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Good friend or good student? An interview study of perceived conflicts between personal and academic integrity among students in three European countries

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ABSTRACT
Students are often reluctant to report the academic dishonesty of their peers. Loyalty to friends and classmates has previously been identified as an important reason for this. This paper explores loyalty conflicts among students from upper secondary school, through bachelor's, to Ph.D. level. Drawing on semistructured qualitative interviews (N = 72) conducted in Denmark, Ireland and Hungary, we show that loyalty considerations among students can be complex and draw on a range of norms including responsibility. The study demonstrates how students are often willing to assume substantial personal responsibility for dealing with the academic dishonesty of a peer, often preferring this to reporting. However, when deciding on the right course of action, they also perceive tensions between the norms of the good researcher and student and their own norms of being a good friend and person. The loyalty considerations and tension were identified in all three countries and across the educational levels, which suggests that this is a cross-cultural challenge. We argue that institutions should formally decide whether they want students to take some degree of responsibility themselves for addressing less serious cases of academic dishonesty and communicate their decision to their students.

Introduction

Cheating by students is not a new phenomenon, but recently, partly as a result of new means of checking plagiarism, there has been a growing interest in dishonest student conduct. To gain a better understanding of

the prevalence of student cheating, a number of large-scale surveys have been conducted (reviewed in Davis, Drinan, and Gallant 2009, see also McCabe, Butterfield, and Trevino 2012). These generally show high levels of cheating and paint a rather depressing picture of student honesty. Apparently, *academic dishonesty*, which we take to include both misconduct such as plagiarism and falsification of data, but also potentially detrimental practices such as getting full credit when free-riding in group work, comparing results on assignments that were supposed to be completed individually, questionable handling of data, etc, is alarmingly common among students.

This picture has, to some extent, been balanced by a few studies that explore the complexity of the situation. For instance, studies indicate that students have a poor understanding of key concepts such as *plagiarism* and are often unclear about academic rules, which in turn may account for some of the unintentional academic dishonesty discovered in the surveys (Roig 1997; Craig and Evans 2015; Johansen and Christiansen2020). Nevertheless, the general picture seems to be that academic dishonesty occurs regularly among students at all levels of education.

In this paper, we focus on an important part of this problem: students' lack of willingness to report academic dishonesty committed by others. This has been documented in a number of studies (Simon et al. 2004; Lim and See 2001; Yang, Huang, and Chen 2013). Although some commentators – like Resnik and Shamoo (2017) – argue that whistle-blowing is an ineffectual tool with which to tackle academic dishonesty, students' and researchers' willingness to report dishonesty among peers is generally seen as an important part of the fight against dishonesty. For that reason, a number of ways to counter this tendency have been suggested.

Several suggestions emphasize the need to protect whistle-blowers from negative consequences of their disclosures – for instance, by ensuring their anonymity (Titus, Wells, and Rhoades 2008; Committee on Assessing Integrity in Research Environments 2002). Another recurring theme is that institutions should seek to develop a sense of loyalty in students toward a larger community (as opposed to just close friends and classmates) either through honor codes (McCabe and Trevino 1993) or by developing a scientific identity (Committee on Assessing Integrity in Research Environments 2002).

When addressing students' reluctance to report their peers, it is important to understand the reasons for their reluctance. So far, the main reasons reported in the literature are 1) *camaraderie* (or similar forms of misplaced group loyalty) and 2) *fear of retaliation* (Rennie and Crosby 2002; Pupovac, Popović, and Blažina 2019; Horbach et al. 2020; McCabe, Trevino, and Butterfield 2001).

With this paper, we wish to add to this important discussion by providing further insights into the reasons behind students' reluctance to report academic dishonesty committed by their peers. We report a qualitative interview study with 72 upper secondary, bachelor's and Ph.D. students from Denmark, Ireland, and Hungary. The study is part of a larger project – INTEGRITY[1] – aiming to map the understanding and experience European students have of themes related to academic and research integrity.

