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Negotiating Visibility: Mediating Presence through Zoom Camera Choices in Post-Secondary Students during COVID-19

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Abstract: Students at a large and socially diverse urban university completed an anonymous survey examining online learning experiences during the COVID-19 pandemic with an emphasis on decisions to keep their cameras on or off during synchronous class. The 505 student respondents used 7-point scales to assess their school performance and everyday life experiences during the pandemic, general classroom values, pre-pandemic and current pandemic experiences, technological proficiencies related to Zoom, and camera on/off attitudes, as well as the online behavior of professors, and the role of social media in their everyday lives. The findings underscored two motivations underlying school engagement. Students could be motivated by a need for belonging involving authentic self-presentation while experiencing the emotional presence of others, and/or be instrumentally motivated by a need to perform well and advance their careers. The importance of professors creating a safe online space to foster a sense of belonging was highlighted. Finally, the findings show that feelings about having one's camera on or off during online classes are related to everyday social media experiences. The social-emotional and pragmatic aspects of university education are complementary facets of a university experience.

Keywords: COVID-19; camera on/off; belongingness; Zoom fatigue; safe online space; social media

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Citation: Cupchik, G.C.; Rebello, C.B.; Albar, R.; Cocunato, J.; Cupchik, E.; Ignacio, A.; Faubert, E. Negotiating Visibility: Mediating Presence through Zoom Camera Choices in Post-Secondary Students during COVID-19. *Societies* **2024**, *14*, 126. https://doi.org/10.3390/soc14070126

Academic Editor: Gregor Wolbring

Received: 5 June 2024
Revised: 9 July 2024
Accepted: 15 July 2024
Published: 18 July 2024

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1. Introduction

The Chinese logogram representing the word "crisis", 危机, embodies complementary sides of the challenges posed by the COVID-19 pandemic; "danger" or "risk" and "opportunity". Prior to the COVID-19 pandemic, universities experimented with online courses that provided opportunities for students to attend lectures remotely. With the onset of the pandemic, some (sufficiently funded) universities switched to online teaching. While this helped mitigate the "danger" or "risk" of having students and teachers in close proximity, it also provided an "opportunity" to learn about the implications of giving students the power to have their cameras on or off, especially when universities cannot mandate "camera on". In smaller seminar-type classes, this meant that student participation became a two-way street, with expectations regarding their participation through presentations or questions to the lecturers. Students became primarily passive recipients of information in larger lecture-type classes but could be visible to both teachers and classmates. The absence of an official background posed a problem for students who may not want to have either their faces or lived-spaces publicly shared. Accordingly, the pandemic

"crisis" provided an occasion to explore the dynamics surrounding decisions to be visibly present during classes.

The pandemic forced a fundamental change in the delivery of course material in educational institutions. In the Canadian post-secondary system, professors went from lecturing in front of classrooms to lecturing in front of a camera. Students and faculty transitioned unexpectedly from a traditional environment for education and socializing to a single personal space that became a trademark of life within the COVID-19 pandemic. Many universities settled on two major forms of online learning: synchronous and asynchronous. Asynchronous classes involved pre-recorded material that students could watch at their own pace, with no opportunity to discuss the material with professors in-lecture. This offered flexibility for students in various time zones and for those with conflicting schedules involving classes or work. Synchronous classes occurred in real time so students could discuss material with professors and classmates. However, many classes struggled to transition online, thereby adversely affecting graduation plans, and students from different times zones were challenged to attend classes remotely.

Negotiating visibility through choices regarding camera on or off and the experience of belonging in a classroom are fundamental themes in this project. The distance imposed on students, because of the onset of remote learning via the Zoom platform, exposed fundamental issues about how students relate to school and everyday life. The realities of public presence versus private life become paramount in part because of socio-economic inequities. The fact that students could look each other up on social media, in a hidden way, contributed to potential self-consciousness. All of this was exacerbated by the presence of everyday social media platforms and the diverse ways that students are exposed. This project is about the experience of presence in a remote classroom setting during the age of social media. It does not stop with the abating of pandemic challenges. The decentralization of workspaces and diffusion of the social world have been by-products of isolation forced upon all inside and outside university settings.

The particular focus of this student-initiated project is related to decisions about having one's camera on or off in remote education. In accordance with university policy, professors could not mandate that students keep their cameras on. Students had control over their visibility, choosing whether to appear and the kind of background they preferred. There were many reasons why students might decide to keep their cameras on or off. There could be implicit group pressure favoring having cameras on. On the other hand, students might choose to keep their cameras off because of concerns about increased visibility, feeling uncomfortable with the possibility that others could consistently see them or look (i.e., gaze) at them [1]. While students generally faced the instructor in traditional classrooms, they could look at each other all the time in the online format [1]. Some students felt unprepared to be seen by others (were not "camera ready") because they did not have time to shower, apply their makeup, or style their hair [2].

Castelli and Sarvary [3] found that, if everyone else had their cameras off, students were more likely to turn off theirs as well. Other students were multi-taskers and would rather not be seen eating, lying in bed, walking away from the camera, tending to a family member, completing household chores, answering emails, or browsing the internet [1]. Multi-tasking is more common when students are disengaged or uninterested in the course material. Also, being in Zoom meetings for extended periods of time, such as several hours of online classes per day, is cognitively and mentally exhausting. This feeling is referred to as "Zoom fatigue" [4–6]. Bailenson [7] identified four causes for this syndrome: (1) the unnatural use of vision; (2) higher cognitive load; (3) more opportunity for self-criticism; and (4) reduced ability to move and gesture. Ongoing eye-gaze with classmates, casual acquaintances, and coworkers may provide distraction and lower cognitive ability to stay on task. It is unclear as to whether a "mirror" effect, caused by seeing oneself on camera for long periods of time, produces a negative effect and affects self-evaluation [7]. Engaging in online communication is more cognitively exhausting compared with typical in-person discussions.

The move online has also created video classism, as students voiced concerns about their socioeconomic status being visible and broadcast [8]. Poor access to high-quality internet connectivity, due to limited bandwidth coverage and other inequities in access to technology in different countries, gives some students no choice but to turn off their webcam [1,3,9]. Finally, issues of privacy were raised with cyberbullying and deep fakes, where digital technology is used to create composite media nearly indistinguishable from reality, making students all too aware of the potential for other classmates to record or take unwanted pictures that can be used inappropriately on social media [3,10]. In higher education settings, the rush for institutions to contract online proctoring companies exacerbated the concerns on the surveillance and privacy of students [11].

Zoom has recognized the need for user privacy and thus introduced features such as blurred backdrops and insertable backgrounds. Arguments for keeping cameras on have come mainly from teachers who, in a typical in-class setting, rely on visual cues and body language to see how their material is being received [8,12]. Student engagement has often been measured through in-class visibility and participation, and in the steep learning curve to online education, many teachers looked for that same feedback [13]. A study at Cornell University in the United States found that cameras allowed for communication in isolated spaces while unencumbered by masks, and students insisted "that being able to hear and see each other in real-time helped construct a 'more complete picture' of their peers" [3] (p. 3567).

