Högskolepedagogiska texter, Enheten för pedagogisk utveckling och interaktivt lärande (PIL), Göteborgs universitet, June 2025, <u>www.pil.gu.se/publicerat/texter</u>

Students' absenteeism during in-person lecturing in higher education: A pilot study of causes and potential solutions

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Abstract

Student absenteeism in higher education has become an increasing concern, particularly in the aftermath of the COVID-19 pandemic. This study explores the underlying causes of chronic absenteeism in in-person lectures and investigates potential strategies to mitigate this trend. Focusing on graduate students at the School of Business, Economics, and Law at the University of Gothenburg, the study employs survey data to analyze attendance patterns and identify key determinants of absenteeism.

Findings suggest that while most students attend over half of lectures, compulsory attendance is not the primary driver of participation. Instead, factors such as scheduling conflicts, the availability of recorded material, and lecture engagement levels significantly influence absenteeism. Students balancing work or personal commitments value the flexibility of asynchronous learning, whereas those who prioritize social interaction tend to favor in-person attendance. Additionally, commuting preferences play a role in students' decisions to skip lectures.

To address absenteeism, the study highlights the importance of interactive teaching methods. Increased peer and instructor engagement, collaborative classroom activities, and a reduced reliance on slideshows and textbook-based assessments are identified as potential solutions. While these strategies may encourage attendance, further research is needed to assess their broader impact on student retention and learning outcomes.

Keywords: Higher Education, Absenteeism, Student engagement, COVID-19

Introduction

Student absenteeism in higher education has grown into a persistent issue, especially in the aftermath of the COVID-19 pandemic (Santibañez and Guarino 2021). Student absenteeism refers to a general lack of engagement with higher education learning activities. In this study, we will focus on chronic absenteeism, so called to distinguish it from its pre-pandemic counterpart, with a specific focus on its relation to in-person lecturing (Dee 2024).

Several reasons for absenteeism have been brought forth in literature to motivate its dramatic rise in the post-pandemic world, from a general disengagement with traditional higher education and its learning methods, to the rise of alternative commitments, including work and family responsibilities, to lack of motivation, to reluctance to commuting (Jordaan 2009; Moore, Armstrong, and Pearson 2008). In addition, the social restrictions implemented during the pandemic appear to have modified the value assigned to social interactions, including with peers and instructor, with such opportunities being less central to students' higher education experience than before (Şahin 2023).

The issue of absenteeism is of central importance to learning and teaching in higher education (Loughlin and Lindberg-Sand 2023; Revell and Wainwright 2009).. Regarding the learning aspect, much literature suggests that absenteeism reflects in worse academic performance and higher drop-out rates. The former is allegedly due to superficial learning modes being preferred for their short-term success, which include rote and strategic learning at the expenses of deeper learning modes (Swanepoel, Beukes, and Yu 2021; Santibañez and Guarino 2021). The latter is due to a combination of worse performance and growing dissatisfaction with the learning experience, ultimately causing students to drop-out of higher education. Concerning the teaching aspect, scholarship argues that absenteeism can disrupt the learning environment by hindering the adoption of more interactive and collaborative teaching modes and eventually causing demotivation in the instructors themselves (Offer et al. 2019).

This study addresses the problem of absenteeism in higher education from a learning perspective and aims to answer the following research questions: $(P_{Q}(1) What does arthlain the declining students' participation to in person lectures following the pandamic?$

(RQ1) What does explain the declining students' participation to in-person lectures following the pandemic? (RQ2) What learning approaches can be employed for this trend to be reversed?

Drawing from survey data from anonymous responses submitted by graduate students at the School of Business Economic and Law at Gothenburg University, this study first investigates the motives that are more likely to give rise to instances of chronic absenteeism. Second, the study provides some tentative suggestions as to how to resolve, or at least reduce, the problem of students' absenteeism. The study thus contributes to pedagogical development by contributing with real-life data to the scholarship on absenteeism, applicable not only to the subjects of the survey, but also to other student groups in the social sciences and humanities in higher education.

