

## Criminal Grades?

## Contract cheating and student exploitation in Higher Education

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## 1. EXECUTIVE SUMMARY

- This research involved a combination of semistructured interviews with senior academics with responsibilities related to academic integrity and misconduct from three Scottish universities, and an analysis of online data pertaining to the contract cheating market.
- All respondents had experiences of contract cheating inquiries. Whilst suspected cases of contract cheating were relatively common, a significant issue is to obtain evidence that contract cheating has in fact occurred.
- There was a broader awareness of the risk of student blackmail and extortion by predatory contract cheating service providers. The actual numbers of confirmed cases of student blackmail were very low and only reported at one institution.
- Contract cheating service providers are aggressive in their marketing and actively try to legitimise their services by framing assignment outsourcing as a normalised practice amongst students, and they specifically target students who may be struggling with their education.
- Some contract cheating service providers are more transient and employ deceptive and outright false marketing prerogatives. These can potentially be considered as more high-risk service providers, in comparison to more well-established contract cheating companies.
- It is clear that there is a huge global market for contract cheating services, and that service providers are very adept at utilising a variety of online platforms and strategies to attract students. What is also concerning is that they actively frame their services as legitimate student learning services distinct from 'cheating' or academic misconduct.

- Technology has not only expanded and diversified the contract cheating market, but it has also served to mutate different forms of academic misconduct, such as plagiarism involving automatic language translation.
- Students engaging in contract cheating, and more widely, academic misconduct, are likely to experience significant stress. International students, and students with English as a second language, might be particularly vulnerable and experience unique forms of pressure.
- Students involved in academic integrity processes may experience a significant deterioration in mental health. Interventions need to be sensitive to the impact of such processes upon student wellbeing.
- Student learning and support services are likely to be under increased pressure due to the growing number of international students.
- There is a need for institutions to better collect data on suspected or confirmed instances of contract cheating, and to more proactively research the causes behind it, to better inform academic policy.
- Students need clear guidance on what constitutes contract cheating, and that engaging in it poses serious risks, both in terms of their academic futures, but also that they may be exploited through blackmail or extortion.
- A holistic approach is likely to be required to adequately address contract cheating, involving partnership working across institutions, between students and educators, and between student support services and academic misconduct offices.

### 2. INTRODUCTION

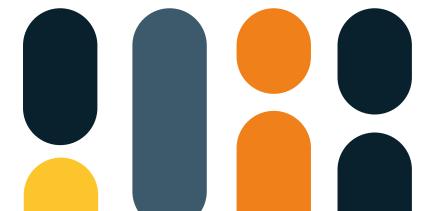
Recent reports in the UK media highlight that students in higher education are increasingly outsourcing their assignments to third-party service providers (Newton 2018). In academic discourses, the submission of assignments completed by a third-party, whether a friend, family member, or a commercial enterprise, is often referred to as 'contract cheating'. Whilst commentators, both in academia and beyond, have referred to contract cheating as reaching "epidemic" proportions (Turner 2017), there is currently little empirical evidence to substantiate such assertions (Lancaster and Clarke 2016; Newton 2018).

Despite limited evidence on the extent of the problem, it is clear that the contract cheating industry is highly developed and sophisticated (Lancaster 2019a). Virtually any type of assignment can be purchased online, from undergraduate essays to PhD dissertations, and students can even pay others to take their exams (Newton and Lang 2016). Relying on a flexible and agile labour force, these companies offer quick turnaround times and modestly priced assignments (Lancaster 2019a). There is widespread consensus within academia that bespoke coursework from these service providers is very challenging to detect; anti-plagiarism software is largely ineffective, and it can be very difficult to differentiate between a genuine student essay vis-à-vis an essay written by a third-party (Ison 2020). In addition, contract cheating is often poorly understood by staff tasked with marking assignments (Ellis et al. 2018), and the issue itself is often not part of contemporary academic discourses in the UK (Birks et al. 2020). In the context of the commercialisation of higher education, the growth in more instrumental attitudes to student learning (Naidoo and Jamieson 2005), a more precarious academic workforce, limited resources, and increasing

opportunities for academic misconduct, identifying and responding to contract cheating are increasingly challenging (Brimble 2016).

The emergence of the contract cheating market has largely been facilitated by the widespread adoption of the internet and communication technologies (Wallace and Newton 2014). Plagiarism has historically been a common feature of academic misconduct, and technological innovation has seen this problem mutate into new forms of misconduct, for instance, the use of paraphrasing software, essay banks, and the provision of bespoke assignments (Birks et al. 2020). The outsourcing of assignments is likely to have been a historically omnipresent feature of educational institutions; however, the internet has provided the infrastructure to significantly expand and extend its reach (Clare et al. 2017). Contract cheating services are now advertised openly on campuses, via emails directed to students, the targeting of students on social media, and most peculiarly, YouTube celebrities and influencers encouraging students to employ "professional nerds" to complete assignments on their behalf (Jeffreys and Main 2018; Morris 2018).

Whilst the prevalence of contract cheating remains uncertain, it is nevertheless clear that this can have serious consequences for the value and integrity of academic degrees, both in the devaluation of qualifications, but also that students may then lack the skills required in their future careers. Perhaps more concerning, contract cheating service providers are predatory in nature, targeting vulnerable students through aggressive marketing (Bailey 2020). Given that these transactions largely occur in unregulated markets and online spaces, students expose themselves to a variety of risks by engaging with these actors (Yorke et al. 2020). Some actors fraudulently acquire payments from students without delivering their products



(Sutherland-Smith and Dullaghan 2019), and there are also reports of students being blackmailed (Bailey 2020; Ross 2018). Indeed, service providers are reported to have threatened to reveal student misconduct to institutions, unless further payments are made (Bailey 2020; Birks et al. 2020; Yorke et al. 2020). Stress and poor mental health are often identified as factors contributing to student misconduct and contract cheating in the first place (Birks et al. 2020), and the process of being investigated for contract cheating has been reported as being highly traumatic for students (Pitt et al. 2020). What may potentially lead to intensified anxiety is of course being threatened with blackmail.

Responding to student vulnerability, contract cheating, and more widely, academic misconduct, requires a holistic approach. These are highly complex issues spanning a spectrum of poor academic practices to intentional attempts to procure bespoke assignments and submit them for academic credits (Thomas and Scott 2016). This research is concerned with examining some of these complexities in relation to higher education in Scotland, and more broadly, the trends and processes related to student vulnerability, misconduct, and contract cheating. In particular, the aims of this scoping study are to:

- Understand the motivations for using, and experiences of, contract cheating in the context of higher education.
- Understand the relationship between the contract cheating market and the emergence of explicitly illegal forms of exploitation against students.
- To scope out possible indicators and attributes of more exploitative and high-risk provision in the essay mills market.
- 4. Understand how the harms to students caused by criminality within a contract cheating context can be reduced, and how more widely the presence of criminality in contract cheating markets can be leveraged to undermine the continued operation of these markets.

This report consists of four different sections. The first section is a review of the current literature related to student vulnerability and the contract cheating industry. The methods used for primary data collection will be outlined in the second section, and the findings from qualitative and online data analyses are presented in section three. The final concluding section synthesises the insights from both the literature review, and the findings from the qualitative and online research, and discusses academic policy implications.



## 3. LITERATURE REVIEW

The literature review is structured around the following five topics: (1) defining contract cheating; (2) the prevalence of contract cheating; (3) the causes of student misconduct and contract cheating; (4) the contract cheating market; and (5) detecting contract cheating.

## 3.1 DEFINING CONTRACT CHEATING

The term 'contract cheating' was coined by Clarke and Lancaster (2006, p. 2) as "the process of offering the process of completing an assignment for a student out to tender". In its essence, contract cheating involves a relationship between at least three actors: a student, the university they are enrolled at, and the third-party completing the assignment (Draper and Newton 2017). The process of contract cheating can, however, take many different forms. Some have suggested that an economic or financial transaction is necessary (Rigby et al. 2015), whereas others have argued the monetary transaction to be irrelevant; the crucial element is that the assignment is completed by a third-party, and not by the student themselves (Eaton et al. 2019; QAA 2020). This report favours the latter, whilst also recognising that it is perhaps most plausible that blackmail and coercion occur in the context of financial transactions with a third-party. The focus of this report is the contract cheating industry (Lancaster 2020a), rather than transactions involving friends, acquaintances, or family members completing the assignments on behalf of students.

What adds further complexities to contract cheating

is that it may overlap with other forms of academic misconduct (Lancaster and Clarke 2016), such as plagiarism, filesharing or essay 'spinning' (more on this below). Similarly, there is not always a clear line between inappropriate assistance, proofreading, and editing, which would not necessarily involve any form of a 'contract' but can nevertheless give students an unfair advantage (Awdry 2020). For these reasons, Awdry (2020) suggests the term 'assignment outsourcing', as it has the potential to more accurately capture instances of students outsourcing their assignments to others, in the absence of any form of contractual obligations. Given the focus of our research, the term 'contract cheating', or 'commercial contract cheating' is appropriate, because of our focus upon the processes related to the marketisation of bespoke assignments. What potentially makes commercial contract cheating a distinct issue of academic misconduct, however, is that it involves a financial transaction requiring the act to be pre-planned, deliberate, and intentional (Morris 2018; Newton 2018). As a result of this, it is often perceived as one of the most serious matters related to student misconduct, with the Quality Assurance Agency for Higher Education (QAA 2017) recommending suspension or expulsion as the sanctions for contract cheating.

