

Flexible Learning and Student-Teacher Relationship Experience of College Students with Visual Impairment

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Abstract In the absence of guidelines and policies on flexible learning delivery to students with special needs from the Commission on Higher Education, this study aimed to describe the lived experiences of flexible learning and the student-teacher relationship of four college students with visual impairments who were mainstreamed in a Philippine higher education institution during the COVID-19 pandemic. The researchers utilized the Husserlian descriptive phenomenological approach and performed a thematic analysis of the data gathered from the interview. As a result, the themes that emerged for flexible learning were (1) environmental and (2) personal factors. On the other hand, the themes that emerged for

student-teacher relationships were (1) instructional and (2) motivational interactions. During flexible learning, the students encountered factors beyond their control, making them feel ambivalent and experience adverse health consequences. Despite the challenging circumstances, they coped by upskilling and through social support. The students received accommodation, care, and encouragement from their teachers but asserted that their unique needs must be considered when their teachers design academic tasks and instructional materials. The insights gained from the study imply that education leaders and university administrators may improve the flexible learning experience of students by crafting inclusive quality education policies and capacitating teachers on disability awareness, appropriate teaching strategies, and the use of assistive technology for students with visual impairment.

Keywords: COVID-19, flexible learning, inclusive higher education, special education, visual impairment

Introduction

When the COVID-19 pandemic disrupted the educational systems worldwide, flexible learning became a viable instructional approach as classes were held online to reduce the risk of COVID-19 transmission (Almahasees et al., 2021; Cortes, 2020). Flexible learning is an approach where teachers remotely deliver lessons, assign tasks, and communicate with learners based on their preferences, while students make choices on when and how they would like to learn (Gocotano et al., 2021; Joan, 2013; Naidu, 2017). Although the flexible learning approach offered a solution for continuing education during the pandemic, it led to other challenges.

Globally, teachers' and students' readiness, digital skills, and resources were inadequate during the transition (Crawford et al., 2020; Rosalina et al., 2021).

Some developed countries in Europe, developing and underdeveloped countries in Asia (Asian Development Bank, 2021), and Africa (Oswab, 2022) struggled with the sudden digitalization of classes (König et al., 2020). Teachers lacked preparation, training, and resources to deliver online instruction (United Nations [UN], 2020). On the other hand, college students need time to become accustomed to the flexible learning approach. Despite students' coping ability, they experienced a lack of accessibility, accommodation, independence, and participation. They became stressed about online learning, which was partly due to the inexperience of their instructors. Thus, they needed mental health support (Gombas & Csakvari, 2021; Lischer et al., 2021; McKenzie, 2021; Senjam, 2020).

The sudden shift to the flexible learning approach affected the quality of the teaching-learning process and teacher-student interaction, which changed the educational landscape worldwide (Anderton et al., 2021; Rapanta et al., 2020; Singh et al., 2021). Following the UN's fourth sustainable developmental goal of quality education (SDG 4), youth and adults are envisioned to receive inclusive and equitable quality education and learning opportunities. With the rise of flexible learning as a sustainable educational approach, further research on different learners' characteristics, needs, and concerns is timely and relevant. The research results can be used to develop policies, design teaching strategies, and responsive interventions that would minimize learning gaps, as well as promote inclusivity and quality education for all (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017).

In the context of Philippine higher education, colleges and universities were recommended to utilize the flexible learning modality and experiment with the implementation of online and distance learning approaches (Asia Society Philippine Foundation, Inc., 2021; Commission on Higher

Education [CHED], 2020). Due to a lack of preparedness, tertiary-level institutions experienced difficulties planning, implementing, assessing, and delivering flexible online learning (Baticulon et al., 2021; Toquero, 2020a). The encountered difficulties jeopardized the academic life and mental health of regular college students (Clemen et al., 2021; Lim et al., 2022), and little is known about how the transition affected college students with special needs. Stressing the importance of inclusivity, this study explored how mainstreamed college students, particularly those with visual impairments, experienced flexible learning and interaction with their teachers through online modality.

Though universities strived to move inclusion from physical to virtual classrooms, mainstreamed college students with special needs struggled to adjust and learn during the transition (Dela Fuente, 2021; Firmanda, 2020). Before the pandemic, the Commission on Higher Education (2017) granted college students with visual impairments auxiliary aids and services such as having a qualified reader as a companion, a *shadow teacher*, which is also known as an assistant in addressing their special needs and academic concerns, considerable time to finish tests, access to instructional materials in their preferred format, and the use of assistive devices like Braille, a recorder/player, and a laptop. During the pandemic, it is likely that college students with visual impairments found flexible learning and accomplishing online tasks to be strenuous because of their sensorial limitations (McEwin, 2018).

Visual impairment ranges from mild to severe low vision, including blindness and near vision impairment (World Health Organization [WHO], 2021). Individuals with this condition are at risk of experiencing higher levels and more severe impact of fatigue as they needed to exert more time, cognitive resources, and effort to comprehend instructional materials. They also needed to establish visual

perception, make life adjustments, endure lighting conditions that could harm their eyes or physical health due to prolonged exposure to computer screens, and even struggle with negative thoughts or affect (Kapur, 2018; Schakel et al., 2019). According to Cubillan (2018), the prevalence of visual impairment in the Philippines is 1.98%, wherein the estimated affected population is 2,077,378 which is primarily caused by cataracts, uncorrected error of refraction, and maculopathy. As their population continues to increase (Bourne et al., 2020), understanding their condition and needs is imperative. Similar to others with disabilities, they also deserve equal access to educational opportunities (UNESCO, 2017).

Regarded by the UN (2020) as vulnerable learners, students with visual impairments deserve equity, inclusion, and assistance, but they are often left behind as they tend to have poor digital skills and little access to hardware and connectivity. Despite having guidelines on implementing inclusive education, the Philippine higher education institutions still need the provisions and policies to implement flexible learning delivery for students with visual impairment and address their needs during emergencies like the COVID-19 pandemic (CHED, 2017; Toquero, 2020b). Without these policies, teachers primarily decide how to deliver instruction through flexible learning and provide accommodation to students with visual impairment. Teachers can become agents of equity and inclusion when they implement flexible learning and facilitate student adjustment in a warm and safe learning environment. When teachers exhibit involvement, pro-social behaviors, affection, and commitment to students' learning, they will likely develop a positive student-teacher relationship, a precursor to students' academic success (Ayllón et al., 2019).

The student-teacher relationship is an overlooked concept in higher education but remains important (Hagenauer & Volet, 2014). The student-teacher relationship

was associated with students' affective commitment, satisfaction, academic engagement, conflict avoidance, and loyalty towards the institution; which could affect the quality of the teaching and learning process (Snijders et al., 2021; Tormey, 2021). Positive student-teacher interactions can significantly advance student learning and development (Pianta, 2015). College students could benefit from teachers who set the tone for positive interactions, encourage them to learn effectively and manage their socio-emotional health and behavior (Davis, 2021).