State of the Art

Synchronous, in-person lecture-based instruction models are an integral part of higher education, and have long been the most common way of transmitting notions and information

between a lecturer and his/her students (Lowe 2011). However, this teacher-centred mode of instruction has seen a gradual, yet clearly increasing, rate of students' absenteeism across subjects and across higher education institutions all over the world (Jordaan 2009; Perrin and Laing 2010).

As part of the IT revolution, digital tools have become gradually available and integrated into day-to-day learning and teaching in higher education. From slideshow presentations replacing the use of the blackboard, to the more recent integration of synchronous and asynchronous lecture recordings as aid or even as replacement to in-person lectures, higher education teaching modes have undergone dramatic changes (Nordmann and McGeorge 2018; Larkin 2010; Lund Dean and Wright 2017). On the one hand, this move towards digitization has contributed to accommodate the pressure higher education institutions and instructors underwent because of the massification of higher education has rendered traditional teaching modes, and especially in-person lecturing, less interactive and thus less effective at generating students' engagement, albeit there is no lack of scholars disputing this conclusion (Lowe 2011; Revell and Wainwright 2009; Voelkel et al. 2023; Offer et al. 2019; some critics of this reading are e.g., Swanepoel, Beukes, and Yu 2021; Loughlin and Lindberg-Sand 2023).

The COVID-19 pandemic has further hastened the adoption of digital innovations when it comes to lecturing at all levels of education, and especially in higher education (Balcaite 2024). As a result of the rapid shift to online teaching aimed at facing public-spaces' closure, synchronous lectures were nearly entirely replaced by recorded, asynchronous lectures (Santibañez and Guarino 2021). This learning mode was adopted to deal with the difficulties that a rapid and forced full digitization of higher education entailed during the early stages of the pandemic so as to guarantee an uninterrupted learning experience. However, lasting negative consequences of this forced digitization process became apparent only as in-person activities could resume (Dee 2024; Şahin 2023).

Much scholarship that investigated higher education learning experience among students during and after the COVID-19 pandemic reported how students adapted well to the transition to synchronous and asynchronous online lectures, albeit mediated by individual digital skills. On the other hand, the same literature stresses how the lack of interaction caused students to suffer from social disconnect and isolation leading to high rates of anxiety and emotional distress. Furthermore, this literature highlights how the technical and emotional aspects just mentioned resulted in a lower degree of students' engagement across most, if not all, of the learning activities in higher education compared to pre-pandemic standards (Dee 2024; Santibañez and Guarino 2021; Aristovnik et al. 2020).

One common element to this literature is the identification of students' absenteeism as a central issue in learning in higher education in the post-pandemic context, coupled with a general decline in students' performance across higher education institutions and subjects. Despite absenteeism pre-dating the COVID-19 pandemic, it is nonetheless recognized that its rate has increased dramatically as the restrictions were lifted and face-to-face, synchronous teaching could resume (Dee 2024). Despite its centrality to higher education research, only a few studies have explicitly investigated the causes for what scholars have termed 'chronic absenteeism', to distinguish it from its pre-pandemic counterpart, and even fewer have examined potential solutions.

Empirical strategy

This pilot study addresses the literature gaps concerning chronic absenteeism in higher education by investigating its causes and potential solutions by asking two research questions:

(RQ1) What does explain the declining students' participation to in-person lectures following the pandemic? (RQ2) What learning approaches can be employed for this trend to be reversed?

Based on previous literature's findings I form two set of hypotheses and sub-hypotheses. The former is concerned with the causes for chronic absenteeism, the latter with the solutions.

Ha: After in-person lecturing resumed, students tend to show up only to compulsory lectures.

Ha1: The flexibility that recorded asynchronous is expected to have enabled students to adjust their schedule to a much greater degree than previously possible.

Ha2: Students who missed the social interaction stemming from an in-person learning environment may not value flexibility as heavily as one may expect.

Ha3: Non-in-person lecturing is expected to have enabled students to take on other commitments (i.e., work, sports, etc.), despite an expected 100% study rate. This pattern is expected to have persisted upon returning to face-to-face activities.

Ha4: Non-in-person lecturing is expected to have enabled students to actively choose to opt out of commuting. This pattern is expected to have persisted upon returning to face-to-face activities.