## 3.1.1 THE CONSEQUENCES OF CONTRACT CHEATING

Whilst definitions of contract cheating may be variable, there is a broader consensus regarding its consequences. Indeed, besides the obvious negative impact upon students in terms of suspension or expulsion (Bretag et al. 2018), students who opt out of the learning process by having others complete their assignments might also lack the skills required for future employment (Clare et al. 2017; Sutherland-Smith and Dullaghan 2019). This might be particularly acute in relation to certain courses, such as medicine or law, where a lack of skills can have direct implications for safety and public health (QAA 2020).

Lancaster (2016) has previously argued that contract cheating is not a victimless crime. Indeed, it not only devalues the effort of students producing high-quality work on their own, but it also contributes to the devaluation of tertiary qualifications (Baird and Clare 2017; Lancaster 2016). Whether or not contract cheating is actually increasing, a widespread belief that students are obtaining degrees without completing the assignments themselves may result in considerable mistrust towards universities (Sutherland-Smith and Dullaghan 2019).

Besides these broader considerations, students may themselves – if detected – experience a significant amount of stress, guilt or other issues related to wellbeing (Pitt et al. 2020). What potentially may be even more traumatic is being blackmailed by a third-party, and living with the stress of being 'outed' as a cheater. As Naughton (2020) cautions, it is important to move beyond moralistic discourses of 'lazy' students and 'cheaters'; such conceptualisations of the problem will undoubtedly restrict our understandings of the complicated mechanisms behind student misconduct, and consequently, how we best can address it.

## 3.2 THE PREVALENCE OF CONTRACT CHEATING

The Quality Assurance Agency (2020, p. 5) suggests "[t]he use of essay mills affects every higher education institution in the UK". According to the Business Manager of one such company – Ukessays.com – their organisation produced over 11,000 essays alone in 2012 (Awdry and Newton 2019). The media often portrays contract cheating as increasing and reaching 'epidemic' proportions (Naughton 2020). Yet, there is a lack of

empirical data to support such claims; on the contrary, the current empirical evidence would suggest that a relatively low proportion of students engage in contract cheating (Morris 2018). Inconsistent definitions, conceptual ambiguities, and a lack of representative data also make it impossible to accurately capture the extent of contract cheating, and subsequently, any longitudinal trends. Similar to the study of criminalised behaviours, our knowledge on contract cheating tend to come from self-report surveys or cases that are detected by educational institutions. A more thorough review of the different estimates will be discussed in more detail below.

## 3.2.1 STUDENT SURVEYS ON CONTRACT CHEATING

Newton (2018) conducted a meta-analysis of 71 surveys conducted between 1978 to 2016, and containing a total of 54,514 respondents. Approximately 3.5% of respondents reported engaging in commercial contract cheating. In addition, Newton (2018) also identified a moderate positive correlation between the year of the survey, and the proportion of students engaging in contract cheating. 15.7% were reported to engage in commercial contract cheating between 2014 to 2016. However, caution must be exercised in interpreting these statistics: the vast majority of surveys relied on convenience sampling covering a variety of countries.

More recently, Bretag and colleagues (2018) surveyed Australian students (n = 14,086) from eight universities. 5.8% of respondents reported engaging in behaviours identified as contract cheating, and 27% admitted to having completed assignments for their fellow students. Only 0.2% (n = 30/14,086) reported having obtained an assignment from a professional service provider, and it was considerably more common to have obtained an assignment from current or former students, or friends or family members. Nevertheless, the survey relied on convenience sampling, and given the sensitive nature of contract cheating, there is likely to be an element of both

confirmation bias and self-selection bias present within the survey.

The results from Awdry's (2020) survey (n = 10,495) of students from Europe, Australasia, and the Americas, reverberate with the findings of Bretag et al. (2018). 7.4% of students reported engaging in any form of formal outsourcing (essay mills and bespoke writing services), compared to 12.0% using informal outsourcing methods. It is important to note, however, that Awdry (2020) included peer-sharing sites as a mode of formal outsourcing. The proportion of students using essay mills (1.2%) or online essay bidding (0.8%) remain low. This survey also relied on convenience sampling across a large geographical area, and the results are neither generalisable, nor to be considered representative of the wider student population.

### 3.2.2 ACADEMIC TEACHING STAFF SURVEYS ON CONTRACT CHEATING

Harper and colleagues (2018) surveyed Australian academic staff members (n = 1,147) from eight universities. 68% of respondents reported having encountered assignments they believed to be written by someone other than the student themselves. Moreover, it was also reported that prior knowledge of the student's academic ability, language skills, or a high text-match in anti-plagiarism software promoted the suspicions of contract cheating.

In a survey of academic staff (n = 196) from universities across the UK and Australia, Awdry and Newton (2019) asked their respondents to estimate the prevalence of contract cheating within their institutions. On average, staff believed 10.3% of students were engaging in some form of contract cheating. Furthermore, 42% of respondents also had direct experience of students using contract cheating services, and 60% of the sample confirmed their institution had detected instances of commercial contract cheating.

#### 3.2.3 EXPERIMENTAL RESEARCH

Rigby and colleagues (2015) sought to investigate the demand for bespoke essays by conducting hypothetical discrete choice experiments. 90 students from three UK universities completed the experiment, which had them decide whether to buy an assignment, based on price, grade, risk, and penalty. Half of the respondents opted to buy at least one of the assignments, whilst the other half chose to not buy an assignment in any of the scenarios presented to them. Additionally, females were found to be more risk-averse than males, and students with English as a second language were also found to be more likely to buy bespoke assignments. Whereas this would suggest a rather strong demand for bespoke assignments, it is important to question the ecological validity of this research. Indeed, the non-representative sample, and experimental setting, means the results are not generalisable, and moreover, the hypothetical nature of the experiment might poorly capture the complex decision-making processes involved in, and social context of, contract cheating.

## 3.2.4 CONCLUSION: THE PREVALENCE OF CONTRACT CHEATING

Despite many claims of how widespread commercial contract cheating is, there is a paucity of robust empirical data to confirm those claims. Indeed, all the survey research reviewed were non-random in nature, and it is therefore difficult to both estimate the current prevalence, as well as any longitudinal changes. Most research tends to suggest a minority of students engaging in some form of assignment outsourcing, with an even lower proportion procuring bespoke assignments from commercial service providers. It is also clear, from what limited evidence there is, that contract cheating appears more likely to occur within family and friendship networks, rather than involving the paid services of a third-party (Awdry 2020; Eaton et al. 2019). Nevertheless, as with many forms of illegal or illicit behaviours, there is a possibility

that many forms of academic misconduct go unnoticed and unreported (Ison 2020). Accurately estimating the dark figure of contract cheating remains a significant future challenge.

# 3.3 THE CAUSES OF ACADEMIC MISCONDUCT AND CONTRACT CHEATING

#### 3.3.1 THE SOCIAL CONTEXT

Student cheating, and in particular, contract cheating, are not recent phenomena (Harper et al. 2018). Often in discourses surrounding contract cheating, the social context of student misconduct is ignored. Despite this, the propensity to engage in contract cheating is influenced by a variety of factors, and cheating occurs in particular social contexts. Bretag and colleagues (2018) position contract cheating in the context of broader social, political, and economic changes occurring in higher education. Indeed, increasingly large and diverse student cohorts are evident, and both are the result of the internationalisation and commercialisation of higher education (Bretag et al. 2018). Universities themselves are increasingly market-oriented and operate similarly to other commercial enterprises. Upon graduating, students find themselves in increasingly uncertain, precarious, and competitive labour markets (Bretag et al. 2018; Harper et al. 2018; Naughton 2020). Brown (2001) has cautioned that these broader structural changes contribute to a form of 'credentialism', in which degrees and qualifications themselves are deemed more important than the skills and experiences developed as part of obtaining them. Parallel to this, the expansion of sharing economies and online platforms for providing goods and services have also been highlighted as contributing to more disengaged and transactional approaches to learning (Bretag et al.

2018; Harper et al. 2018). As Naughton (2020) recently pointed out, as a result of intensified competition amongst graduates, students are facing unprecedented pressure to achieve first-rate grades, and even receiving high grades is by no means a guarantee that students will enter their chosen careers. The stress, anxiety and pressure faced by students, together with the broader structural changes occurring both in and outwith higher education, have been argued to represent "a 'perfect storm' in which contract cheating can perhaps be seen as an unsurprising symptom of an ecosystem under extreme stress" (Bretag et al. 2018, p. 1838).

## 3.3.2 THE SPECTRUM OF CHEATING BEHAVIOURS

Before proceeding to examine research on why students are engaging in contract cheating, it is important to situate contract cheating along a continuum, or a spectrum, of behaviours related to cheating and academic misconduct. At the one end of the spectrum, academic misconduct may be unintentional, such as a student plagiarising due to poor academic practice or being unable to paraphrase (Thomas and Scott 2016). Sharing notes with fellow students may not necessarily be cheating, but the emergence of peer-to-peer networking sites dedicated to sharing means that students can outsource different aspects of their learning - such as notetaking - whilst technological advances also make automated paraphrasing tools readily available (Bretag et al. 2018). These online spaces are also used by students to obtain completed coursework; the assignments may be freely available, require a fee, or that the student uploads completed assignments themselves to access the work of others (Bretag et al. 2018). At this point, students are crossing the threshold into what is commonly referred to as contract cheating, and arguably, this is a particularly serious form of misconduct, since it involves a premeditated attempt to bypass academic regulations by fraudulently submitting the work of a third-party (QAA 2017).