Before the COVID-19 pandemic, online learning was shown to be effective in higher education because it facilitates interactions with classmates and teaching staff, allows students to learn asynchronously and anywhere, and virtual learning materials can be freely accessed [14]. However, the pandemic brought about several unique challenges to the successful implementation of wholly online learning, such as the sudden and unprepared transition for both learners and teachers, the lack of personal interactions due to social distancing policies, and increased workload [15,16]. A systematic review by Meng et al. (2024) identified factors that negatively or positively affected online learning effectiveness during the pandemic, including infrastructure factors (e.g., internet connectivity, accessibility of digital devices), instructional factors (e.g., course design, learning interaction, assignments), the lack of social interaction, negative emotions caused by the pandemic and school lockdown, flexibility, and convenience [17].

The transition to online emergency learning was rushed and time-limited for many higher education institutions; therefore, teaching staff were left with little time or support from their institution to adapt and create sound pedagogical plans. A number of online emergency learning approaches have been criticized for not adhering to best pedagogical practices and research [18]. This unprepared transition to online emergency learning, particularly to educational technology and online teaching, was significantly likely to hurt students' ability to adapt as well as their well-being. Consequently, many student bodies reported feeling lonely and disconnected from the campus community, being less engaged with the course materials, and their academic performance and well-being were negatively impacted [15,19]. As new technologies become available, new learning methods become possible and more students can become engaged if technologies are used in strategic ways.

In this study, we address the negotiation of visibility that students can determine online, as they are no longer required to be fully visible in class. How can a supportive environment be provided in an online education context? The reliance on in-person environments can pose challenges that create confusion in the switch to online methods, as seen during the COVID-19 pandemic. Learning from home also has potential risks because the environment may be discouraging, distracting, or unsafe.

The focus of the current study was on a contrast between student concerns regarding performance in university courses contrasted with the desire for face-to-face interaction in the classroom setting at the university. To that end, a series of measures were created by the research team to address student goals and needs, classroom experiences before and during the pandemic, computer skills related to lectures, as well as motives

for engaging with social media. It was assumed that these motives would impact student experiences during the shift to remote learning, particularly for students who favored in-class experiences.

2. Materials and Methods

2.1. Samples and Data Collection

A group of 13,164 university students were invited to participate in a "voluntary survey examining individual online learning experiences and ways of improving them following the COVID-19 pandemic". Students received three reminders during a one-month period in March 2022 and 505 completed the survey anonymously. The resulting sample comprised 329 students identifying as female, 154 males, as well as 13 who identified as transgender or non-binary (nine chose "other" or "prefer not to answer"). In terms of year of study, there were 162 in their first year, 109 in their second, 110 in their third, and 124 in their fourth and beyond. Among the student sample, 304 were domestic, 78 were permanent residents, 94 were international students attending classes within the country, and 29 were attending from their home countries. From the perspective of time zone, 398 were in the Eastern Standard Time zone, 67 were 10.5 or 12 h away, and 40 were between 1 and 6 h removed from the university. In response to a question about the last time they visited the campus, 49 never had, 100 before the pandemic, and 356 during the pandemic. The sample comprised 204 self-identifying as Asian, 107 as South Asian, 78 as White, 27 as Black (from Africa or the Caribbean), 12 as Hispanic, 10 as Arab, 36 as mixed race, and 30 as not listed or "prefer not to answer".

2.2. Instrument

The survey was developed during the pandemic by a team of undergraduate students mentored by a professor. Measures and individual questions were developed over a series of meetings to capture their experiences in online classes along with their recollection of experiences prior to the pandemic. In addition to the demographic information described above, there were nine sections requiring answers using Likert-type 7-point scales (see Appendix A). These sections concerned: Pandemic School Performance and Everyday Life (9 items), General Classroom Values (6 items), Pre-Pandemic Classroom Experience (8 items), Current Pandemic Experience (11 items), Technological Proficiencies (4 items), Camera On (18 items), Camera Off (6 items), and Online Behavior of Professors During the Pandemic (6 items). A separate section asked 13 questions about the role of social media in the participating students' everyday lives.

2.3. Data Analysis

There were three steps in the data analysis performed via SPSS statistical software (version 29). First, factor analyses were conducted for each part of the survey to determine whether the questions could be grouped into clusters sharing qualities in common that could then be labeled. Second, regression analyses were conducted to determine which factors related to school experiences could best predict school performance and experiences in everyday life during the pandemic. Third, correlations were then calculated to build a bridge between factors representing university experiences and those associated with social media usage.

3. Results

3.1. Overview

The COVID-19 pandemic provided an opportunity to explore what happens when students and professors are forced by a health crisis and university policy to switch to online learning. The voluntary survey, sent to students by the Office of the Registrar, provides insights that go beyond the pandemic to online learning as an option during the post-pandemic period. The separate measures in the survey encompassed: (1) Pandemic school performance and everyday life, (2) general classroom values, (3) pre-pandemic experience

during in-person classes, (4) current pandemic experience, (5) technical proficiencies with media, (6) camera on and (7) camera off decisions, (8) professor's behavior online during the pandemic, as well as (9) social media use outside the classroom.

3.2. Factor Analyses

3.2.1. Pandemic School Performance and Everyday Life

A central focus of this project was on the effects of the pandemic on school performance as well as a student's ability to manage everyday life, and nine questions focused on these issues (see Table 1). A factor analysis with Varimax rotation was conducted and two factors were derived with Eigenvalues above 1.00 (the minimal criterion for inclusion), accounting for 32.7% and 32.4% of the total 65.13% variance. All questions included in each factor have loadings (negative or positive) of 0.50 or greater and a minus (−) attached to a scale means that it is negatively correlated with the factor so that it should be read in reverse with scores closer to 1 on the 7-point scale given greater importance. The naming of factors was a collaborative process for the research team and an effort was made to capture a process underlying or shared by the relevant questions with loadings of + or = 0.50.

Table 1. Pandemic performance and everyday life.

Factors and Eigenvalues	Items	Loadings
(1) Clear Boundaries 1.90	To what extent do you feel there are clear boundaries between your school life and home life?	0.89
	To what extent do you feel there are clear boundaries between your school life and work life?	0.86
(2) Enhanced Online Performance 1.36	Do you feel that your grades increased during the course of online school compared to before the pandemic?	0.77
	Did you find it easier to complete your assignments during online school?	−0.75
	How comfortable do you feel taking exams online compared to in-person?	0.67

Factor 1, *Clear Boundaries*, reflects the importance of keeping careful boundaries between school and home life (0.89), as well as between school and work life (0.86). It bears noting, in passing, that faculty and administration at the university face the same challenges as workdays spill over into personal or family time. Factor 2, *Enhanced Online Performance*, reveals that students felt their grades increased during the pandemic (0.77), found it easier to complete assignments (−0.75), and were more comfortable taking exams online compared to in-person (0.67). The complementary themes of constraints (challenges regarding boundaries) and opportunities (to study without distraction) during the crisis are highlighted by these two factors.