Hb: Greater interaction and lower reliance on slideshows is expected to foster greater engagement and reduce chronic absenteeism.

Hb1: Interaction with peers and/or instructors is expected to reduce absenteeism. *Hb2:* The introduction of more interactive and collaborative teaching modes is expected to lower absenteeism.

To test the primary and secondary hypotheses, and to answer each research question, an anonymous survey was developed through the Microsoft Form tool. The survey comprises 10 questions, including closed-ended ordered (Q1 – Q2 – Q6) and unordered questions (Q4 – Q5 – Q7), along with open-ended questions (Q3 – Q7 – Q9 – Q10) to ensure the research questions could be adequately addressed (Toepoel 2016). The survey is reported in Appendix A.

The survey was modified following peers' suggestions and submitted to a sample of Master students from the School of Business, Economic and Law. The students were selected based on their attendance of Economic History courses in the Fall term 2024. To reach out to such students, the Canvas¹ messaging tool was employed, and an individual message was sent.

The sample of students who fit the above criteria was N=46. Each student received a message introducing the purpose of the study and ensuring they were informed about how the data would be used. The choice of sampling reflected a time-analysis constrain, as the study needed to be complete within a rather short time span. In addition, the students were chosen for having

¹ Canvas is a Learning Management System (LMS) that universities use to provide a digital course environment for both teachers and students. It's a platform where course materials, assignments, communication tools (messaging tool), and other learning resources are hosted, making it a central hub for learning and teaching.

attended courses in Economic History not too far from when the study was carried out to ensure the survey reports up-to-date values. It should be noted, nonetheless, that the survey did not refer to the courses taken in Economic History specifically, but in general across the entire Master Programme. The response rate equalled N=21, or 46 percent. Individual responses are available upon request and are not reported here for space constraints.

The data is analysed using descriptive statistics and its preliminary results are discussed in connection with the existing literature to draw preliminary conclusion informed by the data and by the scholarship.

Study limitations

Due to the small sample size, the data is not adequate to directly draw inference upon it but is intended to serve as a preliminary indication of the causes and potential solutions underpinning chronic absenteeism during in-person lecturing within higher education.

The study's findings and conclusions are more straightforwardly applicable to a set of subjects within higher education, e.g., social sciences and humanities, that they rely on similar teaching approaches. The findings can, nonetheless, be employed to generally reflect upon chronic absenteeism and teaching strategies across the whole spectrum of higher education.

Lastly, it is noteworthy that the study relies on data that depend on students' own perspectives and assessments about the topic. This can cause concerns over the reliability of the data if respondents fear they may be identifiable, biasing the results towards the survey provider's expected preferences. To reduce this concern, the current study data originate from an entirely anonymous survey, where the possibility to identify respondents is nearly eliminated. It is, however, important to keep in mind that the results are drawn from students' own views of the topic.

Results

According to Figure 1, of the 21 respondents, 90 percent (n=19) stated to participate on average to at least 50 percent of the lectures held in person during their Master Programme, while 10 percent claimed to attend less than the 50 percent threshold.

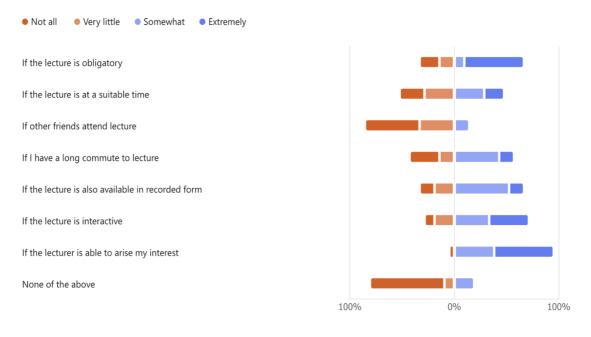


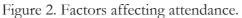
Figure 1. Reported attendance to in-person lecturing

Note: Q1- What has been your degree of attendance to lectures through your Master's degree?

Interestingly, the share of respondents who claimed to always participate is the highest among all categories with 57 percent, followed by respondents who participated to more than 50 percent of the lectures, equivalent to 33 percent.