Considering the available literature, two research gaps seem to exist. First is the practical knowledge gap. The COVID-19 pandemic reshaped the Philippine educational landscape. Thus, researching the lived experiences of learners with visual impairment can contribute to the development of policies and guidelines that ensure inclusive quality education. Second is the population gap. The local studies on the implementation of flexible learning in higher education during the COVID-19 pandemic were represented by regular students (Baticulon et al., 2021; Clemen et al., 2021; Lim et al., 2022; Reyes & Grajo, 2021). When involving learners with disabilities, Dela Fuente (2021) conducted a study about Filipino college students with hearing impairments. Still, to date, there are very few to no empirical studies that specifically involve college students with visual impairment (Correa-Torres et al., 2018). Hence, the present study attempts to address the lack of studies among mainstream college students with visual impairments by looking into their lived experience with flexible learning and student-teacher relationships.

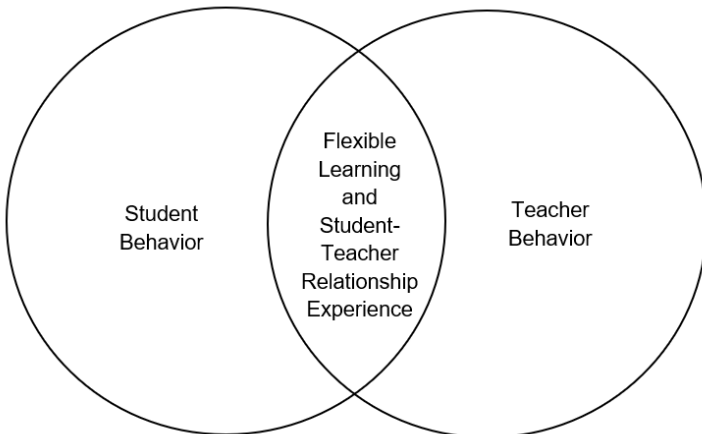
Theoretical Framework

Guided by the Self-Determination Theory of Ryan and Deci (2017), the present study asserts that the quality or

description of experience on flexible learning and student-teacher relationship during the COVID-19 pandemic relies on how college students with visual impairment satisfy three (3) of their psychological needs: autonomy, competence, and relatedness. The theory asserted that autonomy gives students a sense of empowerment, self-direction, and personal choice. Autonomy can be reflected in students' ability to achieve goals with less teacher supervision and to apply appropriate strategies to adapt to challenging situations, like the sudden implementation of flexible learning during COVID-19 . Competence is the perceived mastery of acquired knowledge and skills. Lack of preparedness and readiness might hamper competence. When competence is exercised, they perform skills that are responsive to the demands of flexible learning. Lastly, relatedness is the feeling of connectedness, belonging, and the presence of available support. Because of the shift to the flexible learning environment, students satisfied their relatedness needs or acquired support primarily from their teachers and peers through technology.

Figure 1

Framework of the Study



In the context of the present study, Ryan and Deci (2017) asserted that the student-teacher relationship is important in helping students satisfy three of their psychological needs. When teachers exemplify support behaviors, students likely perform better in their studies and thrive in a challenging learning environment. Through phenomenographic inquiry, the present study intends to determine specific student and teacher behaviors that promote autonomy, relatedness, and competence while having flexible learning and maintaining student-teacher relationships (see Figure 1).

Purpose of the Study

This study explored the lived experience of flexible learning and student-teacher relationships of mainstreamed college students with visual impairments during the COVID-19 pandemic. Specifically, it aimed to identify and describe the factors that make up the experience of flexible learning and the components of the student-teacher relationship. Exploring the factors of flexible learning experience and student-teacher relationship provides further understanding of what student and teacher behaviors or practices can enhance flexible learning experience and develop student-teacher relationships that can satisfy student needs such as autonomy, competence, and relatedness.

Methodology

Husserlian descriptive phenomenology is an approach to explore, describe, and understand the phenomenon being studied, as it is consciously experienced by the person experiencing the phenomenon, hence the lived experience. Aside from capturing the raw essence of the phenomena based on individuals' consciousness, the nuances, contextual

underpinnings, emotiveness, and actions evoked in consciousness were also considered in analyzing the data gathered (Christensen et al., 2017). In the context of the present study, flexible learning and student-teacher relationships are explored through the lens of college students with visual impairments.

Participants

Locally, only five universities seemed to accommodate students with visual impairments (National Council on Disability Affairs, 2013). To identify the research locale, researchers established criteria such as (1) mainstreaming college students with visual impairment, (2) implementing flexible learning during the COVID-19 pandemic, (3) utilizing a learning management system, and (4) having teachers who use online learning platforms like Google Meet and Zoom. Referrals were sought and matched with the criteria until the selected university was identified. Only four college students with visual impairments were enrolled at the time. After securing the study permit, a guidance counselor introduced the researchers to the students. They received informed consent forms that discussed the study scope and objectives, their rights to withdrawal and confidentiality, and the process on how their data would be collected, utilized, and stored. They all consented to participate in the study as they became aware of its possible implications. Thus, the total enumeration and purposive sampling techniques were utilized in this study (see Table 1).

Table 1

Profile of Participants

No.	Age	Gender	Diagnoses	Probable Cause	Age When Diagnosed
1	23	F	Totally Blind/ Cryptococcal meningitis	Viral infection in the brain caused by exposure to pigeon waste	6
2	21	M	Partially Blind/ Persistent Hyperplastic Primary Vitreous	Mother's intake of prescriptive medicine while conceiving	<5
3	20	F	Partially Blind/ Congenital Glaucoma	Hereditary	15
4	20	M	Totally Blind/ Retinopathy of Prematurity	Premature delivery/ exposure to bright lights in the incubator	3 months old

Instrumentation

The interview guide questionnaire was developed based on a literature review on flexible learning, blind education, inclusion, and other related studies. Some questions were: “How does your teacher establish your classroom setup?”, and “What procedures does your teacher take to establish a relationship with his/her students?”. Two subject matter experts validated the questionnaire. Using an interview validation rubric, the experts rated the questionnaire in terms of its clarity, wordiness, negative wording, overlapping responses, balance, use of jargon, appropriateness of responses listed, use of technical language, application to praxis, relationship to the problem, and measure of a construct (Simon & Goes, 2013). The researchers revised the

initial questionnaire draft following the experts' comments and suggestions. Reliability was further established through various techniques. Reliability was determined by assessing two (2) raters' responses showing their level of agreement or disagreement on the interview validation rubric using Cohen's Kappa coefficient (Cohen, 1960). The obtained Kappa coefficient = 1 implied a perfect agreement between the raters' evaluations of the questionnaire. Meanwhile, dependability, trustworthiness, and credibility were confirmed through response validation. NVivo-12 was used to check the textual and thematic data analysis. Participants checked the accuracy of the transcripts and gave feedback on the analysis made. Lastly, for transferability, the results were compared to other studies with the same methodology, respondents, and other similar aspects and variables (Fraenkel et al., 2012; Houghton et al., 2013; Richards & Morse, 2013; Simon & Goes, 2013).