The study countries were chosen with the aim of covering educational systems which, in our experience, differ in important ways. Denmark is characterized by problem-based learning (with a focus on information search, procurement, and use in autonomous projects). Rote learning is low priority, while student participation and autonomy are stressed. Teachers tend to have a supervisory and motivating role, and less so a strict disciplinary role. In contrast, the Hungarian education system emphasizes lexical knowledge. The students learn mainly from lectures and books. Tacit knowledge transfer still seems less prominent than it is in countries with a strong tradition of debate and discussion in education. The Irish education system sits somewhere in between. Traditionally it has focused primarily on skills of memory recall and rote learning. However, in recent years there has been a shift toward school-based assessments and coursework, in order to encourage broader skills. Common to all three countries is the fact that students are typically assessed on absolute scales, not on how good they are relative to their classmates.

Methods

All of the participants in the present study were active students in Denmark, Hungary or Ireland (N = 24 in each country) in the spring of 2019. The recruitment process ensured that, among the bachelor's (henceforth B.A.) and Ph.D. students, there was an equal distribution of participants in social science, STEM and the humanities. To ensure representation across gender minimum quotas were imposed. In each country at least two male and two female students were interviewed from the upper secondary population. In the combined B.A. and Ph.D. population at least two male and two female students were interviewed from each of the three educational subcategories: humanities, social science, and STEM. Details of the recruitment scheme showing the breakdown of the student sample are shown in Table 1.

Interview guide and procedure

An interview guide (Appendix A) was developed. It investigated the participants' understanding of misconduct, detrimental practice, good practice, and integrity in relation to three main themes:

Table 1. Distribution of participants by gender and subject. University study levels are subcategorized into humanities (Hum), Social science and law (Soc), natural, medical, mathematical and engineering sciences (STEM), interdisciplinary (Int) and finally psychology (Psy) which is not easily grouped.

	Upper secondary	B.A.	Ph.D.
Male	8	8 (2 Hum, 2 Soc, 4 STEM)	20 (3 Hum, 7 Soc, 9 STEM, 1 Int)
Female	10	10 (4 Hum, 3 Soc, 2 STEM, 1 Psy)	16 (7 Hum, 2 Soc, 4 STEM, 2 Int, 1 Psy)
Total	18	18 (6 Hum, 5 Soc, 6 STEM, 1 Psy)	36 (10 Hum, 9 Soc, 13 STEM, 2 Int, 1 Psy)

(1) Collaboration and authorship
(2) Use of material/work from others
(3) Collection, analysis, and reporting of data

Within each theme, a number of main questions and follow-up questions were raised to learn about the students' conceptions and experiences. Where relevant, the interviewer asked the participants to give examples and elaborate on gray zones, and enquired about whether they would be willing to report their awareness of academic dishonesty.

A total of 21 short scenarios presenting integrity dilemmas (also Appendix A) were designed to further probe the participants' understanding of the three themes. Nine of these included dilemmas related to academic dishonesty among peers. Participants were initially asked to react to the scenario. Where relevant, they were often asked whether they would be willing to report in such a scenario.

Although all the main themes were covered in each interview, the follow up questions and scenarios covered varied from interview to interview depending on the issues brought up by the participant.

All interviews were conducted in the participants' native language. Each interview lasted 30–60 minutes. Interviews in Denmark were conducted by MWJ. UQ conducted the interviews in Ireland and met with MWJ after the first round of interviews to discuss differences in the way the interview guide and scenarios were used. All interviews in Hungary were conducted by NK. Owing to language barriers, it was not meaningful here to go through the process of discussion and reflection that was used to align the interview process in Ireland and Denmark.

Participants

The interviews were carried out between early February and late April 2019. The participants were not compensated for their participation, and the anonymous and voluntary nature of the interviews was emphasized to all of them before the interview began.

We did not recruit students on the basis of academic performance, motivation, and study activity. This could be a possible limitation if the teachers and

lecturers that helped to recruit participants selected students that e.g., are more active or higher performing. While we assume that the studied students varied "naturally" on these parameters, and thus were symbolic representative of the background populations, we cannot ruled out some extent of selection bias.