When investigating the motivations behind such high degree of reported attendance, it emerges that the factors most positively contributing to lecture attendance are, in order of relevance, whether a) the instructor is engaging, b) the lecture is interactive, c) the lecture is compulsory, d) the lecture is also available in recorded form, e) commuting time. Other options, such as scheduling suitability or whether friends attended the same lecture, played a role in far fewer cases (Figure 2).





Note: Q2 - What affects your lecture attendance and to what degree?

When breaking down the result by declared attendance, respondents who attended all or more than 50 percent of in-person lectures are less likely to be affected by compulsion than their counterpart who attended less than 50 percent of the lectures. Similar results, albeit less marked, can be identified for scheduling suitability, availability of recorded material, engagement and interactivity of lectures. On the other hand, commuting time and peers' attendance appear to be uncorrelated with attendance rate, likely due to individual context and dispositions, albeit the small sample size does not enable us to draw definite conclusions.

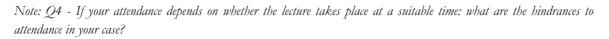
When investigating compulsion as a tool to limit chronic absenteeism, an element often mentioned in the literature, several respondents argue that obligatory attendance may reduce absenteeism at the expenses of active engagement. Several respondents, in fact, refer to added stress, low interaction, and poor teaching modes as issues with compulsory in-person lectures. Albeit these may be specific to the cohort of respondents, it nonetheless suggests that compulsion in and by itself may reduce chronic absenteeism on paper but fail to create greater engagement and ensure better performance. On the other hand, a few respondents manifest their contrariety towards compulsion, adding that it may cause loss of work, much time spent on commuting, or it may force a learning mode upon individuals' who would benefit from different approaches or that may be able to complete the course work anyhow.

When investigating the responses in relation to the rate of attendance, it is possible to notice that respondents who participated to all or most lectures, argue they would do so irrespective of compulsion. These respondents suggest that participation depends on their degree of interest in the subject and in their ability to learn additional notions by attending in-person lectures than what would be otherwise possible by relying only on slideshows and literature. Students who attended the least tend to have a much more negative attitude towards compulsion overall, finding attending lectures 'irrelevant' or 'inflexible'.

To investigate what factors may further increase chronic absenteeism, the survey asked respondents to choose among four types of hindrances. Respondents were provided with four options: Other commitments (focusing on work and sports), scheduling preferences, commuting schedule, and others².



Figure 3. Other commitments related to absenteeism.



One respondent left the answer blank. Among the rest, one-third cited commitments such as work and sports as negatively impacting on their attendance, another third argued for scheduling preferences, while one-fourth cited commuting schedule as an obstacle to attendance. A further 11 percent cited other unspecified reasons. Among the respondents who cited other commitments as influencing their attendance, nearly 80 percent declared that such commitments occupy an equivalent of half-time while the remaining claims they are occupied full time on top of their studies.

² The survey is primarily in English to ensure students from all backgrounds could respond. Yet, the settings of the survey provider (Microsoft Forms) are by default set to Swedish, reason why in Q4 appears '*Annat*' instead of 'others' as a potential response combination.

Much scholarship has argued that students' absenteeism may be explained by the availability of asynchronous recorded lectures in addition to in-person lecturing (Voelkel et al. 2023). The survey thus investigates this factor by asking respondents to state their degree of agreement with the statement "*I do not attend a lecture in person if there is a recording available*" on a scale from 1 (no agreement) to 5 (total agreement).

Both for arithmetic average and mode, respondents scored 3, which shows a certain degree of agreement with the statement. On the one hand, respondents provide some support to the idea that recorded material alternative to in-person lecturing may cause chronic absenteeism, confirming what several scholars have suggested. On the other hand, measures of central tendency tend to be over-estimated in ranked ordered questions if the respondents are not strongly opinionated on the matter the question refers to (de Rezende and de Medeiros 2022). Keeping this inherent 'preference for the middle' in mind, measures of central tendency further hide the fact that the distribution of response may not look normal. As it happens, in fact, no agreement or limited agreement with the statement was selected by a cumulative 38 percent of the respondents (8 observations), compared to only 28 percent (5 observations) of the respondents who cited a greater agreement than average with the statement (Figure 4).