Data Collection

Due to the pandemic, one researcher conducted one-on-one virtual interview sessions with the participants to ensure consistency of questioning style and approach using phone calls and Zoom meetings. The same researcher recorded and transcribed each session, which was approximately for 50 minutes. A Research Ethics Committee at a university located in Manila reviewed the procedures to ensure that ethical research standards were observed in the study's conduct. The procedures took place from October 2020 to April 2021, from recruiting participants to transcription of interview data.

Upon gathering data from the participants, the researchers focused on the words spoken and the manner in which the words were conveyed to understand their responses accurately. The researchers followed an inductive approach to thematic analysis. The participants' responses were coded and categorized through thematic analysis to determine

common patterns or thematic ideas that describe their lived experiences on flexible learning and student-teacher relationships. Initially, the researchers selected the statements from the transcribed data that could vividly and clearly answer the research questions. Keywords from the selected statements were highlighted. The keywords with similar meanings and share a core idea were grouped and labeled with codes. The codes that create patterns or related ideas were then labeled as subthemes and were grouped together under a theme. After the researchers carried out the process of thematic analysis, the themes were further interpreted in the report writing process.

Results

In line to explore the lived experiences of flexible learning and student-teacher relationships of college students with visual impairment, the participants' responses were reviewed, clustered, and coded accordingly. As a result of the analysis performed, this section presents the generated themes on flexible learning experiences and student-teacher relationships.

Flexible Learning

Four interview questions were asked to better understand the students' lived experience in flexible learning, as mentioned. The themes of environmental and personal factors emerged as participants described their flexible learning experience. The environmental factors comprised the circumstances with which they had to deal. The personal factors comprised the thoughts, feelings, and health outcomes that came into their awareness as they experienced the flexible learning approach (See Summary in Table 2).

Table 2
Thematic Analysis of Flexible Learning Experience of Participants

Code and Sample Verbatim responses	Subthemes	Themes	Description of Themes
<p>CODE: Long Straight Synchronous classes</p> <p>VERBATIM RESPONSE:</p> <p><i>May subject po kami na 3 hours po kami.masyado pong huge din kasi,yung topic,kung magextend po siya lunch time (we had a subject with a 3-hour straight synchronous classes... the topics to cover were many, the teacher extends [class] until lunch time)</i></p> <p>CODE: Adjusting to teacher-provided instructional materials</p> <p>VERBATIM RESPONSE:</p> <p><i>Sa presentations, wala na po ako magagawa din. Ang ginagawa ko po ico-convert ko po muna sa word para po mabasa din sa screen reader po. (In presentations, I can't do anything. What I'm doing is I just convert it to word so that it can be read on a screen reader.)</i></p> <p><i>Nababasa ko pa naman po yung mga reading materials nababasa ko pa rin po yung mga presentation may special feature naman sa computer na pwedeng i-zoom.(I can still read the reading materials. I can still read and zoom the presentations using the special feature in my computer.)</i></p>	<p>Implementation of Flexible Learning</p>	<p>Environmental Factors</p>	<p>Factors that were commonly beyond the students' control but gave context to their flexible learning experience</p>

CODE: consultations done through email were time-consuming than live meetings

VERBATIM RESPONSE:

Minsan po ang tagal bago i-send yung recorded session minsan umaabot pa ng araw minsan umaabot pa ng ilang linggo (Sometimes it takes time for the recorded sessions to be sent to us, it would take a day or even a week)

CODE: download instructional materials

Internet Stability

VERBATIM RESPONSE:

Puro link lang yung binibigay samin. Nagvi-video po siya ng sarili niya tapos po ina-upload niya sa YouTube. (We are only given links. Our teacher videos himself and then uploads it to YouTube.)

CODE: communicate with classmates and teachers

VERBATIM RESPONSE:

Bago pa po ako nag-email nag-send na din po ako ng message sa president namin para sabihin na mage-email po ako sa mga prof ko. (Before I emailed, I also sent a message to our president to say that I will email my professors.)

CODE: use online learning applications (e.g., school learning management system (LMS), Siri, and Google Meet)

VERBATIM RESPONSE:

Kapag synchronous po ang gamit sa amin "Google meet" po. (We use Google Meet when conducting synchronous classes.)

Lahat po nasa LMS na tapos naka-synchronous classes po (All materials are uploaded in our LMS and we are having synchronous classes)

CODE: problems due to the low Mbps of Wi-Fi

VERBATIM RESPONSE:

May Wi-Fi kami pero hindi po ibig sabihin na stable na ang connection namin dahil may mga times na hindi kami maka-access ng internet, masyadong mabagal o wala kaming connection. (We have Wi-Fi but that does not mean that we have a stable connection because of the fact that there are times that we cannot access internet because it is too slow or we do not have connection at all.)

CODE: limited finances

VERBATIM RESPONSE:

Nagkaroon po ako ng problema sa WiFi yung sa signal pati sa pagfinance po dito. (I encountered problem with the WiFi signal and the financial support for it.)

CODE: Need devices to perform academic-related tasks (e.g., communication, attendance, output submission) and use assistive features. Device availability/ functionality

VERBATIM RESPONSE:

siyempre po "new world", di naman po gamun kadali maka-purchase ng laptop, gusto niya po (teacher) na next meeting may laptop na po (because it's a "new world"; it is not easy to purchase a laptop yet (the teacher) wanted me to have a laptop during our next meeting).

CODE: limited functionality

VERBATIM RESPONSE:

Isang laptop lang ang gamit naming magkapatid para sa online class, minsan magkasabay po ang class namin kaya kailangan kong gamitin ang ang phone ko para sa pag-aaral

(Me and my sibling only have one laptop for our online class and sometimes we have the same class time that is why I need to use my phone for studying.)

CODE: malfunctioning device

VERBATIM RESPONSE:

Nagka technical problem po ako lalo na sa mga gadget. Noong start po ng first term italagang hindi ko alam pano aayusin yung mic (I encountered technical problems particularly on my gadgets. During the start of first term, I did not know how to fix my mic and etc.)

CODE:	long synchronous classes were exhausting, but studying alone during asynchronous sessions was difficult	Ambivalence	Personal Factors	Factors that show students' thoughts and feelings towards flexible learning
VERBATIM RESPONSE:	<p><i>Yung synchronous classes po medyo mahirap lalo na kapag ang haba, tuloy-tuloy pero mahirap din pag limited lang ang synchronous class sa math mahirap po mag-aral mag-isa. (Synchronous class is challenging especially when it is too long but it is also hard to have limited synchronous class in mathematics because it is challenging to learn on our own.)</i></p>			
CODE:	studying at home increased autonomy, but home-related tasks were distracting			
VERBATIM RESPONSE:	<p><i>Nakakabitid din po ng independence...nakaupo lang ako sa bahay mag-isa para mag-aral at gawin yung mga activity nang ako lang.</i></p>			
	(It builds independence... I just sit at home alone to study and do the activities by myself.)			
	<p><i>...kasi po nung nagsstart na ang online class kamontit na ang oras ko para sa mga gawaing-bahay tapos minsan parang kailangan ko pang tapusin yung mga gawaing bahay bago ko maituloy ang requirements ko.</i></p>			

(...because when online class started I have lesser time to do our house chores and sometimes I need to finish our household chores before I will continue my requirement.)