It is unclear whether students linearly transgress this continuum, for instance, starting by trading notes and

plagiarising the work of others, and in doing so become increasingly disengaged with the learning process, to ultimately outsource the completion of their entire assignments (Bretag et al. 2018). According to Curtis and Clare's (2017) meta-analysis of surveys with self-report measures related to contract cheating, 'repeat offending patterns' appear to be a feature of contract cheating; about two thirds (63%) of respondents that had engaged in contract cheating reported doing so on more than one occasion.

3.3.3 EXPLAINING CONTRACT CHEATING: INTERNAL FACTORS

A variety of different factors have been outlined as contributing to student contract cheating. Some individualistic explanations have been proposed, such as that the propensity to cheat is mediated by psychological traits, morals and norms, desire for academic success, and attitudes towards cheating (Medway et al. 2018; Rundle et al. 2019). However, it has also been demonstrated that students elect to cheat. even though they consider it wrong (Yorke et al. 2020), and this perhaps suggests more complicated decisionmaking processes to be involved in contract cheating. Motivation has also been outlined as a factor mediating the propensity to cheat; students who are engaged and intrinsically motivated to learn may be less likely to resort to cheating (Rogerson and Basanta 2016). Amigud and Lancaster (2019a) suggest students who may initially be motivated and engaged with their learning may reach a certain threshold when the temptation to acquire bespoke assignments becomes too strong; contract cheating can provide an opportunity for students to obtain a qualification without dropping out of their studies. Others have also highlighted normalisation as a problem, in which students may rationalise contract cheating based on the perceptions that it is common amongst students to do so (Birks et al. 2020; Newton 2018; QAA 2020). In this context, Rigby and colleagues (2015) argue that perceived risk, penalties and rewards are central to driving the demand for contract cheating. If the risks of getting caught are perceived as low in comparison

to the possibility of obtaining good grades, or simply passing a course – and especially if there is a perception that contract cheating is common practice – obtaining bespoke assignments can be an acceptable risk to take (Amigud and Lancaster 2019a; Rigby et al. 2015; Yorke et al. 2020). What potentially further drives the perception of contract cheating as an acceptable risk or common practice, is of course service providers using marketing strategies to directly appeal to this, by, for instance, displaying student testimonials on their websites.

Students may experience considerable stress whilst in education for a variety of reasons. First-rate grades are increasingly important for future employment opportunities (Naughton 2020), many may have caring responsibilities, in employment to finance their education, or have other responsibilities diverting their time away from their studies (Brimble 2016; Eaton et al. 2019). Given the cost of education – whether financial or the time invested – students may engage in cheating simply to see a return on their investments (Brimble 2016). There may also be a high level of pressure from family members to achieve high grades, and this might be exacerbated in instances where families have invested significant sums in their children's education (Medway et al. 2018). Amigud and Lancaster (2019a) reported that family members themselves, on behalf of their children, were involved in soliciting contract cheating service providers on social media platforms. The immense pressure and stress that many students experience undoubtedly affect mental health, and as Birks et al. (2020) have pointed out, it is conceivable that there is a link between student mental health and academic misconduct. Cheating may in this context become a tempting strategy to alleviate some of the stress and pressure experienced by students (Eaton et al. 2019).

Both with regards to contract cheating and other forms of academic misconduct, there is a widespread perception that international students, or students with a first language other than English (LOTE), are more likely to cheat (QAA 2020). There is some evidence to suggest commercial contract cheating to be more

common amongst international students, whereas domestic students are more likely to outsource the completion of assignments to family or friends (Birks et al. 2020). International and LOTE students have also been found to be overrepresented in issues related to academic integrity breaches (Bretag et al. 2013), and cheating behaviours, including contract cheating (Bretag et al. 2018; Morris 2018; Yorke et al. 2020). Cross-cultural differences in understandings of concepts such as plagiarism, or attitudes towards cheating, has previously been highlighted as a factor explaining some of these differences (Ehrich et al. 2016; Medway et al. 2018). However, such explanations do not capture the unique challenges faced by international and LOTE students vis-à-vis domestic students. International students may experience considerable pressure, whether it is from family expectations of academic success, or substantial tuition fees, which may add to the propensity to utilise contract cheating services (Eaton et al. 2019). Academic skills and literacy have previously been outlined as mediating the proclivity to cheat or obtain bespoke assignments (Birks et al. 2020; Pecorari 2016). Acquiring the skills essential to complete a university degree is undoubtedly more challenging for students studying in their second language (Awdry and Newton 2019; Prentice and Kinden 2018).

## 3.3.4 EXPLAINING CONTRACT CHEATING: EXTERNAL FACTORS

Factors operating on meso levels – for instance, institutional relationships – or macro levels, such as the commercialisation of higher education, have previously been outlined as contributing to contract cheating. Medway and colleagues (2018, p. 395) argue that the "notion of students as consumers link logically to the idea of buying assignments off the shelf". For instance, paying a small fee for a bespoke assignment can be perceived as an attractive option,

in comparison to paying tuition to retake a failed module (Yorke et al. 2020). As higher education itself is becoming more transactional, and particularly for students focused upon the end goal of obtaining academic credentials rather than fully engaging with the learning process, it is perhaps not surprising that some students also choose a transactional approach to their learning (Awdry and Newton 2019). What may further nudge students to engage in contract cheating is that the service providers are predatory in nature, targeting vulnerable students (Bailey 2020), using empathetic reassurance cues (Medway et al. 2018), whilst offering individualised, affordable bespoke assignments, to alleviate some of the pressure faced by students (Rowland et al. 2017). The impact of the internet and communication technologies has also had profound effects upon diffusing the market, and some of the resulting marketing prerogatives will be examined more closely in Section 3.4.2.

What potentially acts as a barrier against student misconduct and cheating is good relationships between students and staff (Harper et al. 2018). However, in the context of resource constraints and increasingly large student cohorts (Brimble 2016; Naughton 2020), learning environments risk becoming more anonymous and impersonal, with limited opportunities to establish and nurture important staff-student relationships (Harper et al. 2018; Morris 2018; Pitt et al. 2020). Students in need of extra support, and particularly in circumstances where students feel they have limited opportunities to approach their educators (Morris 2018), may turn to contract cheating service providers, disguised as offering 'extra support' (Amigud and Dawson 2019; Lancaster 2020a).

## 3.3.5 THE IMPACT OF THE COVID-19 PANDEMIC

In March 2020, higher education experienced unprecedented and rapid changes due to the

ongoing pandemic, which required universities to adapt their teaching and learning environments to the digital world (QAA 2020). QAA (2020) reports that commercial contract cheating service providers were quick to capitalise upon the increased levels of anxiety and uncertainty experienced by students. Additionally, due to the shift to online examinations, many universities experienced increasing rates of cheating (Bilen and Matros 2021), and substantial increases in the activity on a popular student filesharing website were also shown to coincide with the shift to online teaching (Lancaster and Cotarlan 2021). There is currently a lack of data to accurately measure the impact of the COVID-19 pandemic upon contract cheating, though it is conceivable that less formal supervision arrangements, increasing levels of anxiety, uncertainty and isolation, and fragmented staff-student relationships, could all contribute to potentially increase contract cheating and other forms of academic misconduct.

## 3.4 THE MARKET FOR CONTRACT CHEATING

There is a widespread perception that contract cheating is a recent phenomenon; this, however, neglects the fact that academic ghostwriting services were advertised as early as the 1940s, and that the market continued to proliferate in coming decades (Ison 2020; Lancaster 2020a). The contract cheating market has, nevertheless, been fundamentally reconfigured due to the infrastructure provided by internet and communication technologies (Eaton et al. 2019; Ellis et al. 2018).

#### 3.4.1 TECHNOLOGICAL CHANGES IN THE PROCESSES OF KNOWLEDGE PRODUCTION AND CONTRACT CHEATING

There is little doubt that the internet and communication

technologies have contributed to novel shifts in knowledge production: collaborative production and sharing of knowledge is commonplace in many spheres of daily life (Rowland et al. 2017). Students currently enrolled at universities might have grown up in an environment characterised by sourcing for information online, and the sharing of notes, essays, or other assignments, may not necessarily be perceived as a form of academic misconduct, but as a natural component in supporting others and contributing to collective efforts of knowledge production (Brimble 2016; Eaton et al. 2019; Rogerson and Basanta 2016).

Besides the emergence of an online sharing culture, novel technologies also provide the means necessary to engage in various forms of cheating, such as plagiarism. or the submission of assignments sourced online, whether or not any financial transaction is involved (Hayden et al. 2020). What further complicates matters are the crossovers between contract cheating and other forms of online-enabled academic misconduct. For instance, peer-to-peer sharing websites are often disguised as supportive student communities, or information repositories (Rogerson and Basanta 2016), and the sharing of completed assignments can easily be used for contract cheating. In addition, some of these sites also offer options to pay for 'homework help' (Lancaster and Cotarlan 2021), and at times require subscription fees, or the uploading of materials in exchange for the completed work of others (Rogerson and Basanta 2016). Perhaps a more recent occurrence is the use of online paraphrasing tools, enabled by technological advancements in text processing and artificial intelligence. Such tools can be accessible for free, and allow students to upload a corpus of text which is then automatically paraphrased (Rogerson and McCarthy 2017). Such tools can be an alluring option for students struggling with writing original text, and any grammatical errors or strange phrasing produced algorithmically may simply be interpreted by assessors as a lack of linguistic skills (Prentice and Kinden 2018; Rogerson and McCarthy 2017). Because of the current

limitations of anti-plagiarism software such as Turnitin, essays produced by paraphrasing tools has previously been shown to bypass originality checks, and pose a significant future challenge (Rogerson and McCarthy 2017). Though no research has yet been able to confirm it, it is conceivable that such tools may also be used by ghostwriters providing contract cheating services, due to exceptionally short turnaround times and high demands.