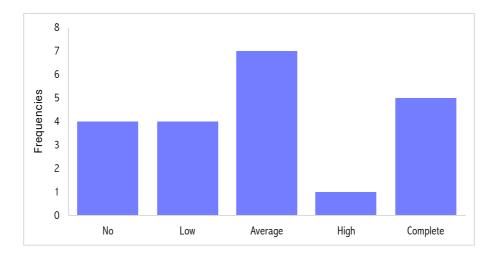


Figure 4. Agreement with the statement 'I do not attend a lecture in person if there is a recording available'.

Note: Q6 - Do you agree with the statement "I do not attend a lecture in person if there is a recording available"?

However, some further support to the idea that recorded material may be of central concern when evaluating chronic absenteeism comes from the high correlation between absenteeism and the likelihood to strongly agree with the statement. Among respondents declaring to attending less than 50 percent of the lecture, we find total agreement with the statement (mean=5), while the picture becomes fuzzier for respondents who report rates of attendance of 50 percent and above.

Among those respondents who tended to show a greater preference for recorded material over in-person lecturing, the key positive aspect is flexibility. Respondents stressed learning flexibility, as the possibility to watch, pause, rewatch at one own pace and pleasure, rewinding if necessary and ensuring a more individualized pace of learning. For others, flexibility was intended as the opportunity to eliminate commuting, and the ability to maintain other commitments without facing scheduling constraints. Respondents who showed lower preference for recorded lectures vis-à-vis in-person lectures argue for the benefits that the possibility to interact with the lecturer and to socialize with peers, along with the ability to divide the space for learning from that of other activities, bring to the learning experience.

To cross-check and confirm the results from Q6 and Q7, respondents were asked what they considered the added value of in-person lectures being for improved learning and were provided with three alternatives to rank (see Figure 5).

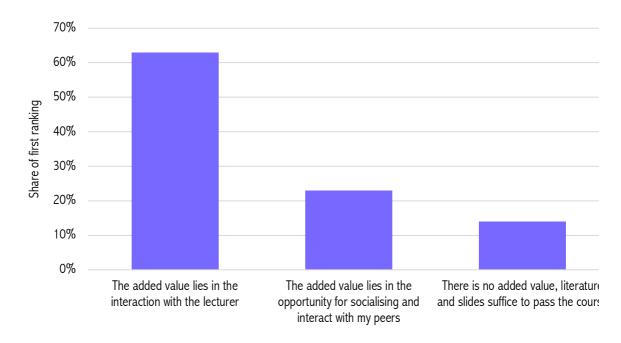


Figure 5. Added value of in-person lecturing.

Note: Q8 - How do you value the potentials for improved learning by attending to lectures?

63 percent of respondents found that the interaction with the lecturer is the component that adds the most value to in-person learning, followed by the opportunity for socializing and interacting with peers (23 percent). There is furthermore not a clear-cut association between the ranking of the three alternatives and the degree of attendance, suggesting that even students who may show chronic absenteeism or high rates of absenteeism may recognize the value added that in-person lecturing provides in terms of interaction with lecturer and peers. Nevertheless, other factors may outweigh the benefits, such as the degree of flexibility that asynchronous lecture recordings allow compared to in-person lectures.

As to how could in-person lecture be improved and enhanced to reduce chronic absenteeism, most respondents agreed on one point: increased interaction and interactivity. Several of the respondents hihighlighted how reading from slideshow presentation in class has become common teaching practice, albeit such mode of teaching is regarded as 'boring' and 'inefficient' by the student body, which may increase absenteeism rate. Most respondents would rather attend

in-person lectures where more interactive and collaborative learning modes, including discussions, real-life case studies, etc. are employed, which are argued to help students contextualize notions or offer additional knowledge that cannot be acquired otherwise, e.g., through the course literature (cf. Q9-Q10).

On the topic of how could chronic absenteeism be lessened and potentially resolved, some students highlight how chronic absenteeism may very well be a generational shock, and thus temporary rather than a permanent fixture of higher education. Respondents suggests that students who attended large parts of their education fully online as a result of the COVID-19 pandemic may be less willing to compromise of their flexibility at the expenses of socialization and interaction. In this regard, some respondents argue how remote, online , anynchronous education may have impacted on students' perceived values and preferences. Some of them suggest that chronic absenteeism may decline as more and more students go through their entire education in-person, rebalancing the preference for flexibility and interaction in favour of the latter, or on a combination of the two.

