News*)

Optimistically, The Dasgupta Review, goes further than Stern as it calls for more than just technological solutions. It may be possible to tweak climatic conditions using technologies or we may be able to use new technologies to adapt, but once a species is extinct it is irretrievably lost. Such losses can lead to ecosystems that are degraded beyond repair, with potentially disastrous consequences for economies and human wellbeing. The review states the need to radically rethink our economic systems; unity between economists and environmentalists can be achieved if the conservation of nature is seen to benefit our wealth, health, and wellbeing as well as preserving nature for its own sake.

One chapter of the report explores intergenerational wellbeing starting from a utilitarian perspective. It stresses that change is required at not only governmental and institutional levels but within society at large in communities and that every individual plays a part. Dasgupta advocates 'ecology' education for all and explicitly for women's access to family planning education to help tackle the impact of the ever growing human population. These are not new approaches, as Waller (2019) outlined when calling for more discussion of population ethics to prevent a catastrophic age, but such issues are not regularly raised in the politics of governance and policy making. The Dasgupta Review ends with a call for ecological and environmental education within all stages of education from the youngest to making it a compulsory component of all university courses.:

"The three pervasive features of nature – mobility, silence, and invisibility – mean that the consequences of actions which desecrate nature are often untraceable to those who are responsible. Neither the rule of law nor the dictates of social norms are sufficient to make us account for nature in our daily practices. Institutional rules, no matter how well designed, would be insufficient for eliminating environmental externalities. We will have to rely also on self-enforcement, that is, be our own judge and jury. And that cannot happen unless we create an environment in which, from an early age, we are able to connect with nature."

"The development and design of environmental education programs can be directed to overcome the problems. In their wide-ranging survey documenting direct impacts of environmental education, Ardoin, Bowers, and Gaillard (2020) have suggested that focusing on local issues or locally relevant dimensions of broader issues, such as collaborating with scientists, resource managers and community organizations, is of enormous help. Our emphasis in the Review on the role of communities and civil societies in the economics of biodiversity is consonant with that line of thinking." (Dasgupta, 2021, p. 496).

One way to engage communities more is to promote citizen science projects, as extolled by the British Ecological Society (BES): *"Ecological projects involving citizen scientists have rapidly increased in number and there is a general consensus that they can produce high-quality data that allow novel ecological questions to be addressed."* (Hoggart, 2021)

A current example is the study of slime moulds and even the discovery of two new species by Teresa Van Der Heul in Australia, as reported by Motion (2021). The BES has recently launched a citizen science hub and special feature journals to support this venture. Is there scope for a similar platform of citizen bioethics projects to reinforce transformative change in attitudes towards and the valuation of nature? Engaging people with nature will hopefully make them more aware of being economical, being more self-reliant, and less avaricious. Thereby, treating the ultimate cause of our environmental crises; human greed, especially greed as seen in most westernized societies. Gandhi is often quoted as saying: *"There is enough in the world for everyone's need but not enough for anybody's greed."* (Gandhi quoted by Kumar, 2013).

The point is that what is required is for us to learn to be less consumeristic, but grateful and satisfied with a "less is more" attitude. As Moolakkattu (2010) writes: *"From a Gandhian perspective, the present environmental mess, ranging from deforestation, soil and biodiversity loss, to pollution and climate change is not a disease but only a symptom. A good doctor treats the disease and not the symptom."*

ecoACE for the perpetuation of life

So what should this 'ecology' education, proposed by Dasgupta, include? If it has to encourage a more conscious appreciation of and greater value placed on nature, then surely it should be more than the science of ecology or developing the skills of a naturalist, although both of these are vital parts. As the report says: *"Research from the literature on outdoor education and experiential learning also points to the positive effect Nature-immersion experiences have on the sense of autonomy and other measures of psychological well-being (self-esteem, self-regulation, social competency) as well as objective measures such as vitality. In a consensus statement, Bratman et al. (2019) include on their list of benefits of nature experiences positive social cohesion, the ability to carry out life tasks, reductions in mental distress, improvements in cognitive functions, memory, attention, creativity and children's performance at school. The authors also note that in addition to improvements in psychological well-being, Nature also helps to reduce the risks of poor mental health and ameliorate the burdens of existing illness."* (Dasgupta, 2021, p.297).

This is where broad bioethics must be an essential ingredient; without full appreciation of what we are a part of, we are unlikely to know its true value. There are several bioethical principles that should be imbibed within this 'ecology' education from the very start. These principles include justice, protection from vulnerability, global stewardship and equitable sharing of goods and benefits as identified by ten Have (2019). Fostering a love of life in all its forms is the ultimate foundation of bioethics as proposed by Macer (1998). Even with young children for example, who have increasing access to new technology apps, the joy of identifying and filming many 'mini-beasts' can be a stimulating activity that leads to a lifelong passion for nature, in a similar way to citizen scientists Indy Kiemel Greene and Teresa Van Der Heul mentioned above. "*The conclusion we should draw from this is unmistakable: if we care about our common future and the common future of our descendants, we should all in part be naturalists.*" (Dasgupta, 2021, p. 6).

Behavioral economics has moved on from being purely based on rational choice theory to recognizing that emotions play a significant part in decision making (Balconi and Terenzi, 2012) Therefore, it is prudent to stimulate an emotional connection with all living entities as well as developing scientific understanding of ecological principles and processes.

Classical ecology education would be incomplete without addressing concepts of carrying capacity. Likewise, Dasgupta's proposed 'ecology' education should be bold regarding the need for, benefits of and connections with family planning policies, thereby impressing from the earliest age that it is the burgeoning human population that has put the global ecosystems under such strain. The inclusion of family planning in middle years is essential, and many would advocate that it could justifiably start earlier. The key is that this education is more than planning to exercise rights but also for people to become empowered to exercise their responsibilities as well. Writers such as Ehrlich (2013) argue that family planning is the most important component of 'ecology' education.

Formal philosophy education, including ethics, has been shown to academically benefit both primary and secondary students (Gorard *et al*, 2015 and Waller *et al*, 2018 respectively). To understand why GDP is found wanting and why HDI or ecological footprint assessments, requires an exploration into the meaning of happiness and fulfillment, which are essentially philosophical inquiries. Therefore, the inclusion of classical ethical frameworks as part of the middle years of education is relevant. Continually raising awareness of the benefits of and exercising virtues such as compassion, kindness, resilience, prudence and temperance towards each other and nature that we are immersed in could be the antidote to the destructive vices of consumerism and hedonism that have gripped modern societies.

There are many principles of this 'ecology' education that are common with planetary health concepts. Indeed, the Planetary Health Alliance offers freely available suggestions for several university level courses on their website. Some courses are available free from universities such as the online course offered by TelessaúdeRS-UFRG. There are various classifications of educational ideologies that distinguish different purposes, forms of knowledge, learning theories, curriculum content and desirable student outcomes amongst other factors (Fien, 1993; Bartlett *et al,* 2001; Schiro, 2013). The details vary, but these are essentially traditional academic, social behaviorist, humanistic learner centered, and social reconstructionist, according to Schiro (2013). This may be a little simplistic, but it can be argued that for many countries the (hidden) curriculum is largely focused on educating the young about the ideals of consumerism and letting them become efficient components in the engines of production. The ideological differences of the purpose of pedagogy and curriculum content of education means that certain ideologies such as social reconstructionist are likely to embrace a wider interpretation of ecological education. Fien (1993) identifies that a socially critical ideology could assist in overcoming inequalities and empowering students to become actively engaged in social, political, economic and environmental issues and claims that this ideology places stress upon social, political and moral conflict resolution. Naturally, this may not be readily welcomed by authorities who have control over the education system. An ecologically Active Citizenship Education (ecoACE) curriculum would place concern for nature at the core, which may in many countries be more congruent with the visions of the governing parties and less contentious than social reconstructionism. The tables in Figure 1 below provide a partial comparison of ecoACE with socially critical or reconstructionist ideology. In ecoACE the ultimate desired outcome is that students fully realize their responsibilities towards one another in society and that that society id fully dependent of nature herself.

Socially ~~critical~~ reconstructionist ideology

a combination of Fien (1993) and Schiro (2013)

Curriculum features		
Aim of subject knowledge and content	Purpose for knowledge	Interpret and reconstruct society
	Nature of knowledge	Intelligence and moral development
	Source of knowledge	Individual's interpretation of society's past, present and future
Social role of the school	School and society reflect one another – help to resolve social conflicts and inequalities	Prepare students to actively engage in social, economic, political and environmental issues
Desired student outcome	**Critical, constructive and self-actualized co-participant in society**	**To pursue the true and the good transforming and transformed by society – not purely individualistic**

ecoACE ideology

Curriculum features		
Aim of subject knowledge and content	Purpose for knowledge	To ensure sustainable living for both humans & nature
	Nature of knowledge	Multiple intelligence to include moral development
	Source of knowledge	Social science and natural science data past, present and future
Social role of the school	School and society both help to resolve social conflicts and inequalities that harm the environment	Sustain students to live their lives fully active in socio-political, economic & ecological responsibilities
Desired student outcome	**Critical, constructive, self-actualized co-participant in communal society and devoted steward of nature**	**To pursue the true and the good transforming and transformed by society within bounds of nature**

Figure 1: Comparison of some curriculum features and desired outcomes of Ecological Active Citizenship Education (ecoACE) with social reconstructionist ideology.

UNESCO (2018) produced a template for teachers to deliver Global Citizenship Education (GCE) and the guidance has suggestions of how to embed GCE across the curriculum. GCE has three central attributes: education must be transformative, knowledge (cognitive domain) must touch the heart (socio-emotional domain) and turn into action to bring about positive change (behavioral domain). These attributes match what Dasgupta deems necessary, except for lacking an emphasis on 'ecology'. So now is the time to broaden GCE, and embrace principles from planetary health including the protection of biodiversity. The purpose of ecoACE would be to equip students with skills and knowledge, so that they are able to actively engage in environmental and social issues.