Notwithstanding the impact of technology upon facilitating the tools and platforms for committing various forms of academic misconduct, the contract cheating market itself is currently thriving on the digital infrastructure provided by the internet (Yorke et al. 2020). Whilst essay writing services historically used to require physical storefronts to operate, commercial contract cheating enterprises are now almost exclusively operating online (Owings and Nelson 2014; QAA 2020). This has not only served to diversify the structure of business operations, but it also contributed to a myriad of marketing strategies, some of which are highly intrusive, and exposes students – on an unprecedented level – to opportunities for engaging in contract cheating (Lancaster and Clarke 2016). However, despite an increased presence online, it should nevertheless not be forgotten that most students that do engage in contract cheating, do so by outsourcing their assignments to family and friends (Bretag et al. 2018).

### 3.4.2 BUSINESS MODELS, PRODUCTS AND MARKETING PREROGATIVES IN THE CONTRACT CHEATING MARKET

Because there is a plurality of different actors operating within the commercial contract cheating market, ranging from independent ghostwriters to sophisticated, large-scale essay mills, accurately estimating the economic size of the market is difficult (Newton 2018). There is limited research that explores the contract cheating market from the perspective of the ghostwriters engaging in it, though Sivasubramaniam and colleagues (2016) shed some light on this. Indeed, Sivasubramaniam et al.

(2016) argue that because of the lack of graduate jobs for international students returning to their home countries, the contract cheating market may offer an opportunity to apply and profit from their skills. These individuals are very familiar with marking procedures, assignment guidelines, and learning objectives from universities in the minority world, and this puts them in a good position to recruit and provide services for current students (Sivasubramaniam et al. 2016). Many ghostwriters are likely to be under severe pressure themselves, and it has been reported that they deliver between 40-50 essays a month (Lancaster and Clarke 2016). Owings and Nelson (2014) argue that contract cheating is a highly profitable industry with a low business failure rate, and moreover, that according to their estimations, global market revenues are likely to be more than 100 million USD. In a recent case from New Zealand in which a contract cheating company was prosecuted, it was revealed that they during a five-year period had received approximately 800,000 USD (Newton 2018).

Lancaster (2016) argues that the market is thriving because there is not only a demand for assignment outsourcing, but there is also a skilled workforce that is genuinely good at writing essays and producing tailored, academic assignments. As a result of both strong demand and a skilled workforce, virtually any type of assignment or examination can be outsourced, including: essays, lab reports, dissertations, PhD theses, PowerPoint presentations, notes for vivas, computer code, or even paying someone to take an exam (Ison 2020; Lancaster and Clarke 2016; QAA 2020). Moreover, these products are usually offered at affordable prices. and can be received within a short period of time (Morris 2018). Purchasing bespoke assignments online is usually relatively straightforward; the customers upload assignment details, the date on which the assignment needs to be completed, and personal and payment details (Medway et al. 2018; Sutherland-Smith and Dullaghan 2019). With regards to the latter – personal details - this can have serious implications and expose

students to the risk of blackmail, which will be discussed further below.

The contract cheating market encapsulates a spectrum of different actors, ranging from registered companies that have been operating for a long time, to individuals – mostly former students or 'rogue' academics – working independently within the gig economy (Draper et al. 2021). Beyond the extreme ends of this spectrum, we find less established essay mills, and ghostwriters working through intermediaries and agents (Draper et al. 2021).

#### **3.4.2.1 ESSAY MILLS**

Businesses providing bespoke assignments are colloquially termed 'essay mills', and usually distinguished from other online platforms acting as repositories of pre-written assignments – commonly referred to as 'essay banks' (Medway et al. 2018). Essay mills can involve complex, and sophisticated business operations, with staff dedicated to marketing and even on-site workers to complete assignments (Lancaster 2020a). Brand-building and a strong online presence are key to generating revenue, and the same company might operate a multitude of different front-end websites, targeting specific disciplines, despite being run by the same company and pool of writers (Draper et al. 2021; Ellis et al. 2018). Quality assurance processes are often in place, and anti-plagiarism tools are used to avoid or disguise plagiarism (Draper et al. 2021).

#### 3.4.2.2 AGENCY WEBSITES AND INTERMEDIARIES

Agency websites act as intermediaries between students and writers. On such platforms, students post the specifics of their assignments, and writers compete against one another to secure orders (Lancaster and Clarke 2016). These are similar to gig models, in which freelance writers advertise their services on online platforms, and students post their orders to the writers directly (Lancaster 2020a). Agency websites and different platforms relying on a request model thus allow students to connect directly with writers, rather than going through official processes common within essay mills (Lancaster 2019b).

#### 3.4.2.3 MARKETING

Contract cheating service providers, and in particular, large-scale essay mills, rely on sophisticated methods of marketing. Whilst it is perhaps most common to utilise online marketing, there are also examples of offline marketing being used, such as advertising on public transportation, and handing out flyers on campuses (Lancaster 2016; QAA 2020). More than 250 YouTube channels in the UK have been identified as promoting EduBirdie – a Ukrainian essay mill – with social media influencers and online celebrities promoting the use of contract cheating (Jeffreys and Main 2018; Morris 2018). Agents of essay mills have also been found to be infiltrating student social media groups to advertise their services (Lancaster 2019a), and the presence of automated bots on Twitter has also been observed. targeting students appearing to be struggling with assignments and directing them to contract cheating services (Amigud and Lancaster 2019a).

Perhaps the most important strategy for essay mills is to communicate their services effectively and convincingly to students through their websites. A range of reassurance cues have previously been observed, such as: emphasising the qualifications of the writing staff; staff nationality (e.g. British staff to appeal to British students); student testimonials; affordability; plagiarismfree work; guaranteed to pass or achieve specific grades; timeliness; providing UK-based company addresses or phone numbers; asserting that the transactions are legal and that it is 'normal' for students to use such services: and finally, that their services are not 'cheating' as much as it is providing support or 'example' essays that can be used as guidance for students in producing their own work (Medway et al. 2018; Rowland et al. 2017; Sutherland-Smith and Dullaghan 2019). As noted by Rowland and colleagues (2017), the key to achieving this is 'problem recognition' and 'problem resolution' to students: by empathising with students experiencing stress, contract cheating is framed as a legitimate solution to alleviate some of this pressure, whilst also ensuring their clients they are not 'cheating', and merely obtaining study support.

There is a darker side to the contract cheating industry; not only is deception used, but service providers are also predatory and employ aggressive marketing to convince clients to use their services (Lancaster 2016; Lancaster 2020b). Key to generating revenue within the contract cheating market is to exploit the pre-existing vulnerability of students (Draper et al. 2021; Lancaster and Cotarlan 2021). This may include approaching students on social media, who are either struggling or expressing dissatisfaction with their studies (Draper et al. 2021). It may also include reassuring their prospective clients of the legitimacy of their services, and as a viable solution to stress and anxiety frequently experienced by students (Newton 2018).

Larger companies have been shown to create the illusion of choice by operating several different websites, appealing to very specific groups of students, for instance, British social science students, or Australian nursing students (Ellis et al. 2018); despite this, the same company and pool of writers may complete the assignments, irrespective of the fact that the advertising suggests the presence of discipline-specific experts from prestigious universities (Lancaster 2020a). As such, many contract cheating websites are part of elaborate covert networks, appearing to have a highly skilled selection of writers with niche expertise, when in reality it is more likely to involve the same group of writers (Ellis et al. 2018; Lancaster 2020b). This, of course, can pose serious issues with the quality of work provided.

Indeed, essay mills tend to make ambitious promises that products will pass or receive the requested classification; however, some recent covert investigations of essay mills have found many of these promises to be false. Sutherland-Smith and Dullaghan (2019) ordered 54 assignments from 18 different essay mills. Many providers did not deliver the product in the agreed-upon time, and 52% of the assignments failed to secure a passing grade. Interestingly, when paying for 'premium' quality assignments (e.g. written by a 'top' writer, extra proofreading, and VIP customer service), there was in fact little difference in the quality compared to standard products, and there was no positive correlation between

price paid and the grade received (Sutherland-Smith and Dullaghan 2019). A similar study was conducted by Medway and colleagues (2018), who ordered three bespoke essays from three different essay mills; two orders for first-class assignments, and one for a 2:1 assignment. Only two essays were returned, with one company charging for the cost of producing an essay without delivering it. Ten academics across the UK and Europe were tasked with grading the assignments, without knowing that they were purchased essays. Both assignments successfully passed through Turnitin's originality check, without raising any suspicions. The assignment ordered at a 2:1 grade received a mean grade of 60.3, and the assignment ordered at a first-class received an average grade of 59.5. These two studies illustrate that assignments from essay mills can indeed pass successfully through both plagiarism checks and receive passing grades; nevertheless, the quality of the work itself appears highly variable, and many students turning to such services are likely to find themselves disappointed, if not outright cheated or exploited.