Discussion

This paper aimed to examine what are the underlying motives and the potential solutions to chronic absenteeism in higher education by relying on a pilot study where survey respondents were selected among the population of graduate students at the School of Business, Economics at Law at the University of Gothenburg.

Based on the data, the study finds that the majority of the respondents attend more than 50 percent of in-person lectures. In addition, the study finds that compulsion plays a comparatively smaller role for students as the rate of attendance increases. We can tentatively say that this study only provides limited support for hypothesis *Ha*, which expected students to participate only to in-person lectures if those are compulsory. On the other hand, the study suggests that there may be other factors, less prominent in literature, contributing to chronic absenteeism and requiring further attention. Among these, the study highlights how scheduling suitability, availability of recorded material, engagement and interactivity of lectures all are cited as factors contributing to absenteeism.

Ha1 hypothesize that students value the flexibility that recorded asynchronous lecture enables. This study provides some support for this statement, albeit only tentative due to issues with small sample size and tendency to regress towards the mean. Keeping in mind these concerns, the study finds that students declaring lower rates of attendance, and thus higher rates of absenteeism, tend to more positively see recorded material compared to their counterpart who show lower absenteeism rate, albeit much variation can be found among individuals. This latter element suggests that recorded material and the flexibility it entails may not be univocally well received by students, though this may very much depend on one own individual preferences, values and context.

Such a reading provides support to hypothesis *Ha2*, whereby those students who are more inclined towards social interactions with peers and instructor tend to value less highly the flexibility that stems from non-in-person lectures. However, the results from the study do show that a certain degree of preference for scheduling flexibility can be found among most of the

respondents. Such results support hypothesis Ha3, which argues that students are likely to be engaged in other activities to a high degree despite a return to in-person lectures and to a 100 percent study rate. As the study shows, two third of the respondents argue that scheduling suitability, resulting primarily from the co-habitation of studies and work (or sports, or other commitments such as family responsibility), affect their degree of attendance. Additionally, onefourth of the respondents identified the possibility to opt out of commuting as an important factor associated with their attendance even as in-person lecture resumed, providing support to hypothesis Ha4. Scheduling clashes as a result of greater commitments outside the school than it was common prior to the pandemic along with commuting preferences may, thus, be found as key motives associated with chronic absenteeism. It should be noted, however, that due to the high degree of endogeneity inherent in the processes under study and the limited sample, we can only discuss the existence of an association between these factors rather than causality. Future studies may thus want to investigate the subject further to address more concretely the present study preliminary results.

The second part of study examined what potential solutions are there for reducing chronic absenteeism. Based on the data, the study finds much support for hypothesis Hb, which states that greater interaction and lower reliance on slideshows is expected to foster engagement and reduce chronic absenteeism. Respondents strongly pointed to increased interaction with peers and instructor as a mean of reducing absenteeism, as hypothesized in Hb1. Similarly, respondents found that more interactive and collaborative activities in the classroom would benefit in-person lecture attendance and increase notion retention and perfomance, in support of hypothesis Hb2. Lastly, a few respondents confirm that a lower reliance on presentation material and literature in the assessment and an increased reliance on notions acquired in class would reduce absenteeism. It remains, however, to examine how such strategy may be practically implemented and to evaluate whether it would cause further disengagement among the students more likely to show chronic absenteeism, further deepening the overall concern over drop-out rates.

Conclusions

The issue of student absenteeism has been central to research in higher education for decades. A renewed interest in the subject has, nonetheless, emerged following the COVID-19 as absenteeism to resumed in-person teaching has reached new heights, causing the terms chronic absenteeism to be coined to describe the post-pandemic dimming rates of attendance that influence students' engagement and perfomance. To examine this phenomenon, a pilot study was carried out that relied on the collection of survey data on chronic absenteeism to address its motives and its potential solutions in higher education.