Learning principles from nature, that has enabled the existence of progressively complex bio or life systems for several billion years, should include thinking based on concepts such as:

Interdependence and a network of interconnections, not monocultures and monopolies.

Communication networks such as the extensive fungal hyphae that are vital in most terrestrial ecosystems.

Regulation, monitoring and feedback loops analogous to the neural and hormonal systems that sustain homeostatic conditions in vertebrates.

Recycling as achieved seamlessly and locally with the involvement of numerous specialized actors for different substances and environments.

Carrying capacities, the recognition of basic pyramidal nature of trophic levels and that this implies how humans, being higher than producer organisms, have a maximum population density.

Furthermore, inspiration can be drawn from nature in how organisms have evolved to take advantage of every opportunity filling any void niche. This has led to a wide biodiversity that generally provides nature with resilience to changes in otherwise adverse environmental conditions. The knowledge for ecoACE must be founded on scientifically acquired data in both natural and social sciences. Ultimately, this will ensure the health and wellbeing of all and all life in our ecosystems. To further develop and roll out a new ecoACE necessitates a commitment to education for all communities at a global level, as part of the medicine for a sick humanity that has "diseased" its own life support systems and habitat.

Summary

The Dasgupta Review reiterates findings of several global assessments of biodiversity adding economic perspectives that must be taken seriously and into full consideration in future policies. Dasgupta does not mince his words. He emphasizes that time is of essence to adopt a threefold approach of balancing the impact equation, changing how we measure economic success, and transforming institutions and systems such as education. Nonetheless he remains cautiously optimistic hoping that: *"...our innate capacity can be redeployed to bring about transformative change, perhaps even in just as short a time. Although time is not on our side, it is not too late for us, both individually and collectively, to make the conscious decision to change paths. Our descendants deserve nothing less."* (Dasgupta, 2021, p. 486).

He passes the baton to the rest of us to act promptly. This will involve rethinking our ideology for education putting our interest in the wellbeing of all life and living systems at the centre, thereby promoting engagement in more purposeful citizen science and bioethics projects. Furthermore, we in the bioethics community can take this as an invitation to contribute towards refocusing and invigorating GCE to develop an ecoACE curriculum. By including the moral medicine of broad environmentally inclusive bioethics in education programs, we can stop the bleeding of biodiversity – the very life blood that sustains our biosphere – thereby healing ourselves and our planet.

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Design suggestions for undergraduate and postgraduate planetary health courses are freely available at https://planetaryhealthalliance.org/build-your-course. This has several dimensions and principles in common with education to sustain a biodiverse world.

Water rights: Ethical issues and developmental impact

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Abstract

Ethical approaches and the right development framework are critical in water use and conservation. Water as a resource is not unlimited. Darryl Macer et al. (2011) point to the necessity of understanding the basics of water, uses of water, water resource availability, and conflict. Water is a very precious resource that in the future can be a source of tension due to unabated urbanization. In the Kaliwa Dam Project in the Philippines, the Dumagat Tribe is at the heart of the issue. If the right policies are not in place, progress can have a severe impact on communities. Water has become a commodity because urbanization has resulted in massive water use in big cities that do not have their own source. This means that urban centers need to get their water from somewhere else resulting in social discord and disputes pertaining to water rights. In addressing the issue of water supply and use, this paper examines the role of policy, efficient infrastructure, and good governance.

Introduction

The complexity of social problems includes harsh economic repercussions, socio-political consequences, and deep ethical issues that need to be analyzed. The use of limited water resources is one of them. Dams provide hydro-electric power and irrigate farmlands. But big dams have been blamed for the displacement of indigenous communities due to flooding in low-lying areas. The Three Gorges Dam in China, for instance, caused the displacement of many people (Padovani, 2007). Finding the balance is difficult when it comes to protecting the environment and pursuing national progress. The ethical approach is to achieve both ecological sustainability and economic development. This requires a type of growth that does not harm the environment.

According to Rola et al. (2018) "global projection states that, for 2025, only 10% of renewable water shall have been withdrawn." The right development framework must be chosen when for water use and conservation. While the planet is about two-thirds water, less than 1% of that water is drinkable. According to the World Bank (2021), 2.2 billion people do not have access to safe drinking water. To develop the water infrastructure of an urban center requires billions in investment. In the Philippines, two companies, *Maynilad* and *Manila Water* have invested in repairing old distribution lines to solve water leaks. Privatization, however, does not come cheap on the part of consumers.

Urbanization means concrete roads, towering buildings, and more condominiums. Massive urban projects, either by governments or the private sector, require huge improvements in the supply of water. For this reason, the government has to look for sustainable water resources. When it comes to supplying water to Metro Manila, the construction of the Kaliwa Dam was touted as the biggest project so far. It is a 12.2 billion-peso project funded by Official Development Assistance (ODA) from China through the China Export-Import Bank as reported by the Metropolitan Waterworks and Sewerage System, a government regulatory agency (MWSS, 2021). However, this project is contentious. The reason is that the ethnic Dumagat Tribe in Quezon Province has not given its consent due to the fact that they will be displaced by the dam (*Manila Standard*, 26 March 2021).

Indigenous Peoples are under constant threat due to industrial expansion in the cities. Corporate interests undermine the way of life of the marginalized sector. Rola et al. (2018, p. 7) write that "rapid increase in population and creeping urbanization gave rise to conflicting demands for water for domestic, agricultural, and industrial purposes." The ethics of water use and conservation need to identify various points of contention and determine the points of convergence. Development involves questions about its meaning. Des Gasper (2004, p.14) asks: "is development material advance or something else or a combination of material advance and something else?" The question of development, in this regard, is about finding the right model that goes beyond the economic.

The above situation gives rise to discussions on water rights. What is the right to water? The access to safe drinking water was recognized by the United Nations in 2010. The global body sees the importance of water as a fundamental resource that is necessary for the realization of other human rights. According to the UN Water (2021), "lack of access to safe, sufficient and affordable water, sanitation and hygiene facilities has a devastating effect on the health, dignity and prosperity of billions of people." Rights correspond to particular obligations (Pogge, 2007). In this respect, there is a need to draw what these obligations are on the part of the state and the corporate sector, if societies are to sustain equitable growth and progress.

The value of water

An important dimension when it comes to the experience of ethnic groups is that for them the land is the source of the life of the community. An essential element when it comes to the ability of land to enable people to live is water. According to Karl Gaspar (2021), for indigenous peoples land is sacred. Even the development of Western Civilization reveals that the first permanent settlers dwelt in an oasis. The first settlements lived in the Tigris and Euphrates Rivers. The reason is simple. Without water, people cannot survive. Water is the source of life and without it, living is impossible. The emergence of human civilization, in this case, is rooted in the value of water not as a material resource but as something that is of transcendental value.

The first human beings devoted their time hunting. It was the case since no social system was established yet. The idea is that the abundance in nature meant that there was no need to produce nor compete for resources. As the earliest people began to settle near riverbanks, farming started. This meant growing something for consumption. This requires the presence of a steady supply of water. In this case, agriculture emerged as an economic activity since water was present as a resource. Later on, waterways and rivers were used as important trade routes. This implies that water serves not only an economic purpose, but also a political one as countries compete with each other in a globalized environment.

The progress in the science of economics, however, has resulted in the commodification of our natural resources. In this case, nature becomes some form of raw material. The consumer market desires the making of products on the basis of profit and earnings. Just like the early settlers, water is crucial in order to sustain communities. But water resources are exploited by corporate interests. Development is a question of prioritization. In an industrial society, water is used to satisfy the appetite of big business instead of securing the basic need of the people. The right way forward is a policy direction that is motivated by the concern for the interest of the public. Rola et al. explain (2018, p.5): *"This situation is brought about, on one hand, by increased water demand arising from economic and population growth, and, on the other, by decreased water supply associated with degradation of forest watersheds in the country. Second, the data on aggregate availability are illusory in that they indicate average supply per capita per year, without regard to the distribution of available supply."*

When it comes to water resources, three factors are critical: sound water policy, efficient infrastructure, and good governance. Policy-wise, the state must look into water sources, use and conservation to improve people's quality of life. Golf courses, the construction boom, condominiums, and big malls, among others, consume so much water. But while this is the case, policy making lacks the foresight in terms of planning for the future. While buildings are being erected in big cities, there is no guarantee as to where cities might get their water supply. An example is Cebu City. There is no water shortage right now in this emerging center in the Philippine South, but this may not be the case in the next 50 years. Urbanization brings many problems. But there is no greater problem than a water crisis. Policy must look into the question of priority and values when it comes to the type of development introduced to the people.

Corporate investments are needed to improve water distribution facilities. But the point is that when it comes to rights, the good of the people must be the priority, not the corporations or any private interest. The right of individuals to clean water cannot be limited to the economic aspect. Economic rights are rooted in the material wellbeing of persons. Access to clean water is an undeniable part of it. When it comes to a natural resource such as water, reducing it to an economic right diminishes its essential purpose which is sustaining life. First World societies use innovative ideas to improve water conservation. Good and efficient infrastructure are needed, but considering holistic development is necessary to integrate the issue of water use with other things.

Good governance means that policy makers recognize the fact that water concerns national patrimony. People are entitled to access to well-managed water systems. What must be noted is that although concessionaires invest big money in the infrastructure and are allowed by law to recoup their investments and profit from the same, there must be a limit to profit making. Indeed, corporate interests cannot commodify water resources because it is violative of the national patrimony. The constitutional right or entitlement to water can only be based on the pursuit and promotion of the public good. Selling water at a rate that is unaffordable to the poorest people is not acceptable. The government, in this sense, has an obligation to protect the interest of the least advantaged, since water is a public good.