3.2.2. General Classroom Values

The six questions concerned specific values associated with attending classes and the atmosphere created in such a collective setting prior to the pandemic. Two factors were derived from a factor analysis, using Varimax rotation, with Eigenvalues greater than 1.00 that accounted for 48.99% and 38.91% of the total 80.88% of the variance (see Table 2). Factor 1, labeled *Affective Connection*, was based on three questions reflecting presence and the importance of seeing someone's facial expressions (0.93), observing body language (0.93), or hearing tone of voice (0.83) when interacting with others either in-person or in online classes. Factor 2 was labeled *Diverse Atmosphere* based on two items related to the importance of diversity in classes (0.88) and co-creating a comfortable atmosphere in class (0.86)

to optimize education and learning. These factors are consistent with a university campus in a large city defined by its diversity and emphasis on inclusion.

Table 2. Classroom values.

Factors and Eigenvalues	Items	Loadings
(1) Affective Connection 2.81	How important is it for you to see someone's facial expressions when interacting with them in class, either in-person or online?	0.93
	How important is it for you to see someone's body language when interacting with them in class, either in-person or online?	0.93
	How important is it for you to hear someone's tone of voice when interacting with them in class, either in-person or online?	0.83
(2) Diverse Atmosphere 1.24	How important is diversity in your classes to you?	0.88
	How important is it to co-create a comfortable atmosphere in the classroom to optimize education and learning?	0.86

3.2.3. Pre-Pandemic Experience during In-Person Classes

A related series of eight questions examined the experience of presence and connection with others during in-person classes prior to the pandemic. Two factors emerged from the factor analysis with Eigenvalues above 1.00, accounting for 32.6% and 31.1% of the total 62.7% variance, respectively (see Table 3). Factor 1, *Authentic Connection*, had a subjective quality and was labeled based on three questions concerning the importance of class atmosphere (0.87), authentically presenting oneself through voice tone and facial expressions during interactions (0.84), and feeling connected to the classroom experience (0.53). Factor 2, *In-person Attendance*, concerned objective facts related to attending lectures, office hours, or tutorials. The *Authentic Connection* factor combines the two general classroom values factors described above, *Affective Connection* and *Diverse Atmosphere*, whereas *In-person Attendance* provides a link to the pragmatics of active presence in the university.

Table 3. Pre-pandemic experience.

Factors and Eigenvalues	Items	Loadings
(1) Authentic Connection 2.34	How important was the class atmosphere before the pandemic?	0.87
	How important was it to authentically present yourself-through voice, tone, facial expressions-in your interactions during in-person classes?	0.84
	How connected did you feel from the classroom experience before COVID-19?	0.66
(2) In-Person Atmosphere 1.42	How often did you attend in-person lectures? (i.e., not [virtually])	0.87
	How often did you attend in-person tutorials? (i.e., not [virtually])	0.86
	How often did you attend in-person office hours?	0.53

3.2.4. Current Pandemic Experience

A series of 11 questions pertained to student online learning experiences during the pandemic and three factors emerged with Eigenvalues greater than 1.00, accounting for 26.64%, 21.56%, and 17.03% of the total 65.23% variance (see Table 4). The first factor, *Actively Engaged*, concerned participating in online synchronous classes (0.85), attending online office hours (0.77), and authentically representing oneself though body language, tone, or facial expressions (0.72). The second factor, *Committed Attendance*, pertained to attending online synchronous lectures (0.86) and office hours (0.86). The third, a very interesting factor, *Comfortably Detached*, combined the feeling that having one's camera off increased attention span during online lectures along with (0.74) not feeling uncomfortable in large online classes (−0.72). Note the negative value associated with −0.72 which implies that the scale should be read inversely with numbers closer to 1 on the 7-point scale having priority (i.e., *not* uncomfortable). The first two factors echo those involved in the pre-pandemic experience, while the *Comfortably Detached* factor refers to enhanced focus fostered by the absence of distraction due to the physical presence of others.

Table 4. Current pandemic experience.

Factors and Eigenvalues	Items	Loadings
(1) Actively Engaged 1.87	How often do you participate (ex. speaking out loud) during online synchronous classes?	0.85
	How often do you attend online synchronous office hours?	0.77
	To what extent is it important to authentically present yourself—through body language, tone, facial expressions—in your interactions during online classes?	0.72
(2) Committed Online Attendance 1.60	How often do you attend online synchronous lectures?	0.86
	How often do you attend online synchronous tutorials?	0.86
(3) Comfortably Detached 1.10	Do you find that having your camera off increases your attention span during online lectures?	0.74
	Feeling comfortable in larger online classes.	−0.72

3.2.5. Technical Proficiencies

Four questions addressed technical proficiencies that were relevant to engaging in online class learning (see Table 5). Two factors emerged with Eigenvalues above 1.00, accounting for 37.52% and 34.36%, respectively, of the total 71.88% variance. Factor 1, *Technical Competence*, underscores the importance of having control over one's camera while on Zoom (0.87) and having Zoom-related skills (0.85). Factor 2, *Technical Fatigue*, encompassed experiencing Zoom fatigue (0.84) and network connectivity problems (0.81) while using Zoom. These are the two faces of online education: relevant skills and burnout. Problems with connectivity and related bandwidth may be particularly relevant in developing countries.

Table 5. Technological proficiencies.

Factors and Eigenvalues	Items	Loadings
(1) Technical Competence 1.57	How important is it for you to feel like you have control over your camera being on or off while on Zoom?	0.87
	How technically knowledgeable are you with reference to Zoom-related skills (or other online meeting platforms)?	0.85
(2) Technical Fatigue 1.31	How often do you experience Zoom fatigue?	0.84
	Do you experience Wi-Fi or network connectivity issues when using Zoom? (i.e., slows down/disrupts internet connection)	0.81

3.2.6. Camera On

Eighteen questions concerned matters surrounding having one's camera on (see Table 6). Four factors go right to the heart of experiences during online synchronous classes. These factors, with Eigenvalues above 1.00, accounted for 21.83%, 13.99%, 13.22%, and 11.03% of the 60.06% of the total variance. Factor 1, labeled *Self-Consciously Anxious*, encompassed six questions relating to worry about being judged by others with one's camera on (0.80), feeling that everybody is looking at you (0.73), feeling self-conscious while being highlighted when speaking (0.71), paying more attention to one's own screen (−66), being a focal point while not aware (0.65), and being more noticeable in a Zoom frame (0.59). Universities do not necessarily appreciate stresses that students can experience in online synchronous classroom experiences. Factor 2, *Online Conformity*, encompassed three questions relating to keeping one's camera on if others do so (0.82), more so in a small online class (0.79), and keeping one's camera on if there were a standardized university background (0.73). Factor 3, *Social Exposure*, reflects a concern that others are looking you up on social media (0.77), paying more attention to the screens of other students (0.66), looking them up on social media (0.56), and feeling some pressure to have one's camera on (0.54). Finally, Factor 4, *Privacy Concerns*, relates to being sensitive to the location where one is viewing the class (0.78) and family members or pets interrupting the class (0.69). The *Self-Consciously Anxious* and *Social Exposure* factors remind us of challenges posed to self and other awareness during an era when social media practices can invade the classroom.