## 3.4.3 STUDENT EXPLOITATION AND BLACKMAIL

Recent reports indicate that extortion and blackmail are increasing threats for students involved in commercial contract cheating (QAA 2020). In online markets, trust between clients and service providers is critical for businesses to operate in quasi-legitimate environments (Medway et al. 2018). This is why effective marketing and reassurance cues are pivotal for essay mills (Rowland et al. 2017). Whilst fraudulent service providers are always an omnipresent threat – providing poor quality work without refunds, or not even completing the assignments for their clients – even more sinister consequences have been reported (Bailey 2020; Birks et al. 2020; Lancaster 2016; Ross 2018; Yorke et al. 2020). Indeed, some service providers have threatened to reveal their clients' misconduct to universities, unless further payments are made (QAA 2020). According to Yorke and colleagues' (2020) recent study, involving a scenario-based online exercise (n = 587) of Australian students to examine blackmail, approximately 90% of respondents were unaware of blackmail. However, 2.4%

of students reported that they either directly or indirectly knew someone that had been blackmailed in the context of contract cheating. Whilst only a small proportion of students (2.4%) elected to cheat in this scenario-based exercise, knowledge of blackmail reduced the propensity to engage in contract cheating.

Besides Yorke and colleagues' (2020) recent study, most of our knowledge of blackmailing within the contract cheating market tends to be anecdotal in nature (e.g. Lancaster 2016; QAA 2020), and the extent to which blackmail currently occurs is unknown. What is clear, however, is that the inherent power differentials between service providers and students provide ample opportunity for unscrupulous essay mills to extort students. As Draper et al. (2021) point out, not only do service providers target vulnerable students, but they also put them in a position to easily be further exploited. There are reports that students who have not even purchased any assignments, or that have purchased assignments but not submitted them, have also been exposed to extortion threats (Draper et al. 2021). This seems to indicate that the market itself has evolved into becoming increasingly exploitative, and moved beyond simply engaging in what can be considered unethical business transactions, to something explicitly illegal. Some highly questionable, or unusual practices, have indeed been observed, which render students highly vulnerable to blackmail.

In their study, Sutherland-Smith and Dullaghan (2019) noted how many online service providers require photo identification (e.g. driving license or passport), in addition to credit card details. Similarly, clients may also be required to provide visas, addresses, the name of the institution they are studying at and student identification numbers (Draper et al. 2021; Sutherland-Smith and Dullaghan 2019). Of course, these sites also collect data from users browsing their websites, and this can be combined with data provided through purchases to

create rich databases of user-profiles; such a database could potentially be a valuable commodity "that could be traded to unscrupulous third parties, who themselves can engage in extortion" (Draper et al. 2021, p. 11). In addition, customer information also allows for future, aggressive marketing efforts; Sutherland-Smith and Dullaghan (2019, p. 1160) reported how "some sites repeatedly contact users to pressure them to purchase further assignments or upgrade their orders". For students who might successfully conceal their identity whilst engaging in these transactions, service providers can potentially still identify them through anti-plagiarism software, as the search results will indicate which institution they submitted their assignment to (Draper et al. 2021).

Whilst it is clear that the contract cheating market, and the unscrupulous businesses practices of actors within the market, renders students vulnerable to further exploitation, extortion, and blackmail, we currently know very little about this. First, given the general lack of data on the extent to which contract cheating is a problem, it is even more difficult to provide reliable estimates of the extent that student blackmail may be an issue. Second, we currently do not know the profile of the actors engaging in blackmail; it is unclear whether independent ghostwriters, essay mills themselves, or perhaps disgruntled employees at large-scale essay mills are engaging in blackmail. Third, we do not know how students themselves have experienced blackmail, and there is a need for qualitative research to further investigate this. Finally, it is also uncertain whether some student groups - such as international students are overrepresented amongst victims of blackmail and extortion; it is conceivable that students who may have a precarious migration status, or limited social and/or other forms of capital, may be particularly vulnerable towards exploitation.

## 3.5 DETECTING CONTRACT CHEATING

Detecting contract cheating is highly challenging, since outsourced assignments are custom-written, and may not involve any plagiarism. As such, anti-plagiarism software, such as Turnitin, is largely ineffective against detecting instances of contract cheating (Yorke et al. 2020). As Rogerson (2017) points out, what makes it even more challenging to detect contract cheating is that custom-written assignments from service providers can sometimes look very similar to work produced by students involving poor academic practice. Most instances of contract cheating are detected by manual means (Lancaster and Clarke 2016), and Dawson and Sutherland-Smith's (2017) study illustrate how difficult it can be to differentiate between genuine student work vis-à-vis contract cheating. The authors presented seven experienced markers with twenty second-year psychology assignments, six of which were assignments obtained by contract cheating (Dawson and Sutherland-Smith 2017). In addition to marking the assignments, they were also tasked with identifying instances of contract cheating. Markers successfully detected contract cheating 62% of the time, and correctly identified assignments produced by students at a rate of 96% (Dawson and Sutherland-Smith 2017). Detection, in this context, is often seen as key to deterring future students from contract cheating (Dawson and Sutherland-Smith 2017; QAA 2020). Some of the proposed methods to increase detection rates will be examined next.

## 3.5.1 METHODS TO DETECT CONTRACT CHEATING

#### 3.5.1.1 IDENTIFYING IRREGULARITIES

According to Rogerson (2017), identifying contract cheating is largely dependent upon three factors: the skill and experience of the assessor, knowledge of the

student in question, and familiarity with patterns common in contract cheating assignments. In her research, Rogerson (2017) documented irregularities identified in instances of contract cheating. Amongst these, contracted assignments typically included materials not relevant to the assignment itself, and they often failed to address the specific question or assignment criteria. Moreover, other patterns potentially linked to contract cheating include: irrelevant, inappropriate, or misrepresented references, the misuse of discipline-specific terminology, and inadequate definitions of conceptual or theoretical constructs (Rogerson 2017). Others have also noted how ghostwriters tend to not follow assignment-specific quidelines (Dawson and Sutherland-Smith 2017).

Inconsistencies in student performance can itself be an important indicator of contract cheating, and the use of anonymous marking is problematic in this context (QAA 2020). Indeed, perhaps the most effective way to detect contract cheating is familiarity with a student's writing style; if language shifts can be identified, either within a submission or between submissions, this could be a clear indicator that the submitted work is unoriginal (QAA 2020; Rogerson 2017). Of course, even though such an approach is likely to be successful in detecting contract cheating, it is perhaps not a realistic solution to contract cheating, in the context of increasingly large student cohorts, class sizes, anonymous marking, casualisation and an increasing workload of academic staff (Medway et al. 2018). There is, as such, a need to systematically monitor student performance across large student populations.

In their research, Clare and colleagues (2017) used administrative university data to identify irregularities in student performance, associated with contract cheating. The sample consisted of 3,798 module results from 1,459 students at an Australian university. The researchers designed a series of rules to indicate unusual patterns (e.g. receiving a very high grade for an essay and failing an exam), and approximately 2.1% of students displayed some form of unusual pattern. There is, however – as

Clare et al. (2017) also recognise – a high risk of both Type 1 and Type 2 errors, or in other words, mistakenly identifying anomalous patterns as indicative of contract cheating, or failing to identify actual instances of contract cheating. Nevertheless, further research into the application of statistics to detect anomalies in student performance could be a promising and scalable approach to potentially identify patterns of contract cheating.

## 3.5.1.2 TECHNOLOGICAL TOOLS TO DETECT CONTRACT CHEATING

It is commonly recognised that anti-plagiarism software is ineffective to detect contract cheating, due to the bespoke nature of outsourced assignments. However, given the pressure and short turnaround times in which service providers produce assignments, there is a possibility that the ghostwriters themselves rely on plagiarism, online paraphrasing tools, and essay spinning, and antiplagiarism software should still be used to potentially identify suspicious patterns (Birks et al. 2020; QAA 2020). In Medway and colleagues' (2018) examination of essays purchased from essay mills, one such assignment scored 24% on Turnitin, and the other 14%; whereas these may not raise any immediate suspicions, a score of, say, 0% could potentially indicate that a lot of effort has gone into fabricating references, or that the writer in some way is actively trying to reduce similarity matches (QAA 2020).

Stylometrics is showing promise as complimenting pre-existing algorithms used to identify plagiarism.

Situated within the field of computational linguistics, stylometry utilises the features of a document to determine authorship (Ison 2020; Lancaster and Clarke 2016). By focusing on the stylistic traits – rather than the

actual content of the document - it aims to determine the probability that a given document was written by a particular author (Ison 2020). The application of stylometry in the context of academic integrity is still in its infancy, however, Ison's (2020) study illustrates the potential utility of such an approach. Text sections from journal articles written by one particular author were used in one corpus, and the other contained text sections from journal articles written by other authors. Three software packages were used to try to determine authorship, and the average accuracy ranged from 33% to 89%. Whilst more research is needed, and particularly applied in the context of student assignments, stylometry could potentially be a valuable tool to detect anomalous patterns in student submissions (Ison 2020; Lancaster and Clarke 2016; Prentice and Kinden 2018).

## 3.5.2 EVIDENCING CONTRACT CHEATING

Notwithstanding the difficulties in detecting contract cheating, a further challenge is to adequately evidence instances of contract cheating (Eaton et al. 2019). Upon identifying a potential case of contract cheating, one of the most effective ways of determining guilt may be to conduct interviews with students suspected of contract cheating (QAA 2020). Discussing irregularities in the submission allows for the student in question to demonstrate their knowledge (or lack of knowledge), and justify their reasoning behind the assignment (Rogerson 2017). However, students under investigation for academic misconduct may be under severe stress, and it is pivotal to recognise the impact such a process can have upon mental health (Pitt et al. 2020).



### 4. METHODS

This research utilised a mixed-methods approach to address the research aims. The first stage of the research process involved an extensive literature review, and the themes and issues identified through this informed the subsequent stages. These can broadly be divided into qualitative data analysis, and quantitative text analysis.