Resiliency and the challenge of sustainable development

Sustainable development means that progress is balanced with the care for the natural environment. If growth is not sustainable, people cannot make meaningful choices. A life that is well-lived is anchored in the basic capacities of the person. The components of a good life are education, healthcare, and the protection of one's civil rights. The government must ensure the availability of drinkable water for people as without it, life becomes difficult. In the future, the growth of local communities and other sectors will largely depend on water supply. Pulhin et al. (2018, p.21) say: "future projections pose a major challenge in terms of making water available to meet the increasing demands of the different sectors."

The concept of sustainability is an important factor in the ethics of development. The United Nations has recognized that water is at the core of sustainable development (UN Water, 2021). Sustainability is founded in the concept of reconciling our present demands with the needs of the future. This means caring for the generation in the decades to come. Progress is important but it should not be at the expense of future generations. Human well-being is by and large about the availability of resources in the future. Droughts, for instance, cause starvation and famines. Without crops to harvest, indigenous peoples are forced to go into cities to beg. Such a situation is the result of years of neglect and exclusion. As a result, women and children from indigenous tribes experience humiliation.

But while the problems persist, the Philippine society has overcome many calamities, the most prominent of which include the eruption of Mt. Pinatubo and Typhoon Yolanda (Haiyan). David Sauri (2018, p.147) writes that "resilience is replacing sustainability as the buzzword for developing better solutions to our current environmental issues." Resiliency is a multifaceted concept. On the part of Filipinos, the core values of the family have something to do with it. The tight culture of the country is rooted in a historical context. As a colony of Spain, people have been subjected to harsh rules and conditions. The desire for liberation meant that nationalism needed a type of cohesion that empowered people to survive despite all odds. This cultural context is relevant in understanding the issues confronting Philippine society in the post-colonial period.

Sauri (2018, p.147) explains that the "the concept of resilience needs to expand its horizons and move from the relatively well known and safe world of technology and management to the much more difficult and uncertain social and political arenas." The Philippine society is complicated by its elitist system. The people in the margins of society, in this respect, have to rely on communal values. The concept of "*bayanihan*" (the word "Bayani" means hero; it is rooted in the word "Bayan" which means nation) implies putting others above oneself. This means that people can draw from their life experiences the value and meaning of social solidarity. People know that the community is out there, able and willing to give support in times of need. Mansueto (2020, p.88) says that "in terms of their socio-political existence, the Filipino ethnic groups are communal."

The approach to resilience, according to Sauri (2018, p.147), is "the classical paradigm of risk reduction by diversifying sources of supply but including in the process a strong compromising in diversifying decision making as well and making citizens active in their water futures." A holistic strategy may be lacking when it comes to water conservation, utilization, and development in the Philippines (Rola et al., 2018). Some leaders only consider the economic impact of development projects before making a decision. For this reason, projects often result in unintended consequences to the environment. The problem, it can be argued, comes from a top-down approach to decision making. The input of the community needs to be considered seriously if meaningful change is desired.

Water rights and good governance

Institutional problems reveal the weakness of state-centric approaches. Conflicts that have an effect on water source involve local culture and its role in development. However, this study intends to advance an integrated and holistic approach that will consider various areas crucial in the use and conservation of water resources. Policy makers must understand the meaning and value of resiliency and its relation to the idea of sustainability. These are not just NGO (Non-Government Organization) terms. Rather, they have implications on policy and therefore, the lives of people. The issues concerning water supply and use involve the problem of governance. According to Rola et al. (2018, p.3): *"The impending water shortage is an outcome of weak governance. This weakness is further revealed through destruction of tropical rainforests and catchment areas, water pollution, excessive extraction of groundwater, general water misuse, and poor resource management. It must be known that the Philippines has a multitude of laws and policies as governance instruments, but structural constraints in water policy in the Philippines persist."*

The role of the state is the promotion and protection of the public good. Thus, it is the obligation of the state to secure the good of the people when it comes to their basic necessities. Water is an essential component of a life well-lived. Without water, the ability of people to improve their living standards is constrained. In this regard, the state should ensure that water is not commodified. Unlike other goods, water is a natural resource that belongs to the state and thus, the ultimate entitlement to it belongs to the people. While we need the investments to develop water sources and make the distribution efficient, a line must be drawn when it comes to making a profit out of business.

There is an apparent lack of transparency when it comes to water management and governance. Decisions made on operations have an impact on the utility of water (De Asis et al., 2009). The problem is that the public does not have the opportunity to express themselves as stakeholders. Since water distribution belongs to the category of being a public utility, the nature of the undertaking should be to advance the interests of consumers. The state has the role to regulate the water business since it is the people who must ultimately benefit from every activity concerning water as a natural resource. De Asis et al. (2009) propose a public complaint mechanism. Without such an initiative, they argue that the public will be severely disadvantaged by private interests.

The search for water sources might lead to a conflict of values when it comes to the right to water. On one hand, the Kaliwa Dam issue is about providing more than 11 million people a sustainable source of water supply in the next 50 years. This is important not only for the future of the country but for the survival of Metro Manila as well. On the other hand, there is a need to recognize the cultural heritage of indigenous peoples who have been at the receiving end of extractive economic activities brought about by the unimpeded growth of urban centers. The main consideration must be the holistic well-being of all.

The solution lies in the right policy and an effective enforcement of measures that will protect the interests of both parties. The government must provide enough safety nets. However, while this is the practical way forward, the right of the Dumagat Tribe to their unique culture and way of life must be recognized by the government. It is not enough that only economic provisions are given. There must be opportunities for people to live well if they are to be relocated somewhere. This will require building schools and health facilities and creating open spaces for the community and livelihood opportunities.

To achieve the above, good governance is needed. A mechanism against corruption must be enforced. A purely utilitarian approach that considers the benefits and outcomes may not be enough. The integrity of the government in pursuing the interest of all parties is crucial in maintaining the delicate compromise between progress and ecological balance. Progress is necessary for the population to attain a higher standard of living. But it should never be at the expense of the marginalized. The support for the future of marginal peoples can only come from a government that respects the identity of the latter.

Conclusion

The access to clean and potable water is a universal right that must be respected by the government and the private sector. For this reason, the government has the duty to protect the interests of the public when it comes to water. It must not allow the exploitation and commodification of water by corporate interests since this natural resource is a basic property of the state's national patrimony. The ultimate role of the state is to promote and protect the interest of the public. Such is a requirement of social justice.

Sustainability is crucial to achieve holistic progress. But this should not mean that a resilient spirit on the part of the people will no longer matter. It matters because such values come from the life experiences of people that allow them to develop skills to survive difficulties and to overcome life's obstacles. As a matter of policy, the idea of sustainability is about having the foresight to strategically plan for the future and not just be contented with the benefits derived from the present. In this sense, that delicate balance between progress and environmental preservation must be maintained.

When it comes to conflict of rights and values, the appropriate approach is not just to rely on one ethical principle. For instance, integrity is crucial when it comes to issues and the tension involving indigenous communities and the needs of mainstream society. While the good of the majority is preferred from a utilitarian end, the concept of social justice demands that indigenous communities must be respected and their right to live their unique way of life be recognized.

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Dealing with the decline of tourism livelihood: The tales of Tricab (tourist cab) drivers amidst COVID-19 pandemic

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Abstract

Tourism creates jobs and helps the economy. A sub-sector of tourism is the transportation industry. In Kapatagan, Digos City, Philippines, which is technically part of the Mt. Apo National Park, tourists love to visit because of several tourist spots, including, of course, the majestic Mt. Apo, the highest mountain in the Philippines. However, tourism was badly hit because of the COVID-19 pandemic. This qualitative study aimed to describe the tales of Tricab (Tourism Cab) drivers in Kapatagan amidst the COVID-19 pandemic. We employed a phenomenological qualitative design. Ten (10) Tricab drivers willingly participated in the Key Informant Interview (KII). Results have shown the following themes regarding their struggles: dealing with government protocols, loss of income, and conflict with *colorum* (illegal) drivers. As to their coping strategies, they could find other sources of income, borrow from loan sharks, increase fare rates, and self-promote. They also shared their viewpoints. The themes that emerged were being flexible and offering optimum quality service. The COVID-19 pandemic has greatly affected the tourism industry, and this has trickled down to other sub-sectors, particularly in transportation. Despite the challenges, the Tricab drivers were able to find ways to deal with the declining livelihood opportunities and gained worthy insights.

Introduction

The COVID-19 epidemic is a disaster affecting hundreds of thousands of people. In the transportation industry, the COVID-19 pandemic presents a significant threat. People's usual movement, using different modes of transportation, has been severely threatened by this pandemic, reducing demand and revenue (Tirachini & Cats, 2020). Cities have grappled with containing people to minimize the spread of the virus and continue providing services to the community, like the transportation service. Because of the COVID-19 pandemic, for the next few months or longer (Rabbi, 2020), corporations would have to deal with a high degree of uncertainty and concern regarding their sales, profit, and cash flow.

Countries around the world have responded to the COVID-19 pandemic. In the Philippines, community quarantine was strictly implemented, which prevented people from moving. Domestic and international travels were cancelled. These lockdowns, although the term used is community quarantine, greatly affected the whole tourism industry. The COVID-19 pandemic poses a threat to people's businesses and livelihood in the tourism industry, particularly in the transportation sector.