The B.A. and Ph.D. students interviewed in Hungary were from the University of Debrecen (UD). The first few participants were recruited with the help of lecturers at UD. The lecturers were not informed of the details of the study, nor which students eventually agreed to participate. The remaining students were recruited through snowballing. The secondary level students were recruited in different schools in Debrecen using a very similar method. In total, 30 students were contacted for the 24 interviews. Ethical approval was not applied for, since the Hungarian regulation only requires ethical approval for biomedical research. All participants were above 18 years old.

For the interviews in Ireland, B.A. and Ph.D. students were recruited at Trinity College Dublin, facilitated by five lecturers representing different disciplines. Each lecturer contacted several students of their choosing, at both BA, and Ph.D. level. The lecturers were not informed of the details of the study, nor which students eventually agreed to participate. The secondary level students were all from schools within Dublin, and they were recruited through a personal network of contacts. Ethics approval for these interviews was granted by the Faculty of Arts, Humanities and Social Sciences ethics committee in Trinity College Dublin. This included permission to interview the secondary school students, who were minors, with their parents' informed consent.

For the interviews in Denmark, B.A. and Ph.D. students were recruited from the University of Copenhagen via direct contact (in-person recruitment on campus and telephone calls) and advertising that was distributed to relevant groups of students by their teachers. It is estimated that about half of the students contacted directly volunteered to participate, while response rates were very low from the advertisements. To ensure variety, secondary level students were recruited from four different schools: one in central Copenhagen, one in the Copenhagen suburbs and two on the countryside. These study participants were recruited through a combination of direct contact (in-person recruitment on campus) and recruitment through the teachers working at the schools. All of the participants were at least 18 years old. The Ethics Review Board at the Faculty of Science at University of Copenhagen approved the recruitment procedure in Denmark and the study in general.

Data analysis

All interviews were recorded, transcribed, and anonymized. Redundancies that result from direct transcription of spoken language were removed where

necessary. The transcripts of the interviews in Hungarian were translated into English by NK and OV. The transcripts of the interviews conducted in Danish were not translated, except for the quoted passages presented below in the Results section.

All of the interviews were coded in Nvivo 12 in two rounds using the principle of coding pre-specified categories followed by emerging categories (Elliott 2018; Taylor-Powel and Renner 2003).

The first round consisted of coding of pre-specified categories from the main themes of the interview guide, supplemented by additional themes, suggested by the interviewers, that came up during the interviews and reflected the overall aims of the project (Appendix B contains the final codebook). Of particular interest to this paper is the code "responsibility and loyalty" which was used to code any passages that somehow involved students responsibilities and loyalty. Before coding, it was evaluated whether coding was conducted similarly by the three coders (i.e., the three coauthors MPG, UQ and MWJ): multiple iterations of independent coding were undertaken, followed by comparison and discussion, until only minor and irrelevant coding differences were observed.

The second round of coding – the results of which we present in this paper – applied a set of emergent codes to passages coded under "responsibility and loyalty" in the first round. A total of 62 of the 72 interviews contained at least one passage that was coded under "responsibility and loyalty." Therefore, only content from these 62 interviews is reported here. The interviews that did not contain passages coded under "responsibility and loyalty" were with eight Ph.D. students and two upper secondary students, evenly distributed between the three countries.

Text extracts collected under "responsibility and loyalty" include answers to the afore-mentioned follow-up question about willingness to report academic dishonesty, reactions to scenarios of dishonesty by peers where responsibility and loyalty emerged as a theme, and many other issues. An initial reading and analysis of "responsibility and loyalty" confirmed that the choice to report or not report dishonesty faced by the students was multifaceted and grounded in many different contexts and considerations. The second round codebook (Appendix B) covered the different courses of action taken when students encountered dishonesty and considerations expressed with respect to the reporting of such dishonesty.