3.2.7. Camera Off

The camera off section comprised six questions and yielded two factors with Eigenvalues greater than 1.00, accounting for 40.97% and 28.55% of the total 69.51% variance (see Table 7). Factor 1, *Insecure Judgment*, concerns judging others (0.87) or being concerned about being judged by others for having one's camera off (0.87). Factor 2, labeled *Camera Off Enhances Focus*, was very interesting because it combined students being influenced by others to turn their cameras off (0.82), while having a camera off enhanced focus on events going on in class (0.65). The *Insecure Judgment* factor is closely related to the emotionally loaded themes associated with being *Self-Consciously Anxious* while having one's camera on. The *Camera Off Enhances Focus* factor addresses the potential pragmatic value whereby having one's camera off diminishes potentially distracting concerns and activities.

Table 6. Camera on.

Factors and Eigenvalues	Items	Loadings
(1) Self-Consciously Anxious 3.84	Are you worried about being judged by others when your camera is on (i.e., looking silly/doing something silly, worrying about looks/weight, etc.)?	0.80
	Do you feel that everybody in the online class is looking at you?	0.73
	Do you feel self-conscious when you are highlighted while speaking during online classes?	0.71
	When your camera is on, do you pay more attention to your own screen rather than the professor's screen? (1 = own screen, 7 = professor's screen)	−0.66
	Are you concerned that someone could make you the focal point on their zoom screen without you being aware?	0.65
	Do you feel that being in a "Zoom frame" (we're all in little boxes) makes you more noticeable when your camera is on?	0.59
(2) Online Conformity 2.56	Does other people having their camera on influence your decision to turn yours on?	0.82
	Are you more inclined to keep your camera on in a small online class?	0.79
	How often would you turn your camera on if all students were given a standardized [campus] background for online classes?	0.73
(3) Social Exposure 1.48	How often are you concerned with other people in your class looking you up on social media?	0.77
	When your camera is on, you pay more attention to the screens of other students who are participating.	0.66
	How often do you look up other people in your class on social media?	0.56
	How much implicit pressure is there for you to have your camera on?	0.54
(4) Privacy Concerns in Life 1.13	Are you sensitive to the location (i.e., bedroom, living room, kitchen) in which you are viewing the class when your camera is on?	0.78
	To what extent are you concerned with privacy issues when your camera is on? (i.e., parents/family members could barge in at any moment, etc.)	0.69

Table 7. Camera off.

Factors and Eigenvalues	Items	Loadings
(1) Insecure Judgment 1.68	To what extent do you judge other people for choosing to have their cameras off?	0.87
	To what extent are you concerned about being judged by others for choosing to have your camera off?	0.87
(2) Camera-Off Enhances Focus 1.10	Does other people having their camera off influence your decision to turn your camera off?	0.82
	To what extent do you focus on events in the class when your camera is off?	0.65

3.2.8. Online Professor's Behavior during the Pandemic

Student responses to these six questions are of particular importance because they address how a professor's actions can set the tone for classroom success (see Table 8). Two factors were found with Eigenvalues above 1.00, accounting for 28.65% and 28.24% of the total 56.89% variance. The first factor, *Insensitive Professors*, concerned professors who failed to give students a break during long synchronous classes (0.75), keeping their cameras off during office hours (0.75), and the importance of professors seeing students so they can determine how well they are communicating with them (0.50). Factor 2, *Professor's Accountability*, recognizes the diversity of teaching styles (0.82) and the importance of their creating an inclusive atmosphere in which students feel comfortable and respected during online classes or office hours (0.76). These two factors underscore the responsibilities of professors who can adversely affect student experiences by being insensitive to them or enhance the experience by fostering a sense of belonging. Of course, these factors go beyond the pandemic to address respectful and inclusive behavior both inside and outside the classroom.

Table 8. Professor's behavior during the pandemic.

Factors and Eigenvalues	Items	Loadings
(1) Insensitive Professors 1.58	Do you find that professors fail to give you a break during 2–3 h online synchronous lectures?	0.75
	Have you noticed professors keeping their cameras off during the pandemic?	0.75
	Is it important for professors to be able to see you online, so they can determine how well they're communicating?	0.50
(2) Professor's Accountability 1.27	To what extent do professors in various disciplines approach online teaching differently?	0.82
	Is it the role of the professor to make you feel comfortable and respected during online classes or office hours?	0.76

3.3. Regression Analyses Predicting Self-Rated School Performance and Adaptation in Everyday Life

A primary goal of the study was to determine how academic and social factors could influence fundamental aspects of the learning experience. Accordingly, the focus was on two aspects of school experiences: the presence of "clear boundaries" and "enhanced on-

line performance" associated with pandemic school performance and everyday life questions. Recall that "clear boundaries" pertained to relations between school and home life as well as work life. Clearly, this factor applies to students. It would be valuable to conduct a separate study on the experiences of teachers of different kinds in various institutions. In contrast, "enhanced performance" pertained to the students' perceptions that it was easier to complete assignments, take exams, and enjoy greater success in online learning.

Accordingly, two stepwise regression analyses were conducted treating "clear boundaries" and "enhanced online performance" factors as criterion (i.e., dependent) variables and factors representing the other measures as predictor (i.e., independent) variables. The *F* statistic shows how predictor variables affect dependent measures, in this case, "clear boundaries" and "enhanced performance". A significant *F* statistic implies that a group of factors related to school experiences successfully predict either the two pandemic school performance and everyday life factors.

3.3.1. School Performance Factor Two: Enhanced Online Performance

A highly significant model, $F(17, 487) = 17.22$, $p < 0.001$, provides insight into factors that either enhance or diminish performance from a student's perspective during online classes (see Table 9). Students generally felt their performance was enhanced when they were *Committed to Online Attendance* (t = 3.40) and *Comfortably Detached* (t = 4.05) during large synchronous lectures. *Technical Competence* (t = 3.21) also played a positive role, while *Technical Fatigue* (t = −5.30) diminished performance. On the university's side, *Professor's Accountability* (t = 2.74), involving diverse teaching approaches and creating an inclusive class atmosphere, was also deemed important to enhance performance. The findings remind us that students have needs of belonging and social inclusion that go beyond academic performance.