## 4.1 ONLINE DATA ANALYSIS

In order to better understand the diffusion of the online market for contract cheating services, a large component of our research involved the collection and analysis of online data. To identify indicators of risk within the contract cheating market, and the market prerogatives used, three different kinds of service providers were identified: (1) essay mills; (2) Fiverr.com; and (3) Gumtree.com. The rationale for choosing these three platforms was that whilst they all offer contract cheating services, they do so in very different ways, and subsequently, the risk of fraud, scams, or blackmail may be associated with particular types of service providers, or specific sections of the market. All online data were collected in August 2021.

## 4.1.1 SAMPLE AND DATA COLLECTION

A similar strategy of data collection was used for all three types of platforms. Being an exploratory study, the aim was not to capture all available data, but to examine the characteristics of the sites, adverts, and profiles that students would be most likely to be exposed to when sourcing for contract cheating services. As such, for all observations that were within the scope of the study

(i.e. entities providing contract cheating services), we captured the first hundred observations encountered on each platform. In other words, the first hundred essay mill websites catering to UK students were scraped, the first hundred profiles listed at Fiverr, and the first hundred adverts posted across the UK at Gumtree. More details are covered below, in relation to each platform.

#### **4.1.1.1 ESSAY MILLS**

The first type of service provider, essay mills, is a colloquial term for websites explicitly focused upon providing bespoke assignments (see Appendix A for a visual example). To create a realistic scenario of what a typical student is faced with when looking to outsource their assignments, the first hundred results of a Google search of the terms 'UK buy university assignment' served as a convenience sample of essay mills. Each of these websites was inspected to ensure that they were indeed essay mills. A simple scraper was implemented in R to harvest all of the textual data on the main pages of these websites. In turn, HTML tags and similar noise were removed, and only the descriptive, textual data were used for the analysis. This serves to represent the information a student is faced with when landing on these types of websites.

In addition to the textual data scraped, R was also used to obtain the Internet Protocol (IP) addresses of the hundred websites scraped. The IP addresses were in turn used in a reverse Domain Name Server lookup (rDNS). This allowed us to both examine other websites associated with the IP addresses, but also more crucially, to establish ties between the essay mills based on shared IP addresses. A number of essay mills were clustered around shared IP addresses, and this implies that the essay mills shared the same web hosting company. This was previously done in the same context by Ellis et al. (2018, p. 5) who argued that it was a "strong indicator of a relationship between these sites". The date in which



the domains were first registered were also collected, to get an indication of how long the essay mills had been operating.

#### 4.1.1.2 FIVERR

Fiverr is a micro-outsourcing site, in which individuals create a profile and provide details of the type of services they are providing, which in Fiverr terminology are referred to as 'gigs'. Similar to Lancaster's (2019b) research on Fiverr, the search term "write essay" was used to obtain a list of services potentially related to contract cheating. We then went on to manually examine each profile, and if it was clear that the profile was dedicated to contract cheating, it was added to the sample. This was done until we had collected 100 unique profiles. Besides the textual data collected (description of services and seller biography), we also collected data on the nationality of the service provider, the date registered at Fiverr, the number of reviews received, and the price charged (£) per 250 words. Appendix A provides a visual example of a Fiverr advert.

#### **4.1.1.3 GUMTREE**

Gumtree is a UK-based online classified, in which individuals and companies advertise a variety of goods and services. The use of Gumtree in the context of contract cheating is underexplored in current research. however, there is anecdotal evidence that it is used by students for the purpose of contract cheating (e.g. Sutherland 2020). The search term "write essay" was once again used to search for adverts across the UK potentially related to contract cheating. It appears to, quite consistently, be around 3,000 active adverts throughout the UK to this search term. A simple scraper was implemented in R to harvest the first 100 adverts. All of the adverts were then manually verified to ensure that they were in fact providing contract cheating services. Only the textual description of the advert was collected. A regular expression was then used to obtain phone numbers referred to within the adverts (only two adverts did not contain a phone number). A visual example of a Gumtree advert is provided in Appendix A.

#### 4.1.2 DATA ANALYSIS

The analysis consisted of basic descriptive statistics (univariate and bivariate analyses), social network analysis, and a combination of quantitative and qualitative text analysis. The aim of the social network analysis was to identify ties between cases in the three groups of the sample (essay mills, Fiverr profiles, and Gumtree adverts). For essay mills, ties were operationalised based on shared IP addresses and textual similarity. This was achieved using the Quanteda package in R, by applying the Jaccard similarity algorithm. The first hundred semantic correlations (i.e. the websites identified as being most similar) were then manually examined, to ensure that no spurious relationships were used in the operationalisation of the network. Appendix B provides a visual representation of visual similarity using the Jaccard index. It is important to point out that whilst text similarity algorithms can offer a certain degree of evidence of text that is similar, it is less clear whether the identified similarities are the result of one organisation recycling their own text, or if an unrelated entity is plagiarising textual content for other purposes. The textual descriptions from the Fiverr profiles were subjected to the same process of identifying potential networks. In the case of Gumtree, ties between adverts were operationalised only based on shared phone numbers.

To analyse the textual components, the textual data from all three data sources were processed into a corpus. English stop-words were removed using the Tidytext package in R. Similarly, a custom list of words that were less meaningful in this context (e.g. emoticons and misspellings) was also created and these were then removed from the corpus. The top twenty-five features of each type of service provider were then analysed using term frequency (TF) and term frequency-inverse document frequency (TF-IDF). Term frequencies represent the number of times any given word appears in a text, and this was divided by the total number of words within that document for purposes of normalisation, and this allowed us to compare the most frequently used words across the three types of service providers. The TF-IDF decreases the weight of

commonly occurring words, whilst increasing the weight of less common words. As such, the TF is useful for understanding the most commonly used words, whereas the TF-IDF attempts to find the words that are the most important or distinctive words used within a collection of documents. The highest scoring TF and TF-IDF features were compared across the type of service providers. The most interesting and distinguishing features were then qualitatively analysed using a keyword-in-context approach (KWIC). This involved examining the sentences surrounding a keyword, and it allowed us to better understand the context in which these words appeared. Finally, sentiment analysis was conducted to quantitatively assess whether there were any substantial differences in the use of positive and negative language. For this purpose, the Quanteda Lexicoder Sentiment Dictionary from 2015 was used. Briefly put, the lexicon consists of words coded as negative or positive, and the lexicon was first applied to the text corpus to count the presence of negative and positive words. The sentiment score was then calculated by subtracting the number of negative words within a document from the number of positive words within that document, and finally, normalised by dividing the sentiment by the total number of words of that document.

## 4.2 QUALITATIVE DATA COLLECTION AND ANALYSIS

To better understand the issue of contract cheating within Scotland, and to contextualise the online patterns we identified through web scraping and quantitative text analysis, we conducted a series of semi-structured interviews. In total, five respondents were recruited for interviews, from three different institutions. All were currently serving in a senior academic or administrative capacity and had experiences related to student misconduct. The interviews were conducted online through Microsoft Teams, and the audio was captured to produce transcripts. The themes covered in the interviews were informed by the literature review, and focused upon the respondents' perception and experiences of student misconduct and contract cheating, and the underlying motivations and consequences of such behaviour. In addition, we also sought to identify possible ways that academic policy could be designed to better respond to and prevent these issues. All data were thematically analysed using QRS NVivo 12.



### 5. FINDINGS

## 5.1 ONLINE DATA ANALYSIS

This section begins with an examination of some identifying characteristics of each of the types of service providers. It then goes on to present a comparison of the market prerogatives used by the three groups by examining the top features, and the contexts in which these are most frequently used. Finally, it shows the results from a sentiment analysis, before going on to present the findings from the qualitative data analysis.

#### 5.1.1 ESSAY MILLS

Most of the websites examined were similarly structured, however, some were clearly more established and had been on the market for a more extended period of time. This included some larger and more infamous companies such as EduBirdie, but there were also some more generic and seemingly less professional websites present within the sample. For instance, despite claiming to be UK-based companies, employing British writers, many websites used American English, and contained poorly phrased language and grammatical errors. Another quite interesting, and potentially alarming, quality of essay mills, was that several websites showed high TrustPilot (an online consumer review platform) ratings, though the URLs to examine the reviews were either broken or absent, nor was it possible to find the companies on the TrustPilot website. Similarly, some essay mills showed media coverage in popular magazines such as Forbes, though it was clear these were fake, as it was not possible to locate these supposed articles. These are quite clear indicators of the dishonest and unscrupulous market prerogatives of some of these essay mills.

To get an idea of how long the essay mills within the sample has been operating, Figure 1 shows when the domain of each essay mill was first registered. The average age of the domains is 5.9 years, with two domains registered within the last year, and five domains were registered over fifteen years ago. Whilst difficult to establish empirically with the current data, it is conceivable that the essay mills that have been active for a prolonged period of time to also be more trustworthy. In other words, it would be difficult for an essay mill that has invested significant resources into developing a customer base and a marketable brand, to continue to operate if they were engaging in predatory and damaging practices, such as student blackmail.