The same can be said about people's livelihood in Kapatagan, Digos City, located in Southern Mindanao, Philippines. Kapatagan is located at the foot of Mt. Apo, the highest mountain in the Philippines, and is a popular tourist destination. One group who benefited from the tourism industry in Kapatagan were the tricab (tourist cab) drivers. In this paper, we present the lived experiences of tricab drivers amid the COVID-19 pandemic. The study's findings contribute to the discussion on how to support the public transportation industry amid a pandemic. Does it provide a sustainable or comparative advantage amid this current pandemic? Is it feasible? This study will assess future research directions focusing on how pandemics should be managed and the need to construct sustainable and human-scale cities in light of public transportation. The experiences of tricab drivers provide a picture of this phenomenon.

Transportation challenges during COVID-19 pandemic

The pandemic hampered human activities, particularly public transportation. The decline in passenger transport demand due to a combination of government lockdowns was an important consequence of this pandemic. Given the public transport networks' capacity and transport demand (passenger, traffic), it is challenging to enforce social distance criteria effectively (Mukherjee, 2020). Moreover, in general, drivers violate the one-car-length rule, so individuals frequently fail to maintain proper social distance (Smith, 2020). Hence, while some modes of transportation are permitted, there is a problem in following the protocols.

Globally, the COVID-19 has had many consequences for food security and food supply chains, such as labor and transport (Salik & Suleri, 2020). In the Philippines, with the intensified neighborhood quarantine, drivers face both health and livelihood uncertainty (Cabrera, 2020). With more people avoiding daily public transport due to the social distance, auto-rickshaw drivers in India lost income (Shyam & Thakkar, 2020). Indeed, those in the transportation services, especially the small ones, are suffering and are losing means of livelihood.

In the Philippines, aside from the imposition of community quarantine, public transportation was initially stopped. When the restrictions were slowly relaxed, drivers had to deal with the curfew. It means limiting the number of hours. It was problematic for those who were used to taking transportation in the evening, like the call center agents and people working until evening time. In Digos City, police officers and *barangay tanods* (village volunteers) roam around the city with sirens wailing loud to remind the people to stay inside. Naturally, there is no more public transportation.

Measures in the transpiration industry

Public transport is the lifeblood of the economy. Maintaining transportation services even during the pandemic is crucial. Both in the formal and informal transportation sector, fewer passengers continued to get drivers and operators (Maimunah, 2020). Murano et al. (2020) suggested some milder travel restrictions would be imposed, not total lockdown, to help the economy recover. One of the obvious means is wearing masks and social distancing (Dzisi & Dei, 2020). Experts recommend that people wear face masks in public (Greenhalgh et al., 2020). No one can commute without the mask while seats are arranged so that social distancing is ensured. Another measure is environmental cleaning and disinfection (Shen et al., 2020). It is an added expense, but it ensures the couches, seats, and handles go through the sanitization process.

Limiting people's movement, including travels, remains a potent strategy in containing the virus. For instance, in the Philippines, public transportation is slowly going back to normal, but only limited, like not all buses can run the streets. However, essential travels are permitted, such as the delivery of necessities and goods. The minimum health protocols must be maintained, and curfews are still in effect in some parts of the Philippines, including the area where this study is conducted. The tricab drivers are affected by the pandemic but continue to operate subject to government regulations and guidelines during the pandemic.

Research Methods

We used a phenomenological qualitative design. The study of people's experiences concerns phenomenology (Creswell, 2007; van Manen, 1997). To understand tricab "tourist cab" drivers' living experiences, we adopted the descriptive phenomenological approach. We cfocused on understanding the lived experiences of tricab "tourist cab" drivers. We looked into their struggles and coping mechanisms specifically. To make a careful explanation of the phenomena, we listened to their stories as we sought to be consistent with what Moustakas (1994), as cited by Creswell (2007), suggested. We focused on describing their experiences, not placing our interpretation. Our goal was to see how "tourist cab" drivers thrived during the pandemic.

Participants

Ten tricab "tourist cab" drivers who were driving under the Kapatagan, Digos Tricab Operator Drivers Association (KADE TODA), the only registered tricab association within Digos City, Southern Mindanao, were participants in the study. Whatever their age and gender, the selection of eligible participants was based on their workplace location and area of residence. We ensured that the informants had the criteria set: (a) The participants must be Filipino and resident of Digos City; (b) The participants must be tricab "tourist cab" drivers in Kapatagan, Digos City' and (c) All participants had at least three months to 5 years of experience as a tricab driver. We used purposive methods. The purposive sampling technique enabled us to get information from participants witnessing a specific phenomenon (Creswell, 2007). This sampling technique enabled us to identify the informants who had the phenomenon's experience and could provide reliable information (Creswell & Plano Clark, 2011).

Data collection

Using a Key Informant Interview (KII), driven by questions from the interview protocol, the data necessary for the analysis was taken from the informants. According to Kumar (1989), KII is typically selected because a limited number of participants are needed to provide information about the phenomenon. Interviews were conducted in September, 2020. This technique helps understand the depth of a person's real experiences.

We followed the data collection cycle, as identified by Creswell (2007). First, we got the recommendation from our colleagues and friends who know our targeted participants who met specific inclusion requirements. Second, before the beginning of the interview, we established rapport with them. We allowed them to speak in their native language. Third, through the key informant interview, we collected the data from their responses. Based on the primary purpose of the study, we asked them questions. The interview was in Cebuano, the informants' local dialect. The informants were asked three research questions: (1) What are the struggles they experienced in Southern Mindanao considering vehicle's new-entry public transportation amidst the COVID-19 pandemic? (2) What are their coping mechanisms? (3) What are their viewpoints?

We did audio recording and note-taking during our interview, allowing precise data to be collected. Fourth, we recorded and transcribed the interviews. Fifth, we securely stored data, and back-up copies of files. Sixth, after the interviews' conduct, we analyzed and interpreted using Colaizzi's (1978) method. The methodology is helpful in descriptive phenomenological research (Shosha, 2012).

Data analysis and interpretation

After conducting the interviews, data was systematically clustered and analyzed using the method used by Colaizzi (1978). We used the tables in the analyzes as suggested by Tudy and Gauran-Tudy (2020), a minor adjustment used by Anderson and Spencer (2002).

Trustworthiness and ethical considerations

Tricab drivers shared experiences were essential in this study. We ensured trustworthiness to ensure this study's quality and credibility. As Guba (1981) suggested, we strictly observed credibility, transferability, dependability, and confirmability to guarantee trustworthiness. In observing ethical standards, we received permission from the tricab "tourist cab" drivers to conduct the study. We told them that we would protect their rights and maintain confidentiality. By requesting them to sign the informed consent form, we secured their informed consent. We used aliases in the encoding of names to protect their privacy and to ensure confidentiality. Weis and Fine (2000) advise establishing a supportive and respectful relationship with the informants. Because of the informants' local dialect, we encouraged them to use it.

Results

The following results were presented based on the three research questions of the study. Results are presented in three clusters: (1) struggles, (2) coping mechanisms, and (3) viewpoints of tricab drivers in Southern Mindanao.

Struggles of tricab "tourist cab" drivers

After the interviews, we analyzed the data, and three themes emerged. These were dealing with government protocols, loss of income, and conflicts with colorum drivers.

Government protocols: The majority of the tricab "tourist cab" drivers said their struggles amidst the COVID-19 pandemic are due to government protocols. The Inter-Agency Task Force (IATF) guidelines, particularly the social distancing and lockdowns, affect the usual set-up of tricab drivers. Through the strict imposition, specifically the maximum of two passengers only, they are prevented from taking more passengers, which hampered their usual income. Moran, a tricab "tourist cab" driver for four years, shared his experience, saying: "*It is a little bit difficult because earlier, in a typical scenario, no limit of passengers as compared now. The government limits up to a maximum of two passengers. We need to abide by these rules; otherwise, the police, particularly at the Teril checkpoint, will arrest us if we ferry 3 or 4 persons. Unlike before, we cannot cater up to 4-5 passengers. (Moran, T1, P1, L5-8)*

Moreover, Elcan, a seven-years drier, shared his sentiments that the government does not allow people of certain age to go out, which added to the decrease of the number of passengers. "*The number of passengers has decreased because the government prohibited senior citizens and below 21years old to go in public places due to the stay at home policy." (Elcan, T2, P2, L26)*

Based on the shared experiences of tricab "tourist cab" drivers, the government's guidelines have a huge impact on their lives. It hampered their regular operation due to numerous restrictions and new regulations, but they have no choice but to follow.

Loss of income: The implementation of government protocols affected the daily operations of the tricab drivers. With fewer passengers needing transportation due to lockdowns and other mitigating measures, they are left with little to make money from. The participants agreed that being a tricab driver, compared to others using a single motorcycle, is more beneficial. But, the pandemic somewhat eradicated this advantage. Ventho, a driver for just four months, shared his experiences by saying*: "It was better earlier compared with now as the pandemic is still ongoing. However, tricab driving is much better than "habal-habal" since I have been a "habal-habal" driver. In tricab I can have an income with a minimum of P500 and a maximum of P1,000, but because of COVID, it decreased due to limites up to 2 passengers. It is not enough, especially if you have a family to feed." (Ventho, T7, P10, L4-6)*

Conflicts with colorum (illegal) drivers: Before tricabs were allowed as public transportation in Kapatagan, there were PUVs, and "habal-habal" (single motorcycle). Many of these modes of transportation are not registered. The tricbas are legitimate as the drivers and operators have permits to operate. However, their existence creates conflict with other drivers, especially the habal-habal. "*The "habal-habal" drivers got angry to us, tricab drivers, but our village captain in Kapatagan announced that we are authorized to ferry passengers. One of the aims is uniformity and legitimate public transportation for the people of Kapatagan amidst COVID-19." (Belon, T5, P7, L6-8)*

Moreover, during the pandemic, as people are in need of income and money, the tricab drivers appear to be subject to jealousy. "*The situation is chaotic because, during COVID-19, tricab was duly authorized as public transportation in Kapatagan. Most of the single motorcycle or "habal-habal" drivers reacted to the declaration. However, they have no choice because the authorization has been given to us. This dispute was raised because the daily net income of "habal-habal" drivers is decreasing." (Sixto, T6, P9, L7-10)*

Coping mechanism of tricab "tourist cab" drivers

We asked the informants how they coped with all the challenges they experienced. After analyzing all their responses, four emerging themes were identified. These were other sources of income, borrowing money from loan sharks, increase of fare rates, and self-promotion.