Table 9. Regression analysis of variables predicting "enhanced online performance" (school performance Factor 2) scores.

Variable	B	t	*p*
Current Pandemic Experience			
(2) Committed Online Attendance	0.16	3.40	<0.001
(3) Comfortably Detached	0.18	4.05	<0.001
Technological Proficiencies			
(1) Technical Competence	0.18	3.21	<0.001
(2) Technical Fatigue	−0.22	−5.30	<0.001
Classroom Values			
(1) Affective Connection	−0.08	−2.01	<0.05
Pre-Pandemic Experience			
(1) Authentic Connection	−0.11	−2.52	<0.01
Camera On			
(1) Self-Consciously Anxious	0.11	2.79	<0.01
Professor's Behavior During the Pandemic			
(2) Technical Fatigue	0.13	2.74	0.01

Note. β = standardized regression coefficients.

Students whose general classroom values encompassed *Affective Connection* (t = −2.01) felt that their performance in online classes diminished during the pandemic. These are students who value the importance of seeing someone's facial expressions, observing body language, or hearing the tone of voice when interacting with others. The same adverse effect was found for students whose pre-pandemic experiences emphasized *Authentic Connection* (t = −2.52), related to facial expressions and voice tone during interactions while feeling connected to the classroom atmosphere. Clearly, some students felt that the absence of first-person contact in a classroom setting adversely affected their school performance.

In relation to what might be considered personality variables, *Self-Consciously Anxious* (t = 2.79) students felt their performance was enhanced in online classes even when the

cameras were on. This reminds us that students have different needs and those who are socially anxious can feel more positive about their academic performance when attending classes remotely.

3.3.2. School Performance Factor One: Clear Boundaries

A significant model was derived, $F(17, 487) = 4.56$, $p < 0.001$, demonstrating the impact of factors predicting "clear boundaries between school and everyday life" (see Table 10). As was observed in the first regression model, two factors related to current pandemic experience figured prominently in this model. Clear boundaries were enhanced by *Committed Online Attendance* (t = 2.44) to synchronous lectures and office hours as well as feeling *Comfortably Detached* so that having one's camera off increased attention span during large synchronous online classes (t = 2.20). Accordingly, students were committed to attending lectures while at the same time being able to detach from the classroom. *Technical Fatigue* (t = −3.74) had a particularly adverse effect by diminishing clear boundaries. This highlights the importance of strategic planning and a proper attitude when it comes to maintaining a balanced lifestyle.

Table 10. Regression analysis of variables predicting "clear boundaries" (school performance Factor 1) scores.

Variable	B	t	*p*
Current Pandemic Experience			
(2) Committed Online Attendance	0.14	2.44	<0.02
(3) Comfortably Detached	0.11	2.20	<0.03
Technological Proficiencies			
(2) Technical Fatigue	−0.18	−3.74	<0.001

Note. β = standardized regression coefficients.

3.4. Social Media in Everyday Life

3.4.1. Factor Analysis

The study proceeded on the assumption that attitudes toward online classes during a pandemic would be influenced or shaped by more common social media experiences. Accordingly, a series of 13 questions were developed to capture everyday experiences with social media. Three factors emerged from a factor analysis of responses to the 13 items which looked at engagement and concerns about social media (see Table 11). The first factor, *Expressive Escapism*, encompassed a "temporary escape from everyday life" (0.80), finding it easier "to share feelings from behind a screen" (0.79), going on social media "without consciously thinking about it" (0.64), and "presenting the person I'd like to be" is easier online (0.62). The second factor, *Fetishizing the Present*, involves being "more concerned with capturing the moment to post on my profile, than just being present" (0.80), preferring "communications with friends to be public" (−0.77) and to "express thoughts, interests, opinions, and ideas on social media (than) offline" (0.73). There appears to be value in detachment from the immediate present. Factor three involves *Privacy Concerns* "that what I post on social media can lead to consequences in my job/career" (0.81), worrying "that what I post will offend someone" (0.75), and "criticizing others for being too open about themselves on social media" (0.60). A series of correlations were computed relating these more general social media values and concerns with factors directly related to the pandemic.

Table 11. Social media in everyday life.

Factors and Eigenvalues	Items	Loadings
(1) Expressive Escapism 2.91	Going on social media provides me with a temporary escape from everyday life.	0.80
	Sharing my feelings from behind a screen is easier than doing so in-person.	0.79
	I go on social media without consciously thinking about it.	0.64
	I can present the person I'd like to be more easily on social media than I do in real life.	0.62
(2) Fetishizing the Present 1.85	In everyday life, I find myself more concerned with capturing the moment to post on my profile, than just being present.	0.80
	I prefer my communications with friends to be public.	−0.77
	I express thoughts, interests, opinions, and ideas on social media that I don't express offline.	0.73
(3) Privacy Concerns on Social Media 1.37	I'm concerned that what I post on social media can lead to consequences in my job/career.	0.81
	I feel stressed about posting on social media because I worry that what I post will offend someone.	0.75
	I find myself criticizing others for being too open about themselves on social media.	0.60

3.4.2. Correlations between Factors Representing Social Media and University Experiences

While the most interesting among the 23 significant Pearson correlations are discussed here, there is ample room to speculate about the meaning of the others (see Table 12). Students who pursue *Expressive Escapism* on social media are *Self-Consciously Anxious* (0.34) when their cameras are on in class and are not *Actively Engaged* in online synchronous lectures (−0.23) but possess *Technical Competence* (0.19). It is evident that online social media behavior patterns carry over to online engagement at school. Students who are anxious and technically skilled can find refuge in online escapist activities.

Students who *Fetishize the Present* on social media (i.e., prefer a detached/alienated attitude toward their experiences) tend to have *Insecure Judgment* (0.61) about being judged (while judging others), are concerned about *Social Exposure* (0.52) and being looked up on social media during class, while looking up others, and have fewer *Privacy Concerns* (−0.24) during online lectures. They are also less concerned about the Zoom skills associated with *Technical Competence* at school (−0.65) and are less committed to *Online Attendance* (−0.45) but are *Actively Engaged* (0.38) in online classes. They are also concerned about *Insensitive Professors* (0.40) who do not provide adequate breaks but do not expect professors to be *Accountable* and create inclusive class atmospheres (−0.48). Finally, having their cameras off did not *Enhance Focus* (−0.28) nor did they believe that online classes *Enhanced their School Performances* (−0.32). This is a very complex and interesting pattern wherein students can participate in class while judging others and being concerned about being judged by them. These students have a superficial and detached presence both in class and online. Capturing (i.e., fetishizing) the moment in images from everyday life, and interacting with others in online classes is more important than a deeper commitment to their studies.

Table 12. Social media correlations.