CODE: familiarizing with online learning platforms was a struggle but freed from pressures of daily commuting and face-to-face interactions

VERBATIM RESPONSE:

Kasi po basic lang ang alam ko pagdating sa technology, talaga pong challenging sakin yun kasi nga po lahat ng activities nirequire kami gumamit ng app dapat may computer literacy... pero yung comfort naman... walang namapressure sa classroom, walang traffic, hindi na ako nastress paglate ng dating sa school at pag-uunwi din ng late na

(Since I have basic knowledge in technology, I found it very challenging because most of the activities requires applications and computer literacy, but the comfort... no one is pressuring me in a classroom, no traffic and stress when coming in late at school and when going home late)

CODE: studied device settings and features of applications (e.g. Facebook Messenger and Google Meet)

Need for Upskilling

VERBATIM RESPONSE:

Familiarize ko po ang sarili ko sa mga platforms na ginagamit din ng students ko sa online class like yung sa Messenger room po at sa Google Meet. (I made myself familiar with the platforms that my students use in online class such as Messenger room and Google Meet)

CODE: improved basic digital skills through trial and error

VERBATIM RESPONSE:

Naobluga po akong matutunan ang mga apps. nagtrial and error kami ni mama (I felt obliged to learn the applications on a trial and error basis with my mom)

CODE: practiced time-management and goal setting by having a to-do list for academic tasks, house chores, and self-care

VERBATIM RESPONSE:

Mahirap kasi ano sila po yung maraming pinapagawa kaya ina-adjust ko po yung oras ko. (It's difficult because they give us so many requirements, so I'm adjusting my time.)

CODE: applied problem-solving skills to independently comprehend complex subjects by reviewing teacher-provided instructional materials and doing extra research

VERBATIM RESPONSE:

hindi naman po lahat ng lessons na diniscuss ng professor namin e didiretso sa isip ko kaya kailangan kong mag-review, mag-aral at panoorin ulit ang recorded session para totally makaha ko... hindi din naman ako matuturuan ng parents ko dahil hindi naman sila ma ano sa mathematies pati si kaya ko hindi din naman alam ang pinag-aaralan ko kaya todo effort ako with the help of internet na rin.

(not all the lessons that was discussed by our professor will directly come to my mind. I need to review, learn and watch the recorded session again so that I will totally get it. My parents cannot teach me since they are not into mathematics and my older brother do not also know what I am studying so it is all my effort with the help of internet)

CODE: having a friend to help in navigating computer applications

Receptiveness Towards
Social Support

VERBAL RESPONSE:

Nagpapatulong na po sa classmates kang hindi na namin makutha (sometimes we ask help of my classmates if we can no longer get it.)

CODE: ask help from mother

VERBATIM RESPONSE:

Yung sa Filipino po puro tagalog kaya... "Mama ikaw talaga ang magbabasa sa akin nato " kasi kahit na basahin ng Siri ilang beses, di po talaga maintindihan kasi slang. ([Our readings] in Filipino is pure Tagalog so... "Mama, you're the one who will read it to me" because even if Siri reads it a few times, it is hard to understand because its pronounced with slang.)

CODE: fear of rejection might prevent other students with visual impairment to seek social support

VERBATIM RESPONSE:

Meron po kasing mga blind students na nahihiya po mag-approach sa teachers po. Feeling po nila mare-reject sila. (There are blind students who are shy to approach the teachers. They feel they will be rejected.)

CODE: disclosing condition led to receiving accommodation

VERBATIM RESPONSE:

Magse-set po siya ng deadline sa ibang kklase ko pero ako po pinapayagan niya na hindi ko ma-meet yung deadline kasi alam niya po na hindi ako pwedeng masyadong gumamit ng laptop. (The teacher will set a deadline for my other classmates but he allows me to not meet the deadline because the teacher knows that I can't use a laptop very much.)

Wala po akong sariling laptop para sa online class ko. Ngayon, mayroon na akong sariling tablet na ibinigay ng Project Tanglaw at talagang nakakatulong ito sa akin kapag mayroon akong kasabay na klase at mga asynchronous na gawain. (I do not have my own laptop for my online class.

Now, I have my own tablet that was given by Project Tanglaw and it really helps me when I have my synchronous class and asynchronous tasks.)

CODE: studying and doing academic requirements on screens led to eye strain, backaches, and headaches

Adverse Health
Consequences

VERBATIM RESPONSES:

Kasi isang mata ko na lang po yung nakakakita. tinanggal po yung buong left eye ko, yung right side po okay naman po yung paningin ko, mahirap pag online. Nahihirapan pa ko mag-focus sa mga klase ko dahil masyadong mahaba tapos sumasakit na po ang mata ko kapag maraming oras sa laptop, kahit nga yung ibang students na wala namang visual disability nagreklamo na din. (Because I can only see with one eye. My entire left eye was removed, but my vision on the right side is fine, online is hard. It is hard for me to focus during my classes because it is too long and my eye is getting hurt if I take a lot of time in laptop, even students that does not have visual disability complain about this.)

CODE: experience of excessive stress and anxiety

VERBATIM RESPONSE:

Sa group work, inaantay po nila yung gawa ko kaya inuuna ko pong gawin yung group works kesa sa individual kasi nahiya po ako na hiniyain nila yung gawa ko. (In group work, my classmates wait for my work. I prioritize doing group work over individual work because I was embarrassed to have them wait for my work.)

Naiistress po ako tuwing hindi gumagana ang gadget ko. (I actually became stressed everytime my gadget did not work well).

CODE: feeling isolated and overthinking

VERBATIM RESPONSE:

No'ng time pong yun, ang dami kong iniisip... tapos feeling ko mag-isa lang ako sa laban.

(That time I have a lot of things in my mind and I feel like I am alone in this battle.)

"Kasi po iniisip ko po na baka mahulitan sila sa akin" (I thought that they might be irritated whenever I ask for help).

Environmental factors (Implementation of Flexible Learning, Internet Stability, and Device Availability/Functionality)

Participants reported that teachers utilized synchronous and asynchronous modalities. Some preferred having extensive live synchronous discussions on complex topics, while some allotted academic consultations, students' self-paced learning, and accomplishment of academic requirements for asynchronous sessions. About the varied approaches of implementation, one participant explained, "*Meron po kasing mga subject na mas frequent po magkaron ng synchronous kaysa sa asynchronous. Yung iba po mas madalas magbigay ng exercises siguro depende na din po sa subject.*" (Some subjects frequently conduct synchronous classes more than asynchronous. There are subjects that often give exercises; maybe it depends on the subject.)