Other sources of income: Tricab drivers created strategies and coping mechanisms amid the pandemic and its impact on their livelihood. They shared that their income was not enough to sustain their daily lives from tricab driving only. The best way to survive was to find other sources of income. "*If the source of sustainability for my family and my unit's monthly payment is from tricab driving only, it can sustain somehow, however, if there will be other sources of income, much better. I have a vegetable farm, wherein I planted various goods, such as carrots,* *cabbage, and a small area for pickles in Kapatagan." (Moran, T1, P1, L20-22)*

Also, from being tricab drivers, others prefer to do multitasking to sustain their family and other needs. Other informants are engaged in some stuff, like what Belon shared: "*Aside from tricab driving, I do manual labor in any form. We do not have a farm, so I work in Kapatagan, like harvesting bananas. I wake up every 1:00 am to carry a bunch of bananas. By 5:00 am, it is the time to prepare for driving my tricab at exactly 6:00 am." (Belon, T5, P7, L38-40)*

Borrowing money from loan sharks: What tricab drivers are looking for was survival during the pandemic. Borrowing money either for capital, payment of interest, monthly bills, or maintenance payment was essential for them to survive. Our informants disclosed that they could not operate immediately due to the absence of money. By borrowing money, they could start up and roll their borrowed money until they could fully pay. Moran disclosed his lesson learned: "*I borrow money like the arawan (daily payment scheme) for my needs. But, to pay for it, I needed to wake up early in the morning to be the early bird in torno (schedule). There is no room to be lazy because you are also indebted, and pray to the Lord to give you grace." (Moran, T1, P1, L23-25)*

Increase of fare rates: The Tricab Association conducted a series of meetings and discussions to strategize how to deal with restricted passengers as per government's guidelines. They came up with the suggestion of fare adjustment, from 100 pesos at the regular rate to P150. The tricab drivers were happy about this little adjustment because they could only carry two passengers at a time.: "*It is okay for me since I can do a roundtrip and earn more because of the adjusted fare. During the COVID-19 pandemic, due to the limit with only two passengers, an additional 50 pesos is added compared to just 100 before." (Elcan, T2, P2, L34-36)*

Moreover, the fare increase was helpful for the drivers. However, they were worried about their passengers and their capacity to pay: "*It is okay right now, because even though there are only two people on board, our fare is adjusted. However, the increase adds more difficulties to the passengers. The fare is P150 as compared to P100 before. However, we are implementing this to recover lost income since the number of passengers is limited." (Dech, T3, P4, L23-26)*

Self-promotion: Furthermore, the participants recognized the importance of promoting themselves. They might not do promotions like commercial transportation companies, but they do have their own. One of these was establishing a good relationship with commuters and having a social media presence: "*Some tourists contacted me on my Facebook and chatted with me because I posted pictures of tourist spots in Kapatagan. For my passengers from Davao (another city) who want to visit Kapatagan, they would contact me. If there are more than two tourists, I will contact my colleagues. Say, for instance, there are 8 or 6 visitors. I would call my co-tricab drivers to bring two tricabs." (Belon, T5, P7, L23-26)*

Other drivers made a proper arrangement of the schedule or bookings. They promoted themselves to their neighbors, relatives, and friends if they needed a ride: "*I maintain good communication by contacting my booked passengers and arranging the schedule to wait for them. It is the only technique to cope-up since it is difficult to steal passengers. I also arranged schedules with my former teachers, cousins, and other relatives. I tell my neighbor in advance what time they will go to Digos proper and what time they will be back so that in the afternoon I can arrange my schedule. That is our way to cope-up with our daily quotas." (Belon, T5, P7, L29-36)*

Viewpoints of tricab "tourist cab" drivers

I asked the informants about their viewpoints as tricab "tourist cab" drivers. Based on their responses, the following themes emerged. These were being flexible and offering optimum quality of service.

Being flexible: The preferences of the passengers are always right, at any rate. The majority of tricab drivers shared that respect and patience are needed. When it comes to fare, although there was already an announced fare rate increase, they understood that they are not the only ones suffering because of the pandemic. They knew their passengers also suffered: "*I have respect and understanding for the passengers. For example, when a passenger would say he has only 100 pesos and asked if I would still carry him, I would gladly do that." (Pedro, T4, P6, L28-32)*

Aside from being flexible with fare rates, the tricab drivers shared that they should be considerate with other co-drivers. They suggested being mindful of their character towards their passengers.

Offering optimum quality of service: Tricab drivers disclosed that to provide an optimum quality of service, they should possess self-discipline. Most tricab drivers agreed that personality is important. They should give the best quality of service to each passenger for comfort and security of health and safety must be considered. One of the participants shared this statement: "*Before going to daily tricab driving, my first advice is to take a bath, brush your teeth, and change clothes and shoes. Furthermore, advise those stubborn drivers to learn respect in "torno," and those who smoke while driving. The essential thing is to have complete documents; otherwise, it will be another burden in your daily operation if apprehended." (Moran, T1, P1, L35-39)*

Additionally, tricab drivers shared that they provide the best service quality to any passenger. They should be responsible enough. They said each one must possess self-discipline and always be vigilant, especially during this pandemic. Health is wealth. Moreover, abiding by the rules and regulations to fight against this pandemic shows a responsible tricab driver: "*I render the best quality of driving for each passenger. I always seek the passengers' safety. I have self-discipline and consider health safety to avoid this deadly pandemic. As a tricab driver, always abide by the rules." (Sixto, T6, P8, L13-14.)*

Discussion

This study explored the difficulties, coping strategies, and viewpoints of the tricab "tourist cab" drivers in Southern Mindanao amidst the COVID-19 pandemic. Tricab drivers experienced various difficulties as to the crisis. It is shown that they dealt with each problem and struggled due to the current situation's demand. They revealed their viewpoints through their learnings, reflections, and advice to their colleagues and co-tricab drivers. Interviewing the tricab drivers is a way to acquire data and scrutinize their current situation.

Tricab drivers have struggled over the protocols set by the national government and local government units. This serves as safety measures for the drivers and the safety of passengers and their colleagues. The IATF guidelines, particularly social distancing and series of lockdowns, are among the main struggles by each tricab driver. There should be at least 6 feet distance between passengers (Centers for Disease Control and Prevention, 2020). Tricab drives were limited to up to 2 passengers only. All these provisions are not only for the passenger's safety but also for the drivers themselves. Although the drivers considered the government measures as their main struggle, they understood the importance and necessity during the pandemic. Naturally, the protocols affected their income. However, this is not only happening in the Philippines. The pandemic has affected the economy of all nations (Donthu & Gustafsson, 2020). The conflict with colorum drivers remains a controversial issue. In villages like Kapatagan, there is some tolerance of transportation with no permits because people have no jobs and found it easier and feasible. However, it does not prevent the local government from imposing its local laws like authorizing legitimate organizations, like the tricab association.

It is interesting to note that these tricab drivers are venturing into other ways of income generation. People will be able to weather the Covid-19 financial storm by creating a more balanced collection of income sources, and that is what tricab drivers portrayed. When people are pressed to the wall, and family needs are in jeopardy, they will find ways. This pandemic has pushed people to go out of their comfort zones. The tricab drivers managed to find other means of livelihood. It is the fighting spirit that drives them as their main source of income is not enough. Unfortunately, it involves borrowing from loan sharks, which creates another problem because of high interest rates. But, when people have nowhere to go, these loan sharks are practical. The increase in fare rates was justified as the government imposed passengers' limits depending on the vehicle. Interestingly, these tricab drivers made use of social media and other forms of self-promotion. In the first place, promotion is not their forte, but they knew how to maximize it in times of need to increase their income.

It is amazing to learn from these drivers and their reflections which they shared. Being flexible is nothing new to them, but all the more needed during a pandemic when everyone is suffering. Their compassion for understanding the plight of the passengers by accepting payment below the adjusted rate is a testament to their concern for humanity. While they are struggling, they are willing to meet half-way. Moreover, there are non-negotiables that they advised to other drivers. They have to offer quality service for their commuters. Otherwise, their business is over, especially during a pandemic.

Limitation of the study

The study was limited only to the experiences of those tricab drivers. The results could not be generalized to reflect the sentiments of other drivers. The study did not touch other aspects such as the tourism side, but purely in their struggles, coping, and viewpoints as tricab drivers.

Implication of the study

One of the main struggles of the participants is the government protocol. The study's result could provide feedback to the government as to the proper handling of the situation in the transportation industry. The government can look into an appropriate and effective supporting mechanism for drivers affected by the protocols. The other area is on colorum drivers who run in conflict with those with authorized business. For other drivers, the findings can be sources of reflection, especially in coping with the challenges brought about by the pandemic. For those in the tourism industry, transportation plays a major role. This study's findings provide a window of how to address the problem of a pandemic in a bigger scope, which includes the transportation sector.