In reporting the results, we focused on establishing relationships (cf. Taylor-Powel and Renner 2003) between courses of action and considerations expressed. To ensure that the choices of action and considerations reported occurred in all segments of the data, we counted (Elliott 2018) the occurrences of choices of action and types of consideration in all countries and at all levels of study. As no apparent differences between the countries emerged, we decided not to analyze along the dimension of country, and we

do not indicate the nationality of the participants whose remarks we excerpt in the passages quoted below. Similarly, we recorded no apparent differences with respect to educational level. However, as the different categories of action play out in slightly different ways depending on educational level, we have decided to state educational levels against the interview excerpts given below, and to point out the most important differences.

Results

Only a few of our participants confirmed that they would be willing to report academic and research dishonesty by peers to teachers or other relevant authorities; and among these many said they would report the dishonesty only if they saw it as very serious. The notion of seriousness here had three dimensions: personal harm to the informant, personal gain for the perpetrator, and harm to other people or groups of people (including the entire scientific community). Some emphasized only one dimension, saying, for example, that they would only report if it affected them directly. Others referred to more than one dimension, explaining, for example, that they would report dishonesty if it seriously harmed their friends or if the perpetrator earned a substantial and undeserved advantage through illegal means.

The reasons participants gave for being reluctant to report can be grouped into three main categories:

(1) Fear of negative consequences, including negative reactions from peers.
(2) The belief that, in the given circumstances, the participant has no responsibility for the conduct of their peer.
(3) A sense of responsibility and loyalty to their peer (and sometimes also to a wider community).

These categories contain several sub-categories. Importantly, category 2 includes complete moral indifference as well as reasons based on loyalty to peers combined with a lack of responsibility for those peers' actions. This last combination roughly captures "camaraderie."

Categories 1 and 2 thus overlap with the types of reasoning reported in the existing literature (see Introduction). Category 3, however, does not. Although the reasons grouped in category 3 broadly revolve around peer loyalty, they are not expressions of the kind of automatic group loyalty implied by the term "camaraderie." Rather, the reasons contained in category 3 can best be described as elaborate moral considerations aimed at finding ways to honor the loyalty the participants perceive themselves as having to peers in an ethically responsible way. In this sense, they are qualitatively different from the kind of reasoning so far described in the literature.

Furthermore, although by design all three categories of reasons were associated with not reporting the dishonesty of a peer, differences at the level of action remained. Reasons in categories 1 and 2 generally led to inaction, while those in category 3 were often associated with specific actions other than reporting. The reasons in category 3 were especially likely to involve a direct, personal confrontation with the perpetrator. The connections between actions and reasons are illustrated in Table 2.

Finally, it should be noted that our participants did not always give just one reason. Sometimes they combined reasons from two or more of the categories in the same explanation. Many also gave reasons from different categories depending on the specific nature of the situation. The reasoning of the participants in the study was thus clearly context-dependent. It was particularly noticeable that the students were more likely to give reasons related to loyalty and responsibility in situations where the perpetrator was a close friend.

Table 2. Combinations of reasons and actions to knowledge of peer dishonesty.

Reasons \ Action	Report to relevant authority	Confront the perpetrator	Remain quiet
Weighing fear of negative consequences against the chance of a positive outcome	Occurs in our dataset. Most likely when the dishonesty is very serious, when anonymity is guaranteed, and when enforcement is perceived to be fair.	Occurs in our dataset. Most likely when the risk of negative consequences is perceived to be lower than it is for alternatives and/or the chance of positive outcomes is perceived to be real.	Occurs in our dataset. Most likely when the risk of negative consequences is perceived to be serious and/or enforcement is perceived to be unfair.
No responsibility for peer action perceived	Not observed and not likely to occur. Occurs in our dataset.	Indifference	Not observed and not likely to occur.
Loyalty to peer	Not observed and not likely to occur often. Occurs in our dataset. Most likely if the perpetrator is a close friend.	Occurs in our dataset. Includes clear examples of "camaraderie".	
Loyalty and responsibility	Occurs in our dataset. Most likely when the loyalty and/or responsibility extends beyond friends and classmates, and when the dishonesty perceived to be very serious.	Occurs in our dataset. Most likely when there is uncertainty about the intent of the dishonesty and/or if the perpetrator is a close friend.	Not observed and not likely to occur, unless reasons based on expected consequences are also involved.