The online learning activities depended on the strength of the internet connection of both the teachers and the students. In a flexible learning approach during COVID-19, the internet was the primary means to obtain learning materials, interact with teachers and classmates, and submit academic tasks. Yet, all participants encountered connectivity problems that affected their online learning. Similarly, students preferred having durable, functional, and personally-owned devices with installed productivity applications for their online learning. One participant recounted the difficulty in having to find a laptop during the peak of COVID-19, "*siyempre po "new world", di naman po ganun kadali maka-purchase ng laptop, gusto niya po (teacher) na next meeting may laptop na po.*" (because it's a "new world," it is not easy to purchase a laptop yet (the teacher) wanted me to have a laptop during our next meeting). Indeed, due to the family's limited financial capacity, two participants endured device-related problems to complete their academic requirements.

Personal Factors (Ambivalence, Need for Upskilling, Receptiveness towards Social Support, and Adverse Health Consequences)

Students reflected on their thoughts and feelings towards flexible learning and how it affected their health. Students recognized the advantages and disadvantages of flexible learning. One participant described long hours of synchronous class as exhausting, but learning alone during asynchronous sessions could be a struggle. Another participant felt that studying at home increased his autonomy, but he became easily distracted by home-related concerns. Another participant found navigating through online learning platforms hard but enjoyed the freedom from the need to commute and the pressures of face-to-face classes.

Nevertheless, they adjusted and coped to thrive in the new learning environment. They realized that they needed to upskill. More than acquiring a good quality device and internet connection for studying, enhancing digital and self-management skills was essential to benefit from flexible learning. Two participants increased their confidence in using devices and online learning applications through practice and trial and error. The other two participants strategized to achieve their personal and academic goals.

Moreover, participants recognized that having visual impairment would require them to seek assistance from their teachers, classmates, friends, and parents. One (1) participant recalled, *“ako po yung nagsend ng question (sa mga professor), tapos sinasabi naman po nila na “If you have any questions feel free to ask” (I send questions (to my professors), and they assure me that if I have any questions, I can ask them freely). However, one may hesitate to disclose or admit they need support for different reasons. One (1) participant with partial blindness explained, “nababasa ko pa naman po yung mga reading materials, nababasa ko pa*

rin po yung mga presentation, may special feature naman sa computer na pwedeng i-zoom” (I can still read the reading materials and the presentations because my computer has a special feature that can zoom out the materials). On the other hand, one participant kept her condition from her professors and classmates. She explained: “*Kasi po inisip ko po na baka makulitan sila sa akin pag magpapatulong ako*” (I thought they might be irritated whenever I ask for help). She tried to perform like a regular student but eventually became exhausted. Needing mental health support, a conversation with a guidance counselor allowed her to realize that reaching out was the key to receiving help. When she disclosed her condition, her professors provided accommodation while the university granted her a personal device for studying.

Engaging with flexible learning affected participants’ physical and mental health. One student reported that due to the bulk of the content they had to cover, the teacher had to prolong their synchronous classes, “*kung mag extend po siya lunch time*” (a teacher extended classes taking away our lunch time). Due to excessive screen time, students with partial blindness suffered from eye strain. One student disclosed, “*hindi ako pwedeng masyadong gumamit ng laptop*” (I can’t stay long in front of my laptop), while the rest reported having backaches, headaches, excessive stress, and anxiety.

Student-Teacher Relationship

Four interview questions were asked to better understand the students’ lived experiences in student-teacher relationships. As a result, two emerging themes, instructional and motivational interactions, showed how student-teacher relationships transpired online. This is summarized in Table 3.

Table 3
Thematic Analysis on the Experience of Student-Teacher Relationship

Code and sample verbatim responses	Subthemes	Themes	Description of Themes
<p>CODE: There was a formal discussion in a typical classroom done virtually</p> <p>VERBATIM RESPONSE: <i>Every meeting para po siyang formal discussion. Parang typical na ano po classroom discussion. Magtuturo at magtatanong po kung sino ang may alam sa topic na yun. (Every meeting is like a formal discussion. It seems like a typical classroom discussion. A teacher will teach and ask who knows about that topic.)</i></p> <p>CODE: Informing professor when the transmission is unclear</p> <p>VERBATIM RESPONSE: <i>Since online, pag synchronous class kami parang ang lagi pong chine-check ni prof ay yung audio niya, yung Wi-Fi niya yun po. (Since online, when we have synchronous class, our prof seems to always check the audio and Wi-Fi connection.)</i></p> <p>CODE: Students are asked to turn off their microphones and cameras to prevent distractions except when reciting.</p> <p>VERBATIM RESPONSE:</p>	<p><i>Synchronous Class Interactions</i></p>	<p>Instructional Interactions</p>	<p>student-teacher relationship became a channel for instruction and how students perceived them.</p>

CODE: Being unable to relate with most of classmates

VERBATIM RESPONSE:

Noong first term, puro kami group tasks at nahhirapan ako dahil hindi ko ipinaalam sa professor at mga kaklase ko na may visual disability ako.

(During the first term, we have a lot of group tasks and it is hard for me because I did not inform my professor and my classmates that I have a visual disability.)

Nagkaproblema ako sa pagcommunicate sa classmates ko kasi ako na lang lagi ang mag-aadjust sa situation nila. (I encountered problem in communicating with my classmates because I had to adjust to their situation at all times.)

CODE: Limited interactions about personal life with classmates and teachers

VERBATIM RESPONSE:

Minsan po pag wala kaming lesson nakikipagkwentuhan po para mas maging comfortable po. (Sometimes, when the lesson is done, the teacher conversed with us to make us feel comfortable)

CODE: Teachers should ask what format will work

*Distribution of
Instructional Materials*

VERBATIM RESPONSE:

Informed po siya na blind po ako tapos tinanong niya din po kung anong format ng document yung mag work best sa akin. Tapos sabi ko po word format, natutawa naman po ako na ganun yung binigay niya sa akin ([The teacher] was informed that I am blind and [the teacher] also asked what document format would work best for me. Then I said word format, I was happy that that's what [the teacher] gave me)

CODE: Preference over physical or tactile materials like Braille

VERBATIM RESPONSE:

Natututo po talaga ako pag nagbabasa po ako gamit ang Braille (I really learn when I read through the use of Braille.)

CODE: Hard copy with simple and bigger font size

VERBATIM RESPONSE:

Siguro po sa mga Powerpoint po kahit na malalaking font po and kulay po... yung mga choice ng colors po sa PowerPoint yung font style po yung font size, makakatulong po yun sa amin.

(Maybe in PowerPoint, even with large fonts and colors... the choices of colors in PowerPoint, the font style, the font size, that will help us.)

Sana po may ibigay pa rin pong module next term kasi malaking tulong po yun sa akin pag nag-aaral po offline kahit na yung mga pabasa po online, malaking tulong po yung modules na binigay sa paggawa po ng ibang activities. (I hope there is still a module given next term because it is a big help to me when studying offline even if the readings are online, the modules given are a big help in doing other activities.)