Concluding remarks

The journey of tricab drivers is a picture of people trying to survive during a pandemic. Just like any other sector, the tricab drivers had to deal with several challenges. This pandemic has created so much inconvenience, like limiting the movement of people. Thus, it severely affects those in tourism and transportation. In particular, the tricab drivers had to deal with government protocols, loss of income, conflict with colorum drivers. However, despite the challenges they encountered, they could find ways to survive, such as finding other sources of income, borrowing money, increasing the fare rates, and doing self-promotion. Their lived experiences are not far from other people who are affected by the pandemic. However, the richness of their experiences and the lessons people learn from them are worth noting.

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Livelihood in jeopardy: Troubles experienced by sidewalk vendors amidst COVID-19 pandemic

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Abstract
The COVID-19 pandemic has created a lot of chaos throughout the world. Its devastating indirect and direct consequences spare no one. This paper explores the struggles of sidewalk vendors in the Southern Philippines during the COVID-19 pandemic. It seeks their coping ways and insights about their experiences during the crisis. We employed a descriptive phenomenological research design. Ten sidewalk vendors participated in the semi-structured key informant interview (KII). The findings revealed three themes for their struggles. These are incapability of earning, helplessness, and loss of income. For their coping mechanisms, small trading, gain assistance, and monetary loans were the identified themes. For their insights, two themes emerged-hopefulness and frugality. Sidewalk vendors were left with no choice but to stop selling temporarily because of the virus's threat. Even if their livelihood is in jeopardy, they became resilient and continued to find a living.

Introduction
There are different ways of earning a living. One, which is very common and probably easier to venture into, is street selling. However, it is very seasonal or even irregular. Many development projects in low-income countries aim to eliminate street vending. City governments often take punitive steps to ban street vendors from public spaces. Nevertheless, street vending or selling offers a vital service for the urban poor, as it delivers food and supplies at a lower price. Many people take advantage of this kind of business. It can be fixed in any place. It can be mobile. The street vendors provide essential services in cities worldwide, especially in Africa, Asia, and South America, where residents rely on them for basic needs. They are part of a huge informal food network that prevents a part of the world from starving. But, the pandemic has ravaged street vendors' livelihoods, crippling their ability to do their jobs and leaving many behind in a fight for survival.

When the health protocols are relaxed, some essential services are allowed to resume gradually. National leaders are keen to foster economic recovery with appropriate precautions for public health. However, it was not easy for street vendors. In this paper, we explore the lived experiences of street vendors in the Southern Philippines. As pandemic is still around the corner, not much has been discussed about the experience of the vendors who are providing services to the people. This research can contribute to the body of knowledge by hearing the perspective of the sidewalk vendors themselves. This could be a great help for the local government to effectively provide support and assistance to sidewalk vendors affected by the COVID-19 pandemic.

Sidewalk vendors and the law

Almost two decades have passed with street vending as an increasing trend in Asia (Bhowmik, 2005). Around the world, the same scenario happened as more and more people converged in urban areas. To prevent from clogging the streets and to install order, local and national governments introduced laws. Batréau and Bonnet (2016) discuss its management informally, referring to how Bangkok deals with street vendors. In several countries, the legislative/regulatory frameworks regulating street trading discourage, rather than encourage, establishing a sustainable informal sector where street vendors can meet the demand for their goods. Street vendors can either be mobile or be at a fixed location (such as a kiosk or sidewalk table). Others merge mobile and fixed sales. Each form of work entails varying regulatory challenges. Local permit laws can limit entry into the market. Zoning regulations sometimes limit street vendors to places that are unbearable for both sellers and their clients.

Street vendors are frequently forcefully displaced as their typical sale areas conflict with planned construction sites. Like any other informal economy, street vendors are not part of the social security programs. But, when their livelihood is threatened, they may become defiant to authorities and go as far as bribing them (Gumisiriza, 2021). Indeed, dealing with street vendors is complicated. Sometimes, the law's application depends on the sincerity of the implementers and how the vendors perceive its rationality and benefits on their part. In a global review about street vending and public policy, Bromley (2000) discovered no consistency in the implementation of laws, and the government sees unexpected circumstances.

Advantages of sidewalk vendors

Being a sidewalk vendor or in the informal sector has its own advantages. It helps boost the economy (Anetor, 2015; Martínez et al., 2018). It provides other job opportunities or livelihood opportunities for the jobless. It enables people to set up a store without many funds, less recording, and minimal income tax to earn a living. Being in the informal sector, one can avoid ridiculous laws and regulations (such as absurd formal currency fluctuations or subsidies), which render trade unprofitable and keep goods out of the store. Informal traders will sell at market prices, and they can store the items customers want.

The informal sector plays a crucial role in society, for it provides what the established structures cannot offer to ordinary people. Hence, people prefer to buy products from street vendors because of easy and convenient access. On the part of the vendors, it allows them to earn a decent living. Moreover, those who have jobs may feel that their salary is not enough and find street vending the solution to their needs (Huang et al., 2018). They venture into street vending to earn extra income. In short, street vending provides opportunities for anyone who has the skills to do business.

Plight of sidewalk vendors during the Covid 19 crisis

The COVID-19 pandemic has greatly affected street vendors worldwide (Arsene et al., 2020; Resnick, 2020; Romero et al., 2021). Several countries and cities allowed street vendors to resume business as the economy and people's needs hit rock bottom. This was after street vending was banned to contain the virus. However, despite good intentions, the vendors suffered a lot. Losing one's livelihood with minimal or no support to sustain their needs was catastrophic.

In the Philippines, the Community Quarantine (the term used instead of lockdowns) prevented people from leaving their homes. The government distributed relief goods, but it was not sustained. The street vendors were asked to stop selling. This prompted a crisis among street vendors, for they depend on street vending for their daily needs. In this study, we focus on the lived experiences of the street vendors during the pandemic.

Research methods

In this study, we utilized a qualitative phenomenological design. Phenomenology focuses on making sense of an individual's human experience (Patton, 2002). The significant phenomenology-derived observations are an interpretation of a phenomenon seen through the eyes of those who have witnessed it. We seek to understand the experiences of the sidewalk vendors in Digos City. We strive to know their struggles, coping mechanisms, and the visions they have attained throughout their experience.

The participants of this study were sidewalk vendors. We personally made sure that the participants were individuals qualified to take part in this study. The criteria included the following: a) They must be a sidewalk vendor for at least 3 to 5 years; b) They must be residents in Davao del Sur, Philippines; and; c) They have expressed a huge impact of the pandemic in their lives as vendors. In selecting the participants, we used purposive sampling. In gathering the participants or informants, we asked for the City Economic Enterprise Management Office (OCEEM) to assist us.

Data collection and analysis

We employed a semi-structured interview with key informants, and used the data collection process suggested by Creswell (1998). We asked them questions based on the study's primary objective. The interview was in Cebuano, the informants' native dialect, using the following three research questions: (a) What are the struggles experienced by sidewalk vendors during the COVID-19 pandemic? (b) What are ways of coping by sidewalk vendors during the COVID-19 pandemic? (c) What are the visions attained by sidewalk vendors from their experiences during the COVID-19 pandemic?

In analyzing the data, we used the seven-step method of Colaizzi (1978), which offers a detailed analysis, with each step closer to the results. The method relies on rich first-person experiential accounts. We used tables in the analysis as employed by Tudy and Gauran-Tudy (2020).

Trustworthiness and ethical Considerations

Trustworthiness refers to the validity and reliability of qualitative studies. However, this concept is more obscure in qualitative studies. We demonstrated the criteria suggested by Guba (1981), which are credibility, transferability, confirmability, and reliability. We secured permission from the City Economic Enterprise Management Office, where our informants belonged, to pursue the study for ethical consideration. After identifying potential informants, we asked for their consent to participate in the study through a semi-structured interview. We told prospective informants we would respect their rights and maintain confidentiality. We obtained their informed consent by asking for their signatures on the informed consent form. We used pseudonyms to observe anonymity and to protect confidentiality. We kept all other information private, such as the location of the informants while selling.

Results

Based on the research objective, we discuss the results in three categories-discussions of the challenges faced by sidewalk vendors, coping mechanisms, and their insights.

Struggles of sidewalk vendors during the pandemic

The first part of the interview was all about the struggles they have experienced during the crisis. As a result, we identified three themes: loss of earning, helplessness, and loss of income.

Loss of earning: They were vendors. Every day they earned money to support their family and their helpers. As the quarantine mandate was issued, sidewalk vendors were forced to stop selling even though it was their only income source. Pedro, the head of the family of six, expressed his experiences: *"We are prevented from selling. We lost our livelihood. We cannot find money for our daily needs. Our helpers have nothing to eat. "(Transcript 1, Page 1, Line 10-11).*

Although some of them managed to continue selling in the sidewalks, there was a huge difference in their income. If before they can earn a thousand pesos a day, now it is hard just to make five hundred pesos. Due to fewer people going outside of their homes, only a few customers can cater. Nenita, a mother of 4, addressed her experience while selling during the quarantine period: "*My biggest problem was food. My family had nothing to eat. I only had very little sales, like 130 to 300 pesos only unlike before when I used to earn around 3,000.00 pesos daily. It was very difficult." (T2, P2, L11-13*)

Since it was mandated to limit going outside of one's home, the sidewalk vendor's income dipped. They were incapable of supporting their family's needs because of the shortage of funds and resources.

Helplessness: Sidewalk vendors felt distressed and worried about what the future may bring to them. They said they did not have a choice because it is mandated by law. Being helpless resulted in worries and distress. Geneva confessed saying: "*I really worried much what to do with my family. My money was not enough for our daily needs." (T4, P4, L8-9).*

Despite the danger, some continue selling. They were already sacrificing their health just to have some income. They were very worried about their source of income and where they could get funds to provide for their needs. At the same time, they were concerned about catching the virus spreading in the city. Nestor expressed his worries about selling during the quarantine: "*I was very worried at that time about the quarantine. I was afraid of the virus and worried about my small business. What will be our source of income if it stops for good?" (T6, P7, L6-7).*

In times like this, people are torn between choosing their safety and providing for their families. They were worried for their own safety and their families, for if they get sick, who will earn a living then? They were sacrificing themselves to sustain their family's needs, although their income was below the usual. Thus, the situation made them helpless.