#### **ESSAY MILLS: DOMAIN AGE IN YEARS**

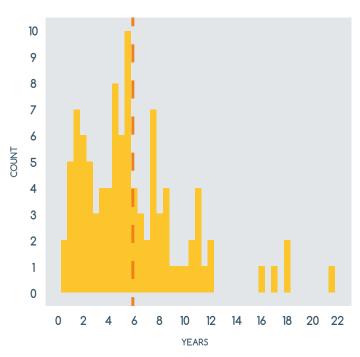
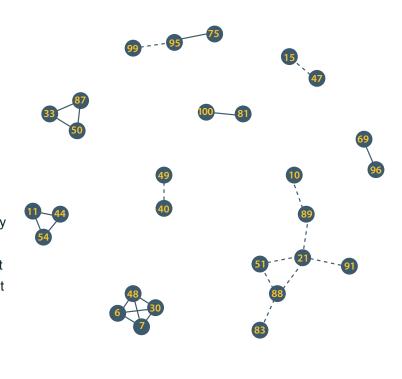


Figure 1. Domain age in years for essay mills

We also found evidence of possible covert networks operating with the contract cheating market. From the sample of 100 different essay mills offering bespoke assignments, nine distinct components could be observed. Five of these components were connected solely by a shared IP address, whereas three were connected by semantic similarity, and one component displayed both forms of ties. A guite interesting observation is that close to a third (28 out of 100) of the websites analysed were connected in one way or another. This is well in line with previous research (e.g. Ellis et al. 2018), and it does imply that essay mills are using different customer-facing websites, despite possibly being operated by the same underlying organisation. However, the ties established by semantic similarity must be treated with caution: whilst there is clear evidence that these websites used identical language, it is less clear whether this is the result of one organisation 'recycling' their own market prerogatives, or if other (potentially more nefarious) actors are plagiarising text from more established essay mills to attract clients. In the latter scenario, and especially given the low cost of setting up a website and copying text from others, it could well be the case that these are by no means there to actually provide assignments, but rather, to defraud students, or in the worst scenario, to both defraud and blackmail students. There may be less risk associated with more established essay mills, which stand to lose more by engaging in fraud or blackmail, and it is more conceivable that essay mills that were created in the last year or so, are more likely to engage in such behaviour.

#### **ESSAY MILLS: NETWORKS**



— IP Address -----Semantic Similarity

Figure 2. Networks amongst essay mills

## 5.1.2 MICRO-OUTSOURCING: FIVERR.COM

Within the sample, the majority of Fiverr profiles were either from Pakistan (73%) or Kenya (20%). Only 5% of profiles were from the UK, the US, or Canada, and there was a clear difference in market prerogatives based on country of origin. The profiles from the latter were better structured and contained fewer grammatical errors. The prices charged, the number of reviews, and the number of days the profiles had been active were all associated with origin, and profiles from the minority world tend to have been active for longer, charge more, and have more reviews. In contrast, the profiles from Pakistan and Kenya appears more fluid or transient, in the sense that most of the profiles have been created within less than a year. As can be seen in Figure 3A, the average price is £5.80 per 250 words, with very few profiles charging more than £10. With regards to the number of reviews, a very positively skewed distribution can be observed in Figure 3B. Indeed, the average number of reviews is 16.4, though the majority of profiles have ten or fewer reviews.

A similarly skewed distribution is evident in Figure 3C, and this, again, reinforces the notion that the majority of profiles appear more fluid and transient, rather than having been online for any longer period of time. A relatively large portion had been posting online for less than fifty days, and the sample average is 167 days.

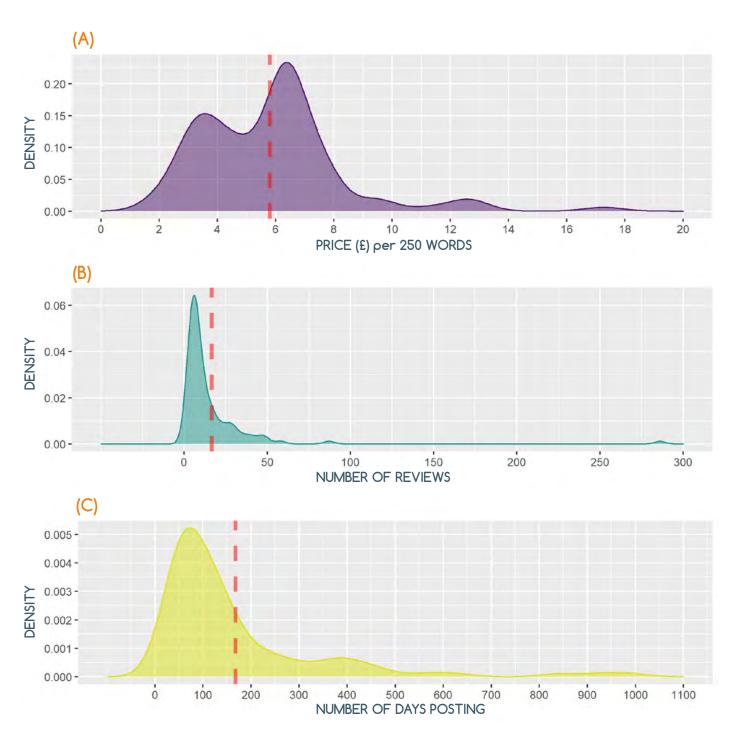


Figure 3. Fiverr profile characteristics

In Figure 4A, it is evident that there is no relationship between the number of days posting, and the price per 250 words. Similarly, there is also no relationship between price and the number of reviews (Figure 4C). There is, perhaps unsurprisingly, a significant, positive correlation between the number of days posting, and the number of reviews.

As was the case with regards to the essay mills in the sample, a large portion of the Fiverr profiles could also be shown to be semantically related to each other, and possibly part of wider networks. One quarter (25 out of 100) of Fiverr profiles within the sample were part of networks. Six distinct components were identified, and all profiles except one listed Pakistan as their nationality. Profile 10 is from Kenya and connected to Profile 99, which is from Pakistan. Of most interest is the larger component, which contains 14 profiles. All of the profiles within this component were seemingly independent at a first glance, though following the semantic similarity analysis, it became clear that parts of the text were shared between these profiles.

#### Fiverr: PRICE, REVIEWS, AND DAYS POSTING

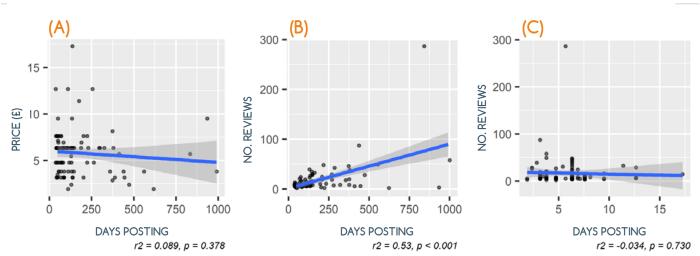


Figure 4. Correlations between Fiverr characteristics

#### Fiverr: NETWORKS

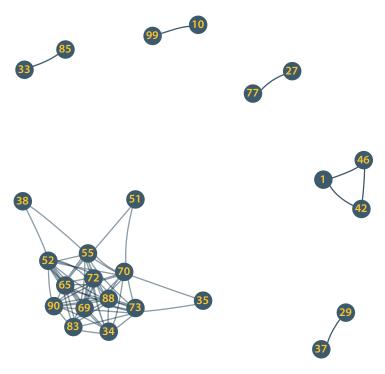


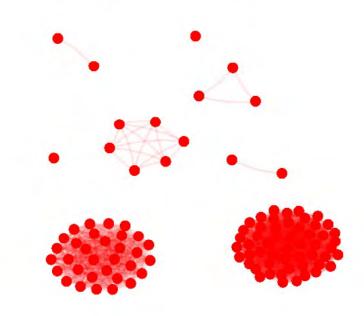
Figure 5. Networks amongst Fiverr profiles

#### **5.1.3 GUMTREE**

As an online classified offering a wide variety of services, contract cheating also appears a prominent feature. However, compared to both Fiverr and essay mill websites, the information provided within the adverts is seemingly more limited; for instance, there are no customer reviews attached to this platform, nor is the website specialised in micro-outsourcing or 'gigs', so there are no characteristics of the poster available. It is nevertheless clear that there is a large volume of adverts (3,500 at the time of data collection) directed towards students looking to outsource their assignments. Given that each advert contained a phone number, it was possible to construct networks based on shared phone numbers. From this, it was evident that 98 out of 100 adverts were part of networks. Whilst marketing at Fiverr mostly surrounds independent individuals, the language used in Gumtree adverts more often than not involved plurals, implying some form of organisation underlying these networks of adverts. The largest network encompassed 53 adverts, and the second largest 32 adverts. Some of the marketing within the networks bear resemblance to essay mills: they are providing a wide range of services across disciplines, and try to portray themselves as professional service providers. Yet, such efforts are undermined by the presence of certain elements, such as Whatsapp as a preferred method of communication, references to PayPal transactions, or the absence of dedicated email addresses or websites. There was, however, some Gumtree adverts that were posted by essay mills themselves, as evidenced by the URL provided in a few of the adverts, which linked directly to identifiable essay mills. The quality of the sample of Gumtree advert appears variable, with some providing some quite extensive details, and others being rather more suspicious. It is difficult to assess the extent to which these can offer reliable services; the absence of customer reviews, and the lack of professional marketing (compared to established companies such as EduBirdie), would suggest that brand building and maintaining a

consistent online presence is less of a priority. Thus, the transient nature of online adverts, and the ease with which adverts can be recycled and re-posted across the country, render some Gumtree adverts within the sample somewhat suspicious.

#### Gumtree: Networks



## 5.1.4 COMPARISON OF TEXTUAL MARKET PREROGATIVES

#### **5.1.4.1 ANALYSIS OF TEXT FEATURES**

The most prominent textual features of the three different service providers are provided in Figure 7. The left column shows term frequencies (TF), whereas the right column shows term frequency-inverse document frequency (TF-IDF). Interestingly, there are relatively few overlaps between the three types of service providers. This suggests that service providers use different market prerogatives to attract clients. First, with regards to essay mills, there is a heavy emphasis on expertise, affordability, and timeliness:

We have Top UK Qualified Experts in almost every industry ...