Social Media Factors	Correlating Factors	r
(1) Expressive Escapism	Actively Engaged	−0.23 **
	Technical Competence	0.19 **
	Self-Consciously Anxious	0.34 **
	Camera-Off Enhances Focus	0.17 **
	Professors' Accountability	0.18 **
	Clear Boundaries	−0.13 **
(2) Fetishizing the Present	Authentic Connection	−0.21 **
	Actively Engaged	0.38 **
	Committed Online Attendance	−0.45 **
	Technical Competence	−0.65 **
	Social Exposure	0.52 **
	Privacy Concerns in Life	−0.24 **
	Insecure Judgment	0.61 **
	Camera-Off Enhances Focus	−0.28 **
	Insensitive Professors	0.40 **
	Professors' Accountability	−0.48 **
	Clear Boundaries	0.21 **
	Enhanced Online Performance	−0.32 **
(3) Privacy Concerns on Social Media	Self-Consciously Anxious	0.15 **
	Social Exposure	0.21 **
	Insecure Judgment	0.21 **
	Insensitive Professors	0.16 **
	Enhanced Online Performance	−0.16 **

Note. r = Pearson correlations, ** $p < 0.01$.

Privacy Concerns about *Social Media* in everyday life are related to *Social Exposure* concerns while on camera so "that others are looking you up on social media, paying more attention to the screens of other students, looking them up on social media, and feeling some pressure to have one's camera on" (0.21) and also to *Insecure Judgment* about "being judged by others for having one's camera off" (0.21). These students are self-consciously concerned about being seen, even while looking others up online. This appears to be a paradox of the detached perspective afforded by social media.

4. Discussion

This study was developed in real time by senior undergraduate students who began university studies before the appearance of COVID-19. They were therefore in a position to compare and contrast the two periods of study. This provided an opportunity to examine the complementary themes of constraints and opportunities that arise when a university shifts to online teaching. Of course, online classes took place prior to the pandemic and so our findings are relevant to exploring, more generally, dynamics underlying remote forms of teaching. General attitudes toward the value of in-person class attendance can then be compared to experiences of enforced remote education. The university had a stake in understanding the relevant processes and so it provided a vehicle for data collection by distributing the survey to the student body. The findings also pertain to expectations that students have regarding the responsibility of professors to maintain a sense of belonging in the midst of what some might consider forced alienation because of the absence of physical contact with other students. Of course, this changed form of education can be related to everyday motivations and patterns associated with social media use. The novelty of the project has to do with the creation of a survey by students supervised by a professor with more than forty years at the university and the extension of a focus on school to everyday social media life.

A primary focus of the work was on students establishing clear boundaries between school and home or work life, when required by health authorities to remain home. Of course, both faculty and staff faced the same predicament of work running into family or

personal time because the transition was hard to establish, especially in the absence of time taken up to commute. A second theme concerned online performance because exams were taken in a home setting and, surprisingly, students found the effects to be positive both in terms of improved performance and ease of taking exams. A main goal of the data analysis was to determine those factors that best predict boundary setting and performance. These included general classroom attitudes and values both prior to and during the pandemic, technical skills related to the accessing of lectures or office hours during the pandemic, and, of central importance, attitudes regarding having one's camera on or off as well as how professors/teachers established a safe space for students. We also addressed the issue of whether attitudes toward keeping one's camera on or off during synchronous lectures reflected the role of social media in student lives.

Our findings showed that both committed online attendance and feeling comfortably detached helped to establish clear boundaries and contributed to a sense of enhanced performance. Technical factors also played an important role with fatigue getting in the way of establishing clear boundaries and competence fostering a sense of enhanced performance. The important role that professors play in remote learning is underscored. Performance is enhanced when they adopt creative teaching strategies and establish an inclusive safe space in their virtual classrooms and office hours. The reverse also applies to professors who display a detached and insensitive demeanor.

The data show that students can attend university in very different ways. On the one hand, they can be very strategic, attending classes and office hours with the explicit goal of achieving good grades and furthering themselves career-wise. On the other hand, students can value first-person contact that encompasses being their *Authentic* selves and enjoying the expressive behavior of others. The findings also show that *Self-Consciously Anxious* students may benefit from having their cameras off or attending classes remotely. However, withdrawing into a private space does not help when it comes to feeling comfortable with others or entering the work world. Advisors are challenged to help students find the right balance between engaged and detached ways of relating to their university experiences.

The data clearly show that educational experience during online classes is related to engagement in social media. Students who pursue *Expressive Escapism* on social media are *Self-Consciously Anxious* when their cameras are on in class and are not *Actively Engaged* in online synchronous lectures despite possessing *Technical Competence*. Anxiety may be reduced by vicariously experiencing the lives of people whom they may or may not know. There is a kind of alienated quality when it comes to school issues for students who *Fetishize the Present* in social media. They display *Insecure Judgment* about being judged (while judging others), are concerned about *Social Exposure* and being looked up on social media during class, while looking up others, and have fewer *Privacy Concerns* during online lectures. On the other hand, *Privacy Concerns* about social media in everyday life carry over to *Social Exposure* concerns in online lectures. Students who demonstrate *Insecure Judgment* about being judged by others during online classes are looking them up online as well. Clearly, motivation for engaging in social media activity is reflected in what happens during online lectures.

5. Conclusions

This study underscores two themes that are ever present in undergraduate life beyond the pandemic. On the one hand, there is a desire for belonging and social contact that enables a student to be authentically present in a classroom. These goals fit with the current emphasis on diversity and inclusion in the university setting. We should also recognize that some students are socially anxious and have benefitted from online classes. Others are motivated to obtain high grades that foster career ambitions and social interaction is of secondary interest to them. Thus, the social-emotional and pragmatic aspects of university education are complementary facets of a university experience. The COVID-19 pandemic, and a transition to online education platforms, has placed the motivations of students in

clear relief. It was also made clear that some professors are insensitive to students, while others adopt diverse approaches to teaching that can be ideally suited to online education.

Professors and teachers, in general, have a responsibility to create a safe space within which students can feel present and flourish. Both students and professors together face the challenges posed by online education based in the home where the workday spills over into private life. One thing is certain: negotiating visibility, by being actively present in the classroom or choosing to have one's camera on or off at home, involves choices that must be respected. It is important for the university to provide neutral backgrounds so that students or faculty are spared discomfort or embarrassment by having work and learning commitments invade their personal spaces. Lastly, for professors to enhance their relationships with students and the learning environment, checking on student wellness by collecting feedback throughout the academic semester is important.

6. Limitations

While this research study had a large, diverse sample size and provided holistic knowledge about student experiences, it has some limitations that should be noted. The study was conducted in an industrial country with excellent internet resources and so it was assumed that students could easily or readily participate in classes in real time. Universities in developing countries may not have the same resources for the transmission of a lecture or seminar. The same is true for students who may not have the most advanced laptop computer. It also bears noting that a large number of international students returned to their home countries that may be in different times zones so they could not easily participate in classes. Another very real limitation was a technical glitch that unexpectedly made it impossible to collect qualitative data. Students were given an opportunity to response to the following question. "If you were to improve online education, what recommendations would you give the university to create an optimal classroom experience? (250-word answers)". Only 50 of the more than 500 participants were able to respond to this question and their suggestions are not provided here. While all studies have their limits, the breadth of this project, created from the perspective of students, provides valuable feedback that goes beyond a journal article to influence the university's policies and planning as we move toward greater online international education.