CODE: Digital files that are readable by text-to-speech programs

VERBATIM RESPONSE:

Pero yung nangyayari po katulad ng isang prof ko po, nagpo-provide po siya ng audio books at yung isa pa pong application na "Text to Speech". (But what is happening is like a prof of mine, he provides audio books and another application called "Text to Speech".)

CODE: prepared materials that are customized for easy readability

Accommodation

VERBATIM RESPONSE:

Minsan po kasi kapag marami pong kulay yung ginagamit sa PowerPoint, nakakalito po kung ano yung dapat kong tingnan. Tulad po sa akin na isa lang yung mata na nakakakita masyo mahirap po kasi parang camera yung mata ko. Kapag may titingnan po ako na kailangan ifocus, lumalabo po yung iba (Sometimes when there are many colors used in PowerPoint, it's confusing what I should look at. It's like me with only one eye that can see, it's a bit difficult because my eye is like a camera. When I look at something that needs to be focused, the others blur.)

CODE: the teacher would share introductory videos and give pre-test before the discussion to facilitate learning

VERBATIM RESPONSE:

Merong po siyang pinapanauod na video na mismong related dun sa topic bago po siya magdiscuss dun. Parang may paunang test siya ganun pre-test parang sinusukat niya po muna yung kaalaman namin kung ano po yung nalalaman namin sa mismong topic na yun (Our teacher presents a video that is directly related to the topic before he discusses it. He conducts a pre-test to first measure our knowledge on that very topic).

CODE: materials were delivered at students' homes

VERBATIM RESPONSE:

Yung mga di-neliver po dito sa bahay, mas nagagamit ko kasi nahihirapan nga po ako kapag sa gadget po ako nagbabasa. (Those materials delivered here at home, I use them more because I have a hard time reading on a gadget.

CODE: grouped with regular students to accomplish tasks

VERBATIM RESPONSE:

Ginawa niya po na lahat ng activities niya ay by group dahil din po may estudyante siyang blind (The teacher made all the activities by group because she knows that she has a blind student)

*Teachers' Skills
Enhancement*

CODE: Openness to adjust from their conventional teaching approaches

VERBATIM RESPONSE:

Pag passionate po sila kaya po nila... yung paga-adjust po parang next na lang po yun sa pagiging passionate po. (If they are passionate they can... adjustment is like next to being passionate)

sa activities dapat hands on po para po makakapag-participate kami. (When giving activities, it should be hands-on so that we can participate)

Siguro po dapat teaching style po is verbal katulad po pag nagpe-present po ng PowerPoint., dapat po verbalized po para mas maintindihan namin what is stated dun sa PowerPoint. (Maybe the teaching style should be verbal like when presenting a PowerPoint, it should be more verbal so we can understand better what is stated in the PowerPoint.)

CODE: Need to improve social skills when relating with students with visual impairment

VERBATIM RESPONSE:

Number one skill po yung kakausapin kami kasi kahit na pare-pareho po kami na blind, magkakaiba pa rin naman po kami ng talent at skills at capacity (The number one skill is that they talk to us because even if we are similarly blind, we have differences in terms of our talents, skills, and capacity).

Patient po dapat yung teacher sa pag-antay ng mga ginagawa at saka maintindihan po yung kalagayan ko. (The teacher should be patient in waiting and understand my situation.)

CODE: Developing of assessment tools that are fit for students with visual impairment

VERBATIM RESPONSE:

Sa mga requirements po para po ma-accommodate yung capacity na kaya po namin, yung oras po ng mga deadlines gamun po lalo po sa online set up. Kaya ko naman po na gawin lahat ng pinapagawa nila pero yung oras lang po yung kalaban ko. (In terms of requirements, to accommodate our capacity, the setting of deadlines especially in the online set up. I can do everything they ask me to do but I raising against time.)

CODE: Familiarize on applications that students with visual impairment use when studying

VERBATIM RESPONSE:

Yung knowledge niya po sa different tools na ginagamit po naming mga visually-impaired tulad po ng braille, abacus, yung mga technology po na ginagamit namin, NVDA, or mga iba pang application tulad ng "Text to speech." Kung pag-aaralan naman po meron naman pong mga videos sa Youtube at kung paano po gamitin yun. (Their knowledge of the different tools that we, visually-impaired people use such as braille, abacus, and the technologies we use, like NVDA, or other applications such as "Text to speech." There are videos on Youtube that can teach how to use them.)

	Motivational Interactions	Care	
			student-teacher relationship became a medium to express care and encouragement to students which motivated them to study
CODE: very accommodating and friendly			
VERBATIM RESPONSE:			
			"very accommodating po and friendly ganun, bino-boost po yung confidence ko" (They are very accommodating and friendly, and they boost my confidence).
CODE: very oriented and considerate teachers			
VERBATIM RESPONSE:			
			Nagme-message po siya sakin na "naitintindihan ko ang katagayan mo. Sana itong online class ay hindi makasira sa isa mo pang mata. Ingatan mo yang mata mo." Parang naitintindihan ko po yung concern niya.
			(My teacher messages me that "I understand your situation. I hope this online class doesn't ruin your other eye. Take care of your eyes." I understand that he is concerned with me.)
CODE: approachable when asked			
VERBATIM RESPONSE:			
			pag may question po open naman po sila approachable naman po (they are approachable and open to questions)
CODE: caring and giving extra time to explain lesson			

VERBATIM RESPONSE:

Pag may kailangan po ako may direct contact po ako sa kanya, tapos pag may kailangan po akong i-clarify sa kanya iha-chat ko lang po siya tapos tatawagan niya na po ako. (When I need something, I have direct contact with [my professor], then when I need to clarify something with [my professor], I just send a chat and then [my professor] calls me.)

CODE: Giving of commendations

Encouragement

VERBATIM RESPONSE:

Nagsasabi po sila ng mga encouraging words. (They say encouraging words.)

Siguro po yung praise of words na "Magaling. Tama yung ginawa niyo (Maybe the verbal praises saying, "Excellent, you're doing it right.")

CODE: Appreciation of abilities and good class behavior

VERBATIM RESPONSE:

Merong naman pong iba na pinang-eencourage nila sa ibang students yung case ko. (There are [teachers] who make use of my story to encourage other students)

Sa tuwing sinasabihan ako sa klase ng prof ko na I did a great job, mas gusto ko pong mag-aral nang mas mabuti. Pag nirecognize yung effort naming students

kahit gaano pa yan kalit ngayong new modality, sobrang nakakatulong po talaga at nakakamotivate para sa aming mga students.

(Whenever my professor told me in class that I did a great job the more I want to study even harder. Recognizing the smallest effort of students in this new learning modality is very helpful and motivating for us, students.)

Instructional Interactions (Synchronous class interactions, Distribution of Instructional Materials, Accommodation, and Teachers' Skills Enhancement).

During flexible learning, participants described that their relationship with teachers primarily focused on how they would cover the course content and satisfy the course requirements. The participants perceived that their teachers treated them as regular students during synchronous classes despite their visual impairment. As they interacted, teachers set the structure, managed expectations, maintained discipline, and formed agreements with students. Since synchronous classes were allotted to discuss the course content and explain learning tasks, casual conversations about personal matters were reduced. Thus, establishing warm and close relationships with teachers and classmates became difficult for students.