In the following elaboration of our results, we will not go into the ways in which students balance their fear of negative personal consequences against the positive outcomes of reporting. Rather we shall focus on the way students see their own responsibility and balance it against various forms of loyalty toward their peers.

Responsibility toward friends

Participants who did not recognize a clear responsibility for the actions of a peer in a particular context might simply opt to keep their knowledge of dishonesty to themselves. The following exchange with Participant 14 (upper secondary) is illustrative:

```
Int: Would you ever [report] if someone was cheating for an
exam?
Par. 14: No.
Int: No? Is there any situation where you might report? Why
not?
Par. 14: I don't know. It's not my business […].
Int: What if you would be totally anonymous and they wouldn't
know it was you?
Par. 14: No.
```

This example also illustrates how in many cases the promise of anonymity did not change the minds of our participants if, from the outset, they did not feel responsibility for what their peers do.

However, many of our participants felt that they had some degree of responsibility for helping their close friends and colleagues. Some also felt that they had a responsibility toward a broader community, but they rarely perceived this to be as important as their responsibility to friends. When loyalty to a friend was combined with a sense of responsibility to help the friend, the participants indicated that they often (but not always) found that the best way to react to the discovery of academic dishonesty was to confront the perpetrator:

> Par. 19 (Ph.D.): If it was one of my peers manipulating data I'd go to them as a friend, being, like, 'you need to be careful', like, 'you need to be careful because you could be found out'. […] So not even kind of from a kind of integrity of the discipline point of view, which is also important. But just kind of, like … 'what are you doing?' […] your whole career could go down the … '.

Sensitivity to peer situation and context

Participants giving reasons with responsibility as a central element frequently recognized that people are dishonest for many different reasons, and these

differences matter to them. A peer who is dishonest out of desperation that is in some way due to illness, personal problems, pressure from parents or lack of academic abilities would be looked on more leniently than, for instance, one who is dishonest out of laziness. These participants sometimes worried that the official system would not have the same sensitivity – that it would react to all cases rigidly by punishing the perpetrator.

As an illustration, Participant 9 (B.A.) gave the following answer when asked if s/he would report dishonesty:

> Par 9: I probably should. I probably would feel the responsibility. But I don't think I would in [practice]. [...] I guess it depends on the circumstances. [If] it was something really bad. [...] If they were actually making big money or something like that. Then it would be like seriously unfair. But if they are just trying to pass their essay or whatever. You know if it was just kind of harmless [...] if they were just [...] having a tough week and they couldn't find time to study and just ended up doing this to get the thing done faster or whatever I wouldn't see much harm in that.

> Int: And what if you knew that if you reported it, the person wouldn't [...] get in trouble, but maybe now the teacher could check if the person's okay or needs extra help? Would you then [report]?

> Par. 9: That's different. [...] If that was kind of the general attitude towards it, then yes. Yes, I'm not sure what the consequences are [...] if I would tell a teacher. So that kind of makes it difficult to answer [...].

The sense of responsibility for a peer who is in trouble even extended to situations in which students not only failed to report the transgressions of a peer, but also actively assisted the transgressions. In our interviews, this was especially visible in B.A and upper secondary students' reasoning as to whether or not to give a free-riding peer coauthorship of a group assignment, and whether or not to help a classmate with an individual assignment.

One of the scenarios presented during the interviews (No 18 in Appendix A) involved asking the participants what they would do if they were writing an essay with a friend and the friend fell ill after an initial discussion of the topic of the essay before being able to write anything. In that situation, most of our participants would not hesitate to give the friend coauthorship, although they recognized that it was undeserved.