Loss of income: Although it was obvious that their sales dropped or even stopped, the participants were quick to admit the loss of their income as one of the major challenges. They were forced to stop for their safety and security because of government protocols. A confession from Jane revealed her experience when the quarantine was mandated: "*When we were told to stop selling because of the community quarantine, we really suffered because street vending is our only source of livelihood. We were not prepared, especially with saving money and even buying groceries. We did not have savings. We had nothing. It was very abrupt." (T9, P11, L8-10)*

Some of the informants confessed that being a sidewalk vendor is their only source of income. When street vending was taken away from them because of the pandemic, they struggled to survive. Henry expressed his experience as he lost his source of income: "*I lost my savings. We did not have money to buy our daily food. It was very difficult, and I did not know where to find something to fill our stomach. We did not have our business, our only source of income." (T10, P13, L12-14).*

It was tough for these sidewalk vendors to lose their only income source, not because they wanted to but because they were forced for their own good. Although they understand the government's sentiments, they couldn't fathom the thought that they can no longer sustain their family's needs.

Coping mechanisms of sidewalk vendors during the pandemic

After analyzing the participants' responses regarding coping mechanisms, we identified three themes: Small Trading, Gain assistance, and Monetary loans.

Small trading: As they were prohibited from going back to their areas where they used to sell, the participants made innovations to earn money even if they stayed at home. They indulged in small trading. It may not fully help them financially, but it eased some of their financial problems. Editha, a housewife and a mother of 4, shared her experience relate to this: "*I did everything. I sold flowers since it became a trend during the pandemic. Since I just stayed at home, I sold barbecue to do business while just at home." (T3, P3, L16-18)*

As the sidewalk vendors struggle to find other ways to earn, they find it feasible to do small trading by being innovative. Liezl indulged in small business at home during the quarantine period: "*I sold anything at home with my customers coming from the neighborhood. I provided them with basic needs. In this way, I was able to earn money." (T5, P6, L15-16)*

Filipinos are known to be resourceful and innovative. In times like this, sidewalk vendors seek other options to sustain their needs. Though not as satisfying as before, at least they have a small income which helps them financially.

Gain assistance: The participants recognized the efforts of the government and other individuals. They have received aid from several people and organizations reaching out to help. A testimony from Nestor, in which he admitted he had received help from both the government and private individuals, proved that some vendors gained assistance: "*We relied so much on the government's subsidy. We depended on the relief goods like rice and sardines. We also received cash assistance of 6,000.00 pesos." (T6, P7, L14-15)*

The participants recognized that the assistance was not enough, but at least it gave them support for a whole month or a week. At least, it lessened their worries and distress. Edilito, a father of five, stated how these reliefs had helped his family, including those from other organizations: "*It was a big help to receive assistance from several people and organizations. Those food items really helped us. No matter how small or big the assistance, we considered it a big help to us." (T7, P8, L16-18)*

Monetary loans: It is undeniable that when people are struggling financially, they may resort to borrowing from other people, especially on the case of our participants who are into business and want to continue doing it or simply just to satisfy their basic needs. According to the participants, they had to borrow money. A confession from Oscar described his experience with loaning: "*I borrowed money, unfortunately. I had no one to go to if not borrowing money to have something to spend for our needs." (T8, P10, L14-15).*

These informants were left with no choice but to borrow money from various people. It is not their will, but circumstances pushed them to do such. Jane was pushed to borrow money because of her child's medication: "*I borrowed money so that I can buy medicines for my child. The other reason is for our expenses at home." (T9, P11, L16-17)*

Although this coping strategy can result in another struggle, the informants take risks to sustain their basic necessities as they have no other option. Borrowing money from other people can help them get funds to establish a small business or simply buy their basic needs. These funds are needed to survive.

Insights of sidewalk vendors during the crisis

After interviewing the informants on their struggles and coping mechanisms, we then asked for their insights from their experiences. The results revealed two themes, namely, hopefulness and frugality.

Hopefulness: In times of crisis, hope is one of the things that make people get going. The participants hoped that the future may bring a difference and that whatever they were experiencing at the moment may end in a better tomorrow. Henry, stated how he longed for a better future: "*Maybe we should not lose hope in life. We should not allow this problem to linger on because I believe it would be resolved in the future. We should not forget to pray to God because he is the only one who can turn everything around. "(T10, P13, L22-24)*

Hoping for a better future is a great step for these informants. Nestor shared his belief in hoping for the betterment of everyone: "*Just continue! We should not lose hope that these sufferings will end. We put trust in God that good things will come in the end. We should surpass all of these things. We should also be strong to defeat our problems." (T6, P8, L19-22)*

Frugality: Frugality is the state of being thrifty of resources and money. Unfortunately, saving was not a habit for some of the participants. They realized how important it is, especially during a crisis. When people are prepared, they can only feel half of the ill effect of the crisis. Sidewalk vendors were not prepared for this crisis. They relied on their business for their livelihood. Editha talked about the importance of being frugal and the value of saving: "Because of the difficulties brought about by the pandemic, you should think of being frugal and do some saving measures so that you have something to pull out when needed. Members of the family should help each other to get out of this crisis." (T3, P4, L20-22)

Being thrifty is a must during a pandemic or even without it. The vendors realized its importance. These testimonies from the participants show that being frugal and saving money can help with survival in times of crisis.

Discussion

The COVID-19 pandemic has wreaked havoc on people's lives, but we did not expect much on the seriousness of its impact until we conducted this study. We have learned a lot about the struggles of sidewalk vendors during the pandemic. The pandemic did not only threaten their lives but also their main source of income for living. However, they were not alone, as a similar experience was happening globally, wherein street vendors dealt with the pandemic's severe impact (Arsene et al., 2020; Resnick, 2020; Romero et al., 2021). When the government imposed lockdowns, they had no choice but to stop their business. The participants of this study identified helplessness as one of their struggles. Street vendors are not new to being helpless as they were subject to many pressures, including the implementation of government laws (Bromley, 2020), which pushed them to the wall.

Ultimately, it was the loss of income that really affected them since street vending is their livelihood. Despite the government's help, it did not suffice for their needs (Unnamalai, 2020) compared to when they had their regular income before the pandemic. Indeed, the struggles of sidewalk or street vendors were real. Their situation was a picture of people from all walks of life who are severely affected by the pandemic.

Despite their struggles, the participants were able to find ways to cope as much as they can. Doing business at home is their main weapon to survive despite not having the usual number of customers. They managed to earn money at very limited returns. Also, according to the participants, they received some form of assistance from governments and individuals. Governments all over the world took the pandemic very seriously. They know how people suffered. Hence, people received several forms of assistance and financial aid (Ashraf, 2020; Razumovskaia et al., 2020) to keep the economy floating and provide the people's basic needs. However, any assistance remains an aid. It could not replenish what was lost. As a result, the participants took money loans. It is undeniable that borrowing money would only result in more complicated financial problems. Informants state that they do not have recourse but to borrow money for they are not prepared for the crisis, and their funds are not enough to last for months of quarantine. Unfortunately, in the Philippines, or as in many developing countries, people are victimized by loan sharks (Aldohni, 2013). The participants did not explain the dynamics of loan sharks, but it is a fact that it adds burden to the already burdened individuals seeking relief from their situation.

After sharing their coping strategies, the participants were generous enough to share their insights for others to learn in dealing with the pandemic's impact. They pointed out hope as the best way to express positivity in life. When many are suffering from mental health problems (Paulino & Tudy, 2020) following government regulations (Tudy, 2020a) and dealing with ethical issues (Tudy, 2020b), the participants acknowledged the importance of faith to be hopeful that the pandemic will end and things would be better in the end. Moreover, in the practical sense, the participants identified the importance of frugality. They specified saving as one of the most practical and effective ways to counter a crisis.

Implications of the study

The findings of the study are essential pieces of information for sidewalk vendors. Local governments may maximize their powers and help mitigate some of the problems these sidewalk vendors are experiencing. The study's findings could also give society a new perspective of the realities, and struggles of sidewalk vendors during times of crisis like a pandemic. The study's findings could be a source of information they can reflect on for other sidewalk vendors. The pandemic has a huge impact on their lives. The participants' strategies and insights could be sources of information to survive during a pandemic. Moreover, it is interesting to dig deeper into the effective laws and mechanisms to appropriately support the sidewalk vendors during a pandemic. It is another area for future research worth pursuing.

Concluding remarks

This study highlights the struggles, coping mechanisms, and insights of sidewalk vendors. The findings describe their struggles of incapability to earn, hopelessness, and loss of income. These struggles were expected, especially with the magnitude of disruptions this pandemic brings. However, despite the difficulties, the sidewalk vendors were able to cope with the situation as much as possible, like indulging in small trading at home, gaining assistance, and borrowing money. They were generous in sharing their viewpoints, particularly on being hopeful and frugal during a pandemic. Hence, despite the threat to their livelihood, they continued to survive and found ways to live. There are many things to learn from the sidewalk vendors. They represent a segment of society that is affected by the pandemic. How they survived and learning from their insights are worth reflecting on.