The results of study, albeit very preliminary and limited in their ability to address causality, show that there are several elements at play that may contribute to chronic absenteeism. Compulsion, an element often discussed in literature, was found here to play much less of a role than previous literature suggested, as the vast majoritiy of the respondents claim to have attended most of the in-person lectures (50 percent or more) during their Master Programme irrespective of whether they were compulsory or not. On the other hand, the study found that most students tend to balance their studies with other commitments, resulting in tensions over scheduling conflicts and time availabile for in-person lectures that creates a thin equilibrium whereby most students

tend to attend as many lectures as their schedule allows. On the other hand, the results of this study show that preferences play a key role in the degree of attendance of individuals. Respondents who value social interaction highly tended to claim to be less likely to be absent from class and to prefer in-person lectures over recorded alternatives. A few respondents, however, showed a clear preference for anynchronous recorded lectures compared to their inperson's counterpart, citing preferences for digital teaching modes, commuting or scheduling preferences as their main concern. As for potential solutions to the problem of chronic absenteeism, most respondents highlighted how greater interaction and active learning modes would enhance attendance and reduce the risk of disengagement, albeit some respondents stressed how the issue may be directly correlated with having undergone education during the COVID-19 pandemic.

Future research is, thus, required to further investigate the topic of chronic absenteeism with larger samples to evaluate causality, and across several student cohorts to test whether there is indeed a cohort effect.

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Appedix A. Survey³

Attending or not attending in-person lectures?

A survey over in-person lecture attendance preferences from a master student perspective

* Obligatoriskt

1. What has been your degree of attendance to lectures through your Master degree? *

- Always attend
 Attend more than 50% of the lectures
 - Attend less than 50% of the lecture
 - Never (or very seldom) attend
- 2. What affects your lecture attendance and to what degree? You can select multiple answers *

	Not all	Very little	Somewhat	Extremely
If the lecture is obligatory	\bigcirc	\bigcirc	\bigcirc	\bigcirc
If the lecture is at a suitable time	\bigcirc	\bigcirc	\bigcirc	\bigcirc
If other friends attend lecture	\bigcirc	\bigcirc	\bigcirc	\bigcirc
If I have a long commute to lecture	\bigcirc	\bigcirc	\bigcirc	\bigcirc
If the lecture is also available in recorded form	\bigcirc	\bigcirc	\bigcirc	\bigcirc
If the lecture is interactive	\bigcirc	\bigcirc	\bigcirc	\bigcirc
If the lecturer is able to arise my interest	\bigcirc	\bigcirc	\bigcirc	\bigcirc
None of the above	\bigcirc	\bigcirc	\bigcirc	\bigcirc

3. If your attendance depends on whether the lecture is obligatory, why are lectures not a sufficiently valuable tool in your learning experience? Provide an answer based on your experience and preferences. Write NA if the question is not applicable to your case. *

³ The survey is primarily in English to ensure students from all backgrounds could respond. Yet, the settings of the survey provider (Microsoft Forms) are by default set to Swedish, reason why in Q4 appears '*Annat*' instead of 'Other' as a potential response combination.

- 4. If your attendance depends on whether the lecture takes place at a suitable time: what are the hindrances to attendance in your case? You can provide more than one answer *
- □ Other commitments (work, sport, etc.)
- Scheduling preferences
- Commuting schedule
- Annat
- 5. If you selected 'Other commitments' in Q4, how much of your time do they occupy? (Answer for the commitment that takes most of your time only)

Full time

Half time

6. Do you agree with the statement "I do not attend a lecture in person if there is a recording available"? (the more stars, the more you agree) *

7. Based on your answer in Q6, can you explain what recorded lectures offer you that in person lectures do not? Be real, if you prefer the comfort of your sofa to meeting your friends for a coffee before heading to the classroom (or any other perks), that's worth knowing! *

8. How do you value the potentials for improved learning by attending to lectures? Rank the alternatives *

There is no added value, literature and slides suffice to pass the course The added value lies in the opportunity for socialising and interact with my peers The added value lies in the interaction with the lecturer

9. What could be a good method to increase lecture attendance in your opinion? *

10. Is there any additional comment you would like to leave on the topic of students' attendance that has not been touched upon in the survey but that is important to you+