Author Contributions: Conceptualization, G.C.C.; methodology, G.C.C., R.A., J.C. and E.F.; formal analysis, C.B.R. and A.I.; investigation, G.C.C., R.A. and J.C.; resources, E.C.; writing—original draft preparation, R.A. and J.C.; writing—review and editing, C.B.R. and G.C.C.; supervision, G.C.C.; project administration, G.C.C., R.A., J.C. and C.B.R. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was approved by a Research Ethics Board of UNIVERSITY OF TORONTO SCARBOROUGH (protocol code: 39861; date of approval: 27 August 2020).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The original data presented in the study are openly available in Zenodo at https://doi.org/10.5281/zenodo.12761061.

Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A

Appendix A.1. Full Survey

Appendix A.1.1. Demographic Information

Gender you identify as:

- Female
- Male
- Transgender

- Non-binary
- Not Listed (please specify)
- Prefer not to answer

What year of study were you entering this Winter 2022 semester?

- 1st
- 2nd
- 3rd
- 4th
- 5th+

How many credits have you received starting Winter 2022?
[Written answer]
Culture you identify with (select all that apply):

- Asian
- Black (i.e., African, Caribbean)
- White
- Hispanic/Latin
- Indigenous (i.e., First Nations, Métis, Inuit)
- Arab
- South Asian
- Mixed Race
- Not Listed (please specify)
- Prefer not to answer

You are:

- A domestic student
- A permanent resident of Canada
- An international student attending classes from within Canada
- An international student attending classes from your home country

When was the last time you visited campus?

- Never been to campus
- Before the pandemic
- During the pandemic

Did you attend online synchronous classes from a different time zone during the majority of the course of the pandemic?

- Same time zone
- +/−1 h
- +/−2 h
- +/−3 h
- +/−6 h
- +/−10.5 h
- +/−12 h

Appendix A.1.2. In-Person Teaching

1. How important has it been to return to face-to-face classes?

(1 = not at all important, 7 = extremely important)

Appendix A.1.3. Experiential Learning

1. Have you taken an experiential learning course that included an online/virtual integrated learning experience during the COVID pandemic? (Yes/No)
2. Did you communicate with the community partner/employer online? (Yes/No)
3. Was technology a barrier to communication? (Yes/No)

4. Did your community partner/employer contact(s) communicate online with their camera on or off? (Yes/No)
5. In the future, would you prefer to communicate with community partners/employers online or in-person? (Yes/No)

Appendix A.1.4. Classroom Values

(1 = Not at all important, 7 = Extremely important)

1. How important is diversity in your classes to you?
2. How important is it to co-create a comfortable atmosphere in the classroom to optimize education and learning?
3. How important is it for you to interact with your professor, either in-person or online?
4. How important is it for you to see someone's facial expressions when interacting with them in class, either in-person or online?
5. How important is it for you to hear someone's tone of voice when interacting with them in class, either in-person or online?
6. How important is it for you to see someone's body language when interacting with them in class, either in-person or online?

Appendix A.1.5. Pre-Pandemic Experience During In-Person Classes

1. How often did you attend in-person lectures? (i.e., not WebOption) (1 = Never, 7 = All the time)
2. How often did you attend in-person office hours? (1 = Never, 7 = All the time)
3. How often did you attend in-person tutorials? (i.e., live, not WebOption) (1 = Never, 4 = Not applicable, 7 = All the time)
4. Did you sit closer to the front or to the back of the class during lectures pre-pandemic? (1 = Closer to the front, 7 = Closer to the back)
5. How important was the class atmosphere before the pandemic? (1 = Not at all important, 7 = Extremely important)
6. How important was it to authentically present yourself—through voice, tone, facial expressions—in your interactions during in-person classes? (1 = Not at all important, 7 = Extremely important)
7. How visible (noticeable) did you feel during in-person classes? (1 = Not at all visible, 7 = Extremely visible)
8. How alienated/connected did you feel from the classroom experience before COVID-19? (1 = Extremely alienated, 7 = Extremely connected)

Appendix A.1.6. Current Pandemic Experience

1. How often do you attend online synchronous lectures? (1 = Never, 7 = All the time)
2. How often do you attend online synchronous office hours? (1 = Never, 7 = All the time)
3. How often do you attend online synchronous tutorials? (1 = Never, 4 = Not applicable, 7 = All the time)
4. How often do you participate (ex. speaking out loud) during online synchronous classes? (1 = Never, 7 = All the time)
5. How often do you text in the chat function during online synchronous classes? (1 = Never, 7 = All the time)
6. To what extent is it important to authentically present yourself—through body language, tone, facial expressions—in your interactions during online classes? (1 = Not at all important, 7 = Extremely important)
7. How important is it to have a cohesive (engaged) experience while viewing a class online? (1 = Not at all important, 7 = Extremely important)
8. To what extent do larger groups in online classes make you feel uncomfortable? (i.e., induce social anxiety, make you feel like you have nothing important to say, etc.) (1 = Not at all uncomfortable, 7 = Extremely uncomfortable)

9. How alienated/connected do you feel from the classroom experience currently during COVID-19? (1 = Extremely alienated, 7 = Extremely connected)
10. Have you noticed a change in your attention span during online synchronous lectures (even with adequate breaks from professors) compared to pre-pandemic lectures? (1 = Extremely decreased attention span, 4 = No change, 7 = Extremely increased attention span)
11. Do you find that having your camera on or off affects your attention span during online lectures? (1 = Camera on increases attention span, 4 = Camera on/off has no effect on attention span, 7 = Camera off increases attention span)

Appendix A.1.7. Technological Proficiencies

1. How technically knowledgeable are you with reference to Zoom-related skills (or other online meeting platforms)? (1 = Not at all knowledgeable, 7 = Extremely knowledgeable)
2. How important is it for you to feel like you have control over your camera being on or off while on Zoom? (1 = Not at all important, 7 = Extremely important)
3. Do you experience Wi-Fi or network connectivity issues when using Zoom? (i.e., Slows down/disrupts internet connection) (1 = Not at all, 7 = All the time)
4. How often do you experience Zoom fatigue? (1 = Never, 7 = All the time)