Moreover, the participants asserted that adjustments must be made and their preferences be considered when teachers prepare instructional materials. Although most students preferred to use Braille, well-prepared instructional materials were appreciated. With students who have partial blindness, slides should have bigger font sizes and simpler font styles with fewer colors or designs. For students with total blindness, files in digital formats are preferred (e.g., slides supporting text-to-speech, e-books, and audiobooks).

Participants acknowledged the teachers' efforts to accommodate their special needs. Most liked how instructional materials were prepared, organized, and distributed. They hoped that this arrangement would persist after the pandemic. Since internet connections were unstable and that screen time should be lessened, one participant shared, "*Sana po may ibigay pa rin pong module next term kasi malaking tulong po yun sa akin pag nag-aaral po offline*" (I hope that modules will still be provided next term because it can help me learn while studying offline).

Aside from providing instructional materials, teachers also showed accommodation by monitoring students with visual impairments and made sure they could cope with lessons. Some teachers even scheduled meetings with the student's parents or shadow teachers to determine their progress and assistance needed. In their university, students with total blindness received an exclusive accommodation called a "buddy system," where teachers designate a regular student to assist with academic tasks and platform use concerns. Contrarily, participants felt neglected and disappointed by some teacher behaviors that showed disregard for their special needs, such as providing instructional materials and academic tasks that seemed favorable only to students with normal vision, delayed sending of recorded meetings, giving requirements with vague instructions and tight deadlines, and being unresponsive when they sought clarifications.

Participants perceived that teachers needed to enhance their skills to become more sensitive and responsive and foster positive relationships with students with visual impairment. For teachers' improvement, one participant asserted that teachers should know more about who their learners are. She explained, "*kasi kahit na pare-pareho po kami na blind, magkakaiba pa rin naman po kami ng talent at skills at capacity*" (even if we are similarly blind, we have differences in terms of our talents, skills, and capacity). They recommend their teachers to have improved social skills, deeper concern for their students' welfare, and develop appropriate assessment procedures. Teachers' familiarity with assistive applications used by students with visual impairment will also help them relate to their students and provide customized learning tasks and necessary accommodations.

Motivational Interactions (Care and Encouragement)

The two identified subthemes reflected how student-teacher relationships also became a medium to express care and encouragement to students. Generally, professors were perceived as considerate and welcoming. One participant said, “*Very oriented naman po and considerate yung mga teachers, approachable naman po sila ganun po*” (They are very oriented, considerate, and approachable). They felt cared for when teachers provided academic-related assistance and health advice. In contrast, students also recalled some inconsiderate and insensitive teacher behaviors that reduced their academic motivation, such as declining a student with total blindness to receive assistance from a shadow teacher, being unresponsive to queries, refusing to send instructional materials, and giving labels such as “*tanga*” (stupid).

Moreover, the participants felt motivated when teachers encouraged them. One participant mentioned, “*very accommodating po and friendly ganun, bino-boost po yung confidence ko*” (They are very accommodating and friendly, and they boost my confidence). Commendations boosted confidence and increased feelings of worth. They appreciated professors who noticed their good class behavior, such as being consistent in attending synchronous classes and being assertive. Two participants recalled being openly praised in class and used their stories to motivate regular students. One (1) appreciated this kind of recognition, while the other preferred that complements be communicated privately to avoid unnecessary attention from others.

Discussion

This section presents how the findings of the present study were compared and integrated with other studies. A conceptual model is also presented at the end to illustrate

how certain student and teacher behaviors can help students satisfy their autonomy, competence, and relatedness needs based on the Self-Determination Theory and to enhance the flexible learning and student-teacher relationship of students with visual impairment.

Flexible Learning

For college students with visual impairments, the flexible learning experience is shaped by environmental and personal factors. Environmental factors of flexible learning experience include teachers' manner of implementation, internet stability, and device availability/functionality, which seemed to be beyond their control. On the other hand, the personal factors include ambivalence, need for upskilling, receptiveness to seek social support, and adverse health consequences.

Despite the pandemic and shift to flexible learning, they experienced inclusion as they remained to be mainstreamed, and received instructional materials and academic requirements. Utilizing blended modalities, teachers used synchronous and asynchronous modalities to maximize students' learning and decide on the course design, development, and implementation process (Hodges et al., 2020; Perveen, 2016).

Since the implementation of blended modalities heavily relied on technology, digital equity was necessary but was difficult to ensure. Students were concerned about internet stability and device availability/functionality, as lacking either one or both could greatly disrupt learning. Fast and reliable internet connection, device ownership, and money to provide for these learning resources were common concerns for Filipino learners (Baticulon et al., 2021). Aside from inadequate access to the internet and digital devices, the performance of internet providers was ranked barely at the bottom half and hampered inclusive access to information (Dhawan, 2020; Hallare, 2020; Salac & Kim, 2016).

From the environmental factors, which they barely had any control over, the students were left to figure out how to cope with the learning plan designed by their teachers. Also, they would try to find solutions when their devices and the internet performed poorly. If none, they would accept the circumstance and do whatever they can. Experiencing flexible learning allowed them to reflect upon personal factors i.e., on how the experience affects their thoughts, feelings, physical health, and on what they can do. Because of challenges coming from environmental factors of flexible learning, the students developed ambivalence. Students enjoyed flexibility, freedom, comfort, and reduced pressure. Conversely, they felt hostile towards flexible learning. Aside from poor connectivity and lack of available/functional devices, they developed mental health concerns as they studied alone with longer screen time and home-related distractions. Students with partial blindness experienced headaches and eyestrain, making flexible learning even more strenuous. They were also prone to experience fatigue more severely than normally sighted adults (Schakel et al., 2019).

As students increased awareness and acceptance of their situation, they learned to cope with ambivalence and realize the need to upskill. Flexible learning promotes autonomy and empowers students to apply different learning strategies and develop new skills to solve personal problems (Cortes, 2020). In addition, students used strategies to improve their digital skills (e.g., navigating applications, websites, and devices) and self-management skills (e.g., time management and goal-setting). They sought social support from their parents, peers, teachers, and classmates. In this way, students relatively performed academically and practiced self-care.

Student-Teacher Relationship

In this study, the student-teacher relationship is composed of purposeful interactions that are mostly teacher-initiated to instruct and motivate the students. As a result, students with visual impairment are encouraged to learn and perform academically. Some students with visual impairments tend to hide their need for accommodation, shy away from seeking support, and experience physical and mental health concerns. People with disabilities are prone to mental health problems, struggle to perform fully, and need support, but often get left behind (Toquero, 2020b). When their worries and concerns are unattended, their autonomy could weaken, inhibiting their academic success.