Consider this example, where Participant 17 (B.A.) is asked why s/he is willing to grant coauthorship of an assignment to a free-rider:

> Par. 17: [...] many courses are really, really hard, and there can also be a lot of personal things. Some get stress, or depressions [...] and stop coming [...] and then you maybe want to help them by not giving them even more work. I had a group member who became ill for a longer period, where it was, like ... we know he is coming back, he is just ill and out for a month and a half or so [...] so we just have to explain it [the academic content] to him when he gets back [...].

Notice that Par. 17 is content to take on a very heavy responsibility here. It is not just that s/he is ready to help the friend pass. S/he also assumes responsibility to teach the friend whatever s/he is supposed to have learned. This shows a sensitivity to the context and aims of the specific actions being contemplated that goes well beyond simply knowing a set of rules and following them.

Our participants, however, were attentive to things other than the reasons why their peers cheat. Thus, they often reacted differently, depending on their relation to the perpetrator, and depending on the effects that cheating might have for both the informant, the perpetrator, and others. This sensitivity was also observed in relation to differences in the aims of research and learning practices. Although our B.A. students were reluctant to report a fellow student, this did not necessarily imply that they would be equally reluctant to report if the product had real-life impacts, as illustrated by the following exchange with Participant 59 (B.A.):

> Par. 59: No […] as long as it did not directly relate to me and was only at bachelor's-level I would not care. If they were writing a master's thesis, or […] As soon as you send something out into the public [domain] then I think it is different, but as long as it is in a closed forum.

> Int.: […] So your limit would be if it affects someone outside you study?
> Par. 59: Yes. If it was going into an academic journal or similar.

As we see it, the responsibility expressed in such reasoning goes well beyond a simple sense of group loyalty. The participants' reasoning in this way is not trying to protect members of their group from justice. They are engaged instead in helping peers, and steering them clear of trouble, in a responsible and productive way.

Conflicts and tensions

The participants whose complex attitudes to responsibility and loyalty were described in the last section sometimes face ethical challenges that others do not. In particular, the need to weigh up considerations of loyalty and responsibility to friends and to a broader community.

The participants often felt some kind of responsibility for their friends and classmates, to whom they also wished to remain loyal to. But, as illustrated in the exchange with Participant 19 above, some also perceive a responsibility to the broader "integrity of the discipline." Several of our participants were aware that both their loyalty and responsibility extended beyond their closest friends. They recognized that sometimes what is perceived as morally right will depend on whether one emphasizes loyalty to friends or loyalty to the

broader community. This is illustrated below, where Participant 68 (B.A.) reflects on the ethically correct way to behave in collaborative work:

> Par. 68: This is a really difficult question. It is much easier to find out how to behave in the right way in relation to people, those you do group work with. There are fairly clear rules for how to treat your friends. […] It is hard to follow those rules and at the same time find out what is [ethically] okay. For instance, something like sharing an idea. You should obviously share ideas with your friends, but it might not be the right thing to do in relation to [the university].

> Int: So you see a conflict […] between the demands from, let's say, your education, and the loyalty towards your friends […]?
>   Par. 68: Yes

Several participants described a similar tension, typically in the context of collaboration. Participant 55 (B.A.), for instance, when asked about the scenario involving the question whether free-riders should be given coauthorship in group assignments, indicated that from a "purely academic" point of view free-riders should not be granted coauthorship. But s/he added that, when one is working with good friends, there are "also many other things" to consider, and therefore it would be "quite fair" to extend coauthorship to a friend who has been free-riding as a result of being at "a difficult point in life". Participant 6 (B.A.), on the other hand, was unable to reach a conclusion when presented with the same scenario, stating that "on one hand, there is a tie here, a human connection. On the other hand, however, there is the responsibility." Unable to find a way to honor both concerns – and unwilling to allow one concern to outweigh the other – s/he gave up trying to describe a solution.