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Unfolding the ethical perspectives of "SOLD" by Patricia McCormick

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Abstract
Abducting children for sexual exploitation and trafficking them to other nations is happening since a long time ago. After being trafficked and experiencing extreme difficult situations of life, these victims are often unacceptable by their families and other society members. The community make them experience stigma, blame, bias, loneliness, shame, loss of identity along with unrecognized socioeconomic and citizen status. The paper will provide a structural debate on the ethical perspectives on whether or not a sexually trafficked person should return to the society they belong. Moreover, the religion Islam has a strong obligation in viewing all mankind with an equal right to exercise. To conclude, multiple attainable recommendations could be implemented to support trafficked victims in a society.

Introduction
This paper reviews a book titled "SOLD" which was penned by Patricia McCormick in 2006. The article unfolds the story of a thirteen-year-old teenage girl "Lakshmi" who was sold by his father and trafficked to India for sexual exploitation. The structured debate covers supporting arguments and counterarguments on the proposition of social and religious perspectives regarding the concern in the light of ethical theories. The book "SOLD illustrates the story of a 14-year-old teenage girl "Lakshmi" from rural Nepal who arrives in India with compassion to support her family. As soon as she reaches India, in the twinkling of an eye, she realizes the miserable truth of her being sold to prostitution. We find this also relevant in the Pakistan context.

Case scenario
Lakshmi lived in a slum area of Nepal with her mother and step-father. Lakshmi and her family did not have a luxurious way of living but she blissfully enjoyed playing with her goat, sitting in the light of a lamp with mother brushing her hair. One unfortunate day when the Himalayan monsoon struck and devastated all the crops. Lakshmi's step-father made her meet an attractive glamorous lady who asked Lakshmi to come along with her to the big city and work for a rich lady named "Mumtaz", who in return gave Lakshmi delight and affluence. Although Lakshmi's mother was not willing to send her, the young teenage girl wanted to buy happiness and a tin roof for her family so that no rain can destroy her house any further.

Lakshmi made her way to the "Happiness House" of Mumtaz, which she thought would be a place of delectation and ecstasy. However, she soon learned the glooming truth of her being sold to prostitution, and the only way out was to pay off Mumtaz's debt that she paid to her stepfather. Each passing day added to Lakshmi's agony and despair. She made friends who had similar suffering and pain Lakshmi was going through. The little innocent girls being brought in and diseased girls with AIDS being thrown out enumerated Lakshmi's aggression. Moreover, Lakshmi grasped different skills that she was going to use in the escape from happiness house.

In the darkness of night between the noises of a religious celebration, she successfully managed to evade Mumtaz's prison and made her way to a shelter home. Lakshmi successfully saved herself with many other girls, who caved in the same brothel.

Propositions
The paper aims to address the proposition in the light of ethical consideration and answer whether or not, a sexually trafficked person should return to their respective society? and what does religion instruct in this regard?

Sexually trafficked people returning to their society
Supporting argument: Powell et. al. (2017) cited in his study that approximately 21 million people (children and

adults) in the world are being trafficked for specific purposes such as forced labour and uplifting sex industry. Gender preference plays a huge role in human trafficking for sexual exploitation. The United Nations Office on Drug and Crime has shown that trafficking is gender biased since the women trafficked account for 49%, whereas only 18% men are affected, and 33% children of both genders get trafficked. (Erdogdu et al., 2016). The victims are often discouraged and demoralized from acquiring help from society due to the fear of getting rejected and being shamed. Moreover, when the traffic victims are recovered from the brothels, they are hardly embraced by society due to stigmatized preconceptions associated with them. According to Peláez Echeverry (2016), stigma possesses major constituents including blame, bias, loss of identity, loneliness, and shame, loss of socioeconomic and citizen status, language barriers, and uncommon religious norms and values. Additionally, a qualitative study by Iram et al. (2019) suggested that victimized people do not prefer to return to their homes due to multiple reasons that include poverty, unemployment, disrespect, honor, and sexual violence at home. Ultimately, these factors become the rationale to bounce back in the sex industry. It has been studied that they are prone to undergo the same trauma and negligence if they return to the society. This stigmatization would lead to re-traumatizing of victims, which propells these victims to remain in the brothel. One of the sex workers in the story named "Monica" was very happy to go back to her home after paying debts to Mumtaz for ages. Monica was tortured physically and mentally by her family when she returned home, leading her to bounce back to the same brothel within a few days. Secondly, it is observed that the children growing in the brothels will be working for the same cause and run the same business. This can also be relatable with the story, when the toddler baby girl of other sex worker in the house of happiness was expected and bound to work for Mumtaz in the future. In a country like Pakistan, when there is an existence of unmet socio-economic needs and unemployment, young girls are often trapped by a trafficker to opt for the quickest means of earnings (Iram et al., 2019). This is the vicious cycle of cause and effect, which adds significant prevalence to the growing pandemic of sex workers around the globe.

Communitarianism

Incorporating the communitarianism concept in the current scenario, bringing a sex trafficked victim back into society would increase the transmission of diseases such as HIV and AIDS, risking other members of the community to inflict fatal disease. Therefore, for the betterment of other members of the society, these victims should not be reintegrated into the society to prevent the further burden of the disease in the country. Also, it may lead abused victims to return to the exploiters due to poor subsistence, social isolation, stigmatization, and vulnerability to intimidation.

Counterargument:

On the contrary, the sexually trafficked person should return to society as they recognize these victims as nationals with active citizenship status. A few parts of the society are striving through multiple non-governmental organizations (NGOs), women protection bureau, and welfare centers to extend support for these victims socially and mentally. Moreover, this is not always the case that offspring are anticipated to do similar things that their mother has done. This is an individual fight, and success depends upon a person's intensity to strive to break the chain of a vicious cycle and fetch a difference. A piece of news shared on CNN world in 2013 highlighting Shweta Katti, a girl who grew up in a brothel and with her hard work and dedication towards education won a scholarship in the US to become a psychologist and is now a leading motivational speaker, who aims to uplift the image of sex workers.

According to the constitution of the Islamic Republic of Pakistan, both women and men in society have equal rights, and any physical violence against women is rigorously outlawed. However, the dark side of society still considers sex workers as characterless and immoral, whereas the consumers (males) are considered as a respectable part of the community (Iram et al., 2019). Men play a significant role in spreading contagious diseases in society, as they are the major group using sex services and running a successful sex industry. The bitter truth of society is that consumers (men) are not considered characterless and immoral, whereas women as sex worker have such biased image.

Libertarianism

The Libertarian approach advocates that sex workers should have the autonomy to be part of society and enjoy all the benefits that any citizen holds. In libertarianism, an individual action of happiness should not violate other individual's rights. Libertarians appreciate movements and activities that foster fairness and justice in society and eventually give a healthy opportunity for the sex worker to get back to their homes. Also, the stewardship approach requires the authorities to be accountable to the needs of the individual and community level by addressing the inequalities based on their demographic background and social status. This approach may include activities to be initiated in the society before returning to society, which includes rescuing, repatriation, and producing an atmosphere that respectfully reintegrates and embraces trafficked victims in society. A comprehensive approach is demanded to combat the sex-trafficking problem, ethically by empowering, equalizing, making them accountable and allowing them to participation in the society with respect and dignity.

Religious perspective

To commence the discussion on the concept of sex trafficking about the Islamic school of thought, it is valuable to understand the concepts of traditional slavery since it constitutes a form of exploitation under trafficking in persons. The religion Islam now prohibits slavery, broadly based on its primary and secondary sources which are the divine book of Koran, Prophet's Sunnah (PBHM), and the doctoring of Islamic scholar's consensus beliefs that is Ijma. Slavery was common in the period before the advent of Islam, and that it did not abolish this concept. According to one of the traditions of the prophet

(PBUH), “there are three people whose prayers Allah will not accept and the one who enslaves a free man is among them”.

He further said: “Whoever frees a Muslim slave, Allah will save all the parts of his body from the (Hell) Fire as he has freed the body-parts of the slave”. Moreover, the commandments in Koran with the human sex trafficking forbids forced sex since it is an abuse regarding which Koran (24:33) says: “but force not your maids to prostitution when they desire chastity, so that ye may make a gain in the goods of this life.” Additionally, Islam views all human beings as equal and considers being superior and oppressing others as a satanic logic. Islamic law calls for the welfare of human beings by teaching the ethical principles of equality and justice and therefore provides equal rights to both genders.

Recommendations

There are some recommendations to support trafficked victims in a society. Ethically, there should be an active role of policy developers to design interventions and assess its implementation about ethical approaches of doing upright, avoiding detriment, and providing courtesy, equity, enablement, sustainability, social obligation, opportunity to participate, sharing concerns and self-accountability within the society. The issue can be discussed through multiple ethical perspectives that include libertarianism, paternalism, stewardship, and virtue of ethics. By the libertarian approach, the provision and protection of rights about international human rights standards should be incorporated, where NGOs play a huge role in preparing trafficked victims mentally, socially, and physically before returning to society. A paternalistic aspect to inhibit and alleviate child trafficking is by constructing all-inclusive and detailed awareness regarding the understanding of sex trafficking. Concerning the scenario in the book, when Lakshmi was being moved across the border, the event could be prevented through a paternalistic approach. Likewise, Rijal, et al. (2016) suggested that checking when crossing border by individuals if securitized strictly, can be successful in preventing and protecting girls from illegal transit. Lastly, through virtue ethics, the stakeholders all around the world would take measures to combat the issue at global level with an aim to bring difference at mass level. Since it is a time-consuming process, it may not immediately bring difference but changing the mindset will bring benefit for the long-term goals.

Conclusion

The Universal Declaration of Human Rights stated that males and females should have equal opportunities in law and social situations, and should not be discriminated for equal treatment, health, and education. The scenario introduced us to the unfortunate, neglected, not spoken, hidden yet bitter realities and vulnerabilities of society. Therefore, it is acceptable to make a sound stance by the discussion that sex victims should be embraced by society with the same respect and honor they deserve just like any other member of society and live life productively.

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