Recognizing that students struggle in the sudden transition to flexible learning, teachers can maximize their relationship with their students so that it can become a channel for meaningful interactions that serve instructional and motivational purposes. Teachers facilitated synchronous classes and provided instructional materials and accommodation. They also expressed care and encouragement by being approachable and considerate by giving praises, compliments, and self-care reminders. Contrarily, students felt demotivated by some unaccommodating, inconsiderate, and unsupportive teachers. Thus, the students perceived that by increasing sensitivity, teachers could improve their skills when relating to teaching and responding to the needs of students with visual impairment. As a result, students are likely to learn more and develop a positive relationship with their teachers.

Having a positive student-teacher relationship could mitigate students' struggles with flexible learning. They felt reassured knowing that their teachers understood their condition and limitations. Teachers could create an ideal learning environment for students with visual impairment by

maximizing blended modalities through thorough planning and proper implementation (Perveen, 2016). Providing clear instructions and expectations could help students develop autonomy, self-direction, and independence as they could plan how to manage their time to study and accomplish their requirements.

Teachers could advocate for equity and inclusion by ensuring students receive proper treatment and accommodation. Aside from monitoring their progress, the provision of disability-specific accommodations such as having a shadow teacher and customized instructional materials for students with visual impairment and a buddy system for those with total blindness would likely decrease the tendency to be left behind and ensure that they receive learning opportunities like regular students (Stone et al., 2019).

Well-oriented and skilled teachers will likely develop positive student-teacher relationships and empower student autonomy, accessibility, and inclusion (Whitburn, 2014). In addition, teachers' familiarity with assistive technologies and specially adapted materials for people with visual impairment, initiating communications, and being responsive to consultations could guide them in instructional planning, customizing instructional materials, designing assessment procedures, and deciding on further accommodations.

Trained professionals will likely become more confident and unrestricted when interacting with students with visual impairments (Ajuwon et al., 2015). They could easily express care, encouragement, and supportiveness towards their students. In response, students were likely to feel valued and motivated to reach their academic goals. These could also increase their class engagement and self-determination skills (Cmar & Markoski, 2019). Therefore, teachers must reflect on their attitudes, verbalizations, and

behaviors towards these college students, ensuring that the relationships they form with them are positively nurturing for academic success.

Looking into the lived experiences of flexible learning of students with visual impairment during COVID-19, it is evident that despite their impairments and factors beyond their control, they proactively seek solutions to ensure that they can still fulfill their academic tasks. In terms of their student-teacher relationship experiences, students' narratives suggested that teachers play a more active role in forming a relationship with their students. Students are merely on the receiving end of instruction and motivation coming from their teachers.

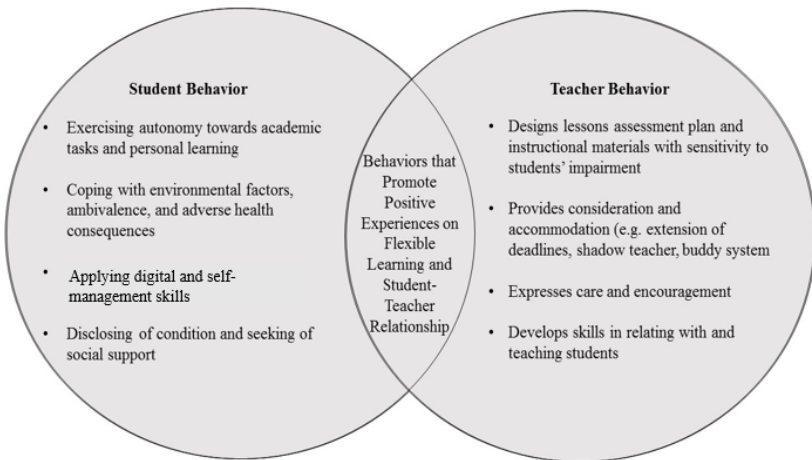
Integrating the grounding concepts in Self Determination Theory and drawing insights from the flexible learning and student-teacher relationship experiences of college students with visual impairment, it is evident that students and teachers both exemplify behaviors that satisfy three psychological needs such as autonomy, competence, and relatedness. Students exercised autonomy through time management, coping, and problem-solving. They become responsible for their learning and are able to manage concerns related to flexible learning. The students increased their competence and relatedness as they sought and received appropriate support from others, like their teachers, friends, and family members, to familiarize themselves with the technology used in flexible learning. Likewise, teachers could help students develop autonomy, competence, and relatedness by increasing sensitivity and providing needed instructional and motivational support.

About the research framework and purpose of the study, Figure 2 illustrates how the specific student and teacher behaviors identified from students' examined lived experiences can contribute to enhancing students' autonomy,

competence, and relatedness. When practiced by both teachers and students, their experience with flexible learning and student-teacher relationships can further improve (see Figure 2).

Figure 2

Student and Teacher Behaviors Promoting Positive Experiences on Flexible Learning and Student-Teacher Relationships



Conclusions and Recommendations

The study described the lived experience of mainstreamed college students with visual impairments on flexible learning and student-teacher relationships during the COVID-19 pandemic. This aimed to address the population and practical-knowledge gap as there is a scarcity of studies about the lives of students with visual impairment, which is crucial to determining practical recommendations responsive to their academic and special needs.

In this study, the flexible learning experience is shaped by environmental and personal factors. Students with visual impairments have no control over their teachers' delivery of lessons, internet stability, or device availability/functionality. Yet, they cope with ambivalence and exercise autonomy through upskilling and seeking social support to adjust to the demands of flexible learning despite its adverse health outcomes.

This study has made a timely and important contribution to the overall knowledge on inclusivity in higher education. By understanding the lived experiences of the students, the study identifies several practical and methodological implications and recommendations relevant to understanding and promoting inclusive educational practices for students with visual impairment.

A positive student-teacher relationship contributes to a better flexible learning experience. By checking on students' ability to cope, health conditions, and available resources, and by being sensitive to their needs, teachers can provide appropriate accommodation and support. Additionally, providing customized instructional materials and activities and utilizing assistive technologies could facilitate their academic progress. This way, teachers encourage the development of student autonomy, competence, and relatedness.

Moreover, they can ensure inclusion and equity when dealing with mainstreamed college students with visual impairment. Thus, to improve flexible learning delivery and foster positive student-teacher relationships, teacher training on disability awareness, appropriate teaching strategies, and familiarization on basic features of different assistive materials for people with visual impairment are recommended. University services and provisions can be revisited to ensure unity and equity. Collaborating with other institutions can also be explored to further equip teachers

with relevant specialized skills when engaging with college students and create a more vibrant and inclusive learning community.

The findings derived from this study were solely based on the participants' responses during the interview. The sample size was small, and its findings were not generalizable to all mainstream college students with visual impairments. Future researchers may consider increasing the number of participants, utilizing the triangulation technique, case study approach, or quantitative measures.

Moreover, conducting a post-pandemic study in the context of flexible learning and student-teacher relationships is recommended to provide research-based evidence that will guide the development of inclusive academic policies for college students with visual impairment and perform a comprehensive needs assessment that would help university administrators to develop programs that will support their academic progress and enhance their overall university life.



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