Ph.D. students face this challenge as well, but for them the tension seemed to be between loyalty to the research group and loyalty to the broader research community. For instance, when Participant 30 (Ph.D.) was asked whether or not s/he would report dishonesty, s/he said:

> Par. 30: There would be an internal conflict in me in this case because … If it was someone from my own section, for instance, then it is someone whom I work with, and it is not a super big section, so you know them well and have very good social relations to them … On the other hand, I think … that our work […] becomes meaningless if we do not in one way or another put our foot down and say 'this is not allowed'. So I hope that, if the situation occurs, I will have the conversation with them and say that I do not think it is okay, and that I hope they will change their practice based on that.

Again we see that the participant opts for confronting the perpetrator personally rather than reporting, and again this course of action is preferred, not because the participant wants to shield the peer from justice, but rather because s/he perceives this solution as the best way to ease the tension between personal norms and interests and the norms of science, both of which s/he is committed to. Participants 19 and 55, quoted above, along with several other

participants, came to the same conclusion (i.e., that it was best to confront personally rather than reporting), albeit for different reasons. For them, the choice seemed to rest on a decision to allow personal norms of friendship to overrule broader academic norms. This does not mean that the norms of academic practice in general are rejected, but simply that when these norms are perceived to conflict with personal norms of friendship and loyalty, some participants' inclination is to disregard the norms of academic practice in order to preserve their personal integrity.

Discussion

In this study we found that students are often willing to assume substantial personal responsibility for dealing with the academic dishonesty of a peer, and even prefer this to reporting. However, when they are deciding on the right course of action they also perceive tensions between the norms of the good researcher and student and their norms as a good friend and decent person. This tension was identified in all three countries and across all educational levels.

Our results raise questions on multiple levels. At the most general level, there are questions about the very idea of speaking about research or academic integrity in isolation. The word "integrity" is derived from the Latin *integritās*, meaning wholeness (OED 2020). In ethics, integrity is generally associated with internal consistency in judgments across contexts. Thus, it can seem to be a contradiction in terms to say that a person has integrity with regard to a certain role – e.g., as researcher or student. In theory, (perfect) integrity cannot be achieved in one aspect, or part, of life without achieving it in all. Our data illustrate that this is not just a philosophical discussion. Our participants experienced it in practice. When faced with issues that are typically presented as relating to *academic* or *research* integrity, they approach them from a broader perspective as persons with multiple roles; friend, student, researcher. Our findings suggest that the role of friend is often the most important to them, and that they chose to act in ways that best preserve the norms of that role.

In some cases, it may, of course, be questioned whether the tensions that our participants perceived, between academic and personal integrity, are real. The participants may simply have misunderstood what is expected of them from an academic integrity perspective. Their belief that they have to assume direct personal responsibility because the official system will not be sensitive to context may be false. In such cases, the problem seems to be primarily one of effective communication, training, and clear guidance. However, this does not seem to be the only problem. Previous studies have shown that failures to enforce codes and regulations can lead to reluctance to report (Horbach et al. 2020; McCabe, Trevino, and Butterfield 2001). To this, our study adds that harsh punishments

and zero-tolerance policies – or just unclear policies – may turn out to have the unintended side-effect that students will be reluctant to report peers.

Furthermore, we saw that, even when they are reluctant to report, some participants are willing to take on substantial responsibility by confronting and trying to convince the dishonest peer to alter their behavior, or by trying to help resolve the situation that pushed the peer into dishonesty. These results to some extent mirror the findings of Koocher and Keith-Spiegel (2010) among American senior researchers. It is, however, an open question whether institutions should be supportive of this way of reacting to academic dishonesty, at least when it comes to less serious dishonesty.

In the literature on research integrity, reporting seems to be treated as, unequivocally, the correct course of action. McCabe, Trevino, and Butterfield (2001), for instance, argue that increasing the rate of reporting is likely to have a preventative effect and reduce dishonesty. On the other hand, it can be argued that trust and group loyalty are important and generally productive values that should be promoted in situations that depend on collaborative work, whether it is in research or during education.