Appendix A.1.8. Camera On

1. Does other people having their camera on influence your decision to turn yours on? (1 = Never, 7 = All the time)
2. Do you feel that everybody in the online class is looking at you? (1 = Never, 7 = All the time)
3. How often do you look up other people in your class on social media? (1 = Never, 7 = All the time)
4. How often are you concerned with other people in your class looking you up on social media? (1 = Never, 7 = All the time)
5. How often would you turn your camera on if all students were given a standardized UTSC background for online classes? (1 = Never, 7 = All the time)
6. Would you be uncomfortable as the only person in the class to have your camera on? (1 = Not at all uncomfortable, 7 = Extremely uncomfortable)
7. Do you feel that being in a "Zoom frame" (we're all in little boxes) makes you more noticeable when your camera is on? (1 = Not at all noticeable, 7 = Extremely noticeable)
8. Do you feel self-conscious when you are highlighted while speaking during online classes? (1 = Not at all self-conscious, 7 = Extremely self-conscious)
9. Are you worried about being judged by others when your camera is on (i.e., looking silly/doing something silly, worrying about looks/weight, etc.)? (1 = Not at all worried, 7 = Extremely worried)
10. Are you concerned that someone could make you the focal point on their zoom screen without you being aware? (1 = Not at all concerned, 7 = Extremely concerned)
11. Are you more inclined to keep your camera on in a small online class? (1 = Not at all inclined, 7 = Extremely inclined)
12. Are you sensitive to the location (i.e., bedroom, living room, kitchen) in which you are viewing the class when your camera is on? (1 = Not at all sensitive, 7 = Extremely sensitive)
13. To what extent are you concerned with privacy issues when your camera is on? (i.e., parents/family members could barge in at any moment, pets can enter the screen frame, etc.) (1 = Not at all concerned, 7 = Extremely concerned)
14. Does it feel that fidgeting/movement is more noticeable on camera? (i.e., tics, getting up to go to the bathroom, stretching, etc.) (1 = Not at all noticeable, 7 = A great deal more noticeable)

15. How much implicit pressure is there for you to have your camera on? (1 = No implicit pressure, 7 = Extreme implicit pressure)
16. Do you agree that the current format of lectures makes it unnecessary for cameras to be on? (i.e., professor simply presenting, minimal social interaction) (1 = Strongly disagree, 7 = Strongly agree)
17. When your camera is on, do you pay more attention to your own screen rather than the professor's screen? (1 = My own screen, 7 = Professor's screen)
18. When your camera is on, do you pay more attention to your own screen rather than the screens of the other students who are participating? (1 = My own screen, 7 = Other students' screens)

Appendix A.1.9. Camera Off

1. How often do you turn your camera off during online classes? (1 = Never, 7 = All the time)
2. How often do you multitask during lectures with your camera off (i.e., cooking, cleaning, at work, doing assignments, etc.)? (1 = Never, 7 = All the time)
3. Does other people having their camera off influence your decision to turn your camera off? (1 = Never, 7 = All the time)
4. To what extent do you judge other people for choosing to have their cameras off? (1 = Not at all, 7 = All the time)
5. To what extent are you concerned about being judged by others for choosing to have your camera off? (1 = Not at all, 7 = All the time)
6. To what extent do you focus on events in the class when your camera is off? (1 = Not at all, 7 = All the time)

Appendix A.1.10. Online Professor's Behavior During the Pandemic

1. Is it important for professors to be able to see you online, so they can determine how well they're communicating? (1 = Not at all important, 7 = Extremely important)
2. Is it important for professors to present themselves as less formal to make you feel comfortable? (1 = Not at all important, 7 = Extremely important)
3. Is it the role of the professor to make you feel comfortable and respected during online classes or office hours? (1 = Not at all, 7 = Very much so)
4. To what extent do professors in various disciplines approach online teaching differently? (1 = Not at all, 7 = Very much so)
5. Have you noticed professors keeping their cameras off during the pandemic? (1 = Not at all, 7 = Very much so)
6. Do you find that professors fail to give you a break during 2/3 h online synchronous lectures? (1 = Never, 7 = All the time)

Appendix A.1.11. Pandemic School Performance and Everyday Life

1. How different are online classes compared to in-person classes? (1 = Not at all different, 7 = Extremely different)
2. Did you find it more difficult to complete your assignments during online school? (1 = Not at all difficult, 7 = Extremely difficult)
3. Do you feel that your grades changed during the course of online school compared to before the pandemic? (1 = Decreased a lot, 7 = Increased a lot)
4. How comfortable do you feel taking exams online compared to in-person? (1 = A lot less comfortable, 7 = A lot more comfortable)
5. Do you feel that online school was more challenging because of time zone differences? (1 = Never, 4 = Not applicable, 7 = All the time)
6. To what extent do you feel like professors adequately accommodate students in other time zones during online school? (1 = Never, 7 = All the time)

7. Do you feel that online school is non-inclusive to some students? (i.e., absence of closed-captioning, lack of accommodation for accessibility … hearing, vision, etc.) (1 = Not at all, 7 = Very much so)
8. To what extent do you feel there are clear boundaries between your school life and home life? (1 = No clear boundaries, 7 = Extremely clear boundaries)
9. To what extent do you feel there are clear boundaries between your school life and work life? (1 = No clear boundaries, 4 = Not applicable, 7 = Extremely clear boundaries)

Appendix A.1.12. Qualitative Question

If you were to improve online education, what recommendations would you give the university to create an optimal classroom experience? (250 words maximum)

Appendix A.1.13. Social Media in Everyday Life

1. To what extent do you prefer to keep your camera off on social media platforms? (i.e., no profile photos, video calls, cover face with filter/emoji, etc.) (1 = Strongly disagree, 7 = Strongly agree)
2. I prefer my communications with friends to be hidden from the public eye (e.g., through Facebook private messaging). (1 = Strongly disagree, 7 = Strongly agree)
3. I seek out opinions online to make decisions. (1 = Strongly disagree, 7 = Strongly agree)
4. I feel disconnected from friends when I am not using social media. (1 = Strongly disagree, 7 = Strongly agree)
5. I can present the person I'd like to be more easily on social media than I do in real life. (1 = Strongly disagree, 7 = Strongly agree)
6. I go on social media without consciously thinking about it. (1 = Strongly disagree, 7 = Strongly agree)
7. In everyday life, I find myself more concerned with capturing the moment to post on my profile, than just being present. (1 = Strongly disagree, 7 = Strongly agree)
8. I find myself criticizing others for being too open about themselves on social media. (1 = Strongly disagree, 7 = Strongly agree)
9. I'm concerned that what I post on social media can lead to consequences in my job/career. (1 = Strongly disagree, 7 = Strongly agree)
10. I feel stressed about posting on social media because I worry that what I post will offend someone. (1 = Strongly disagree, 7 = Strongly agree)
11. I express thoughts, interests, opinions, and ideas on social media that I don't express offline. (1 = Strongly disagree, 7 = Strongly agree)
12. Going on social media provides me with a temporary escape from everyday life. (1 = Strongly disagree, 7 = Strongly agree)
13. Sharing my feelings from behind a screen is easier than doing so in-person. (1 = Strongly disagree, 7 = Strongly agree)

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