Actually, a few of the upper secondary school students to whom we talked were under the impression that their teacher would *not* want them to report a friend cheating. So apart from the conflict between personal norms and the norms of academic integrity, there is another possible conflict here between norms of academic integrity and more practical norms needed to establish an environment that promotes effective collaborative work. From this perspective, students who assume personal responsibility and try to resolve breaches of academic integrity without betraying the loyalty of the group are doing exactly the right thing. It is, however, an open and unresolved question whether institutions can expect students to assume this kind of responsibility for their peers.

Educational institutions are thus faced with at least three different options regarding the distribution of responsibility for handling breaches of academic integrity.

First, institutions may take full responsibility for handling breaches of academic integrity and demand that students report each other. If this policy is chosen, our results show that installation of honor codes and promises of anonymity may not be enough to convince students to report their peers. Rather, if institutions want their students to report transgressions of peers it is important that this expectation is clearly communicated and that efforts are made to ensure that students trust the institution to be just and sensitive in its treatment of perpetrators. Furthermore, students should be shown how to maintain their personal integrity while reporting a peer (if this is possible).

Secondly, institutions may take full responsibility for handling breaches of academic integrity without involving the students (i.e., students are not expected to report each other). This would probably be a less effective way

of promoting academic integrity, but it would allow the students to build the trust and loyalty needed for effective collaboration.

Finally, institutions may delegate some of the responsibility to the students. Judging from our study, many students have de facto assumed some responsibility even though it is not the official policy of their educational institution. This solution combines sensitivity to the students' personal integrity and academic integrity with the didactic consideration of creating a safe learning environment suitable for collaborative work. It is unclear, though, whether institutions can expect students to take on this kind of responsibility for their peers. At least it seems unfair and counterproductive to place this responsibility on the students unless efforts are also made to ensure that they have sufficient knowledge and skills to be able to carry the responsibility delegated to them. Institutions should therefore ensure that such a delegation of responsibility is accompanied by appropriate training.

None of these choices are straightforward, and there is ample room to build mixed policies. For instance, institutions may expect students to report severe transgressions of norms, while encouraging them to take responsibility in minor cases. It would be important, however, to make such a policy absolutely clear, and it should be based on an adequate understanding of students' reasoning in relation to reporting peers.

Limitations

Our study has several limitations. We did not recruit students on the basis of academic performance, motivation, and study activity. This could be a possible limitation if the teachers and lecturers that helped to recruit participants selected students that, e.g.,, are more active or higher performing. While we assume that the studied students varied "naturally" on these parameters, and thus were symbolic representative of the background populations, we cannot be rule out some extent of selection bias. Furthermore, as the study is qualitative, and based on interviews with a relatively small sample of the relevant populations, it provides detailed, in-depth insights into features of those populations, but it does not allow us to draw conclusions about their general prevalence. Future studies based on representative surveys will therefore be an important addition to the results presented above.

Furthermore, the participants were mostly reacting to scenarios and questions that were hypothetical to them. The scenarios described something that realistically could happen to the participants, but had not actually happened. This raises the worry that the responses we recorded do not reflect what they would actually do, but rather what they think they should do, or the ways in which they think members of their group would react.

Despite these limitations, we believe that our study gives institutions good reason to consider further how best to balance requirements for reporting misconduct against empowering students to find ways to take responsibility to deal with the issues among themselves.

Note

1. Project website: http://h2020integrity.eu/.

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Author contributions

Study design: MPG, TBL, PS, MWJ
    Data collection: UQ, NK, OV, MWJ
    Coding: MPG, UQ, MWJ
    Interpretation: MPG, MWJ
    Primary writing: MPG, MWJ
    Critical revisions and commenting: UQ, NK, TBL, PS, OV
    All authors have approved the final version of the manuscript, including appendices and title page.

Coding availability

All data was coded using Nvivo12, the codebooks are included as Appendix B.

Data availability

To protect the privacy of the informants, the raw data for this study (anonymised interview transcripts) cannot be made publically available. Arrangements for sharing the raw data can be made by direct contact to the authors.

Disclosure statement

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