(Essay Mill 2)

Our highly professional team of experts is available for our students all around the ...

(Essay Mill 4)

Our experts can assist students struggling to meet the standards ...

(Essay Mill 86)

Take advantage of our low prices and excellent services today.

(Essay Mill 36)

We always propose low prices which are easily affordable for any student.

(Essay Mill 24)

... produce standard quality work in a matter of days only.

(Essay Mill 11)

The frequency of certain keywords such as 'amazing', 'extremely' and 'top' also suggests the market prerogatives of essay mills to be framed in overtly positive terms, often making promises which it is doubtful that they can deliver upon:

... hundred percent free of plagiarism at the amazing prices easily affordable by everyone.

(Essay Mill 6)

... the best-priced paper writing service that always delivers amazing quality even if you have a rushed deadline.

(Essay Mill 43)

Our writers are professional and are extremely cautious to deliver what you need with an ... (Essay Mill 33)

Hiring a writing assistance online is extremely important, especially when the courses are tough. (Essay Mill 50)

We take pride in assuring top grades to students by providing original documents ...

(Essay Mill 21)

... an expert who can help you score a top grade on your coursework.

(Essay Mill 84)

A feature that is both frequently used as well as highly distinctive for essay mills is the reference to privacy. These appear to serve as textual cues to instil confidence in their clients:

**Don't worry we have got your privacy covered.** (Essay Mill 16)

From our revision policy to our privacy and moneyback guarantee every possible scenario is covered. You can feel absolutely safe about buying ...

(Essay Mill 37)

#### COMPARISON OF TOP FEATURES

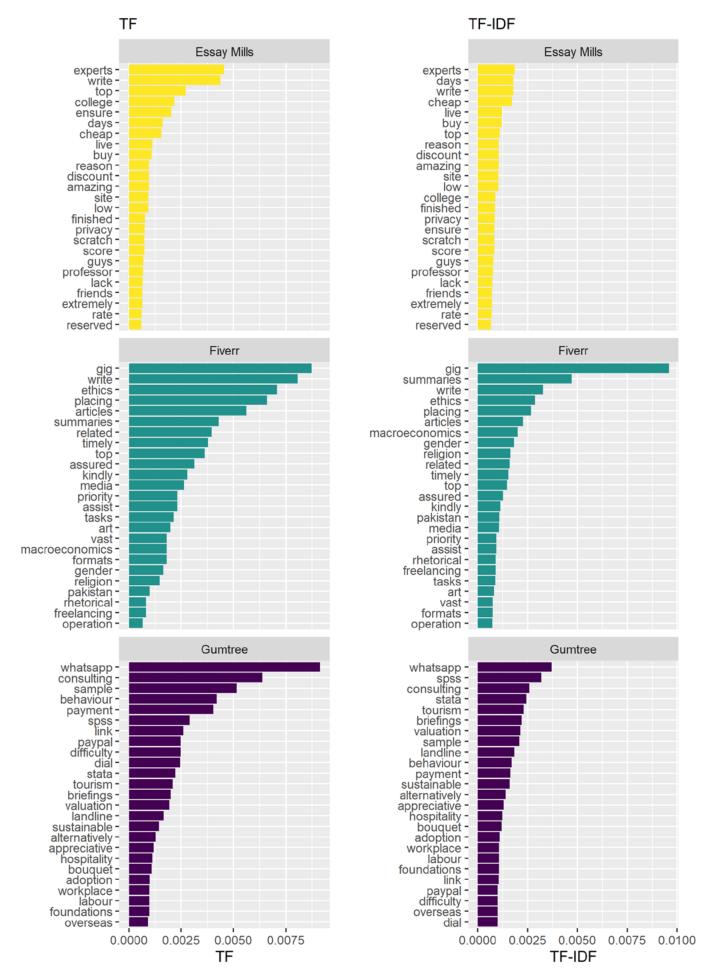


Figure 7. Comparison of TF and TF-IDF across service providers

Our experts have signed our company privacy policy just after they are hired and are lawfully bound to hold your information ...

(Essay Mill 77)

In comparison to essay mills, 'gigs' posted at Fiverr tend to put more emphasis on the type of services they are offering, such as research summaries, articles and essays, or otherwise make specific references to the disciplines they are catering to. In terms of these, 'ethics' and 'rhetorical' essays, 'media' assignments, are particularly common, and the disciplines of macroeconomics, gender studies and religion are also prevalent. Unsurprisingly, 'gig' is simultaneously both the most frequently used and distinctive feature of Fiverr profiles. The language used is more polite, personal, and almost affectionate:

Kindly contact me before placing the order. Thank you.

(Fiverr Poster 43)

When you work with me you can rest assured that you will receive an authentic high-quality product on time. Please contact me with any queries you may have and I will assist you in attaining your desired goals. Thank you.

(Fiverr Poster 9)

Welcome here, I am an experienced essay writer and MBA graduate. Therefore be assured that your essays will be handled by a professional writer.

(Fiverr Poster 55)

My priority is you and your work.

(Fiverr Poster 6)

Client satisfaction is my priority number one and I will follow your guidelines and instructions.

(Fiverr Poster 19)

Customer satisfaction and quality work will always be my priority.

(Fiverr Poster 94)

This reflects the individualised transactional nature of Fiverr as a micro-outsourcing site, in which each profile is – in most cases – reflective of a single individual. However, similar to essay mills, Fiverr also frequently stress the timeliness of their services:

My work is professionally done and timely delivered. I will deliver top notch content ...

(Fiverr Poster 66)

The less informal transactional nature of Gumtree, being an online classified, is reflected in the features observed within the adverts. Here, 'Whatsapp' (a text messaging application) can be observed to be both the most common and distinctive feature. The sample of adverts posted on Gumtree appears uniquely situated between Fiverr and essay mills: there are both adverts pertaining to single writers, as well as adverts that are clearly marketing their services as being part of a collective or organisation of several writers. Often, their services — whether pertaining to individuals or organisations — is framed as 'consulting':

I provide premium dissertation essay editing consulting services.

(Gumtree Advert 47)

We offer a wide range of consulting services to students and anyone studying in higher education (Gumtree Advert 50)

We deliver thousands of dissertation consulting of academic projects for students across the globe.
(Gumtree Advert 51)

Another frequent feature of Gumtree adverts, and indeed distinctive, are specific references made to assignment assistance involving the statistical software packages SPSS and STATA. There is also evidence of Gumtree adverts targeting specific discipline-specific areas, such as 'hospitality' and 'tourism', which are largely absent from the Fiverr and essay mill corpora. However, something that immediately stands out is the use of the term 'overseas'. This is the result of several adverts explicitly claiming their writers are UK-based, and that service providers 'overseas' are untrustworthy:

How can you avoid being fooled by overseas writers? Why does this matter? Unlike the other ads, we are truly based in the UK.

(Gumtree Advert 39)

Studying in the UK is completely different from overseas. Things such as academic language grammar referencing styles etc. can be easily differentiated ...

(Gumtree Advert 40)

This is quite interesting, and in stark contrast to the Fiverr sample, in which the majority of writers are from Pakistan and Kenya, and vocal about their origin.

Besides some of these features which have been outlined, and are both the most frequently used, as well as the most distinctive, it is also worth further exploring some issues related to how service providers legitimise their services and exploit student vulnerability. By examining keywords such as 'anxiety', 'stress', 'pressure', and 'dread', we can get an idea of how service providers appeal to students' vulnerability. Essay mills are most commonly using such marketing options, whilst only a few Fiverr gigs use those keywords, and none of the adverts posted at Gumtree:

We are really aware of the fact that when you are assigned a toughest mind-numbing and lengthy hectic paper you feel anxiety and are ultimately left with two adverse options: You can either poorly and messily accomplish the task – or – miss the deadline. (Essay Mill 11)

... let go of all your stress when we are writing your assignments ...

(Essay Mill 7)

By having our professional team by your side, you can free yourself from the unnecessary of stress creating flawless papers.

(Essay Mill 16)

With such extreme pressure, undergraduates find difficulty in writing and completing their educational assignments to meet UK college specifications and guidelines ...

(Essay Mill 24)

We are aware of the pathetic condition of yours caused by the pressure of bundles of assignment bombarded in your academic life. After all, life is to enjoy to the fullest and we believe in entire freedom of the student to live every moment with sheer pleasure ...

(Essay Mill 99)

No matter how hard you try to enjoy the company of your loved ones, the dread of the impending deadline always plays at the back of your mind. You can hardly shake off this feeling. So how can you cope with it? It's simple, you can seek the help of our experts who understand your problems.

(Essay Mill 10)



I promise to relieve you of stress. Apart from being a professional writer I am also a friend you can talk to freely so order your papers sit back and relax at the comfort of your home as I handle the task.

(Fiverr Poster 71)

In addition to appealing to students' feelings of anxiety, essay mills – unlike Gumtree adverts and Fiverr gigs – also go to great lengths to legitimise their services. This is achieved by distancing themselves from cheating or academic misconduct, framing their services as 'help', and highlighting the negative 'consequences' of failing, thus reinforcing the need of students to employ their services, lest risk exacerbated anxiety:

We are against any kind of activity that involves academic cheating or is against any kind of academic misconduct.

(Essay Mill 29)

Despite what you may have heard or read about, our services are perfectly legal. We do not help students cheat but act as a tutoring service that creates papers for students to use in creating their own original work.

(Essay Mill 18)

Using the services of our qualified specialists does not violate the academic integrity of any school or college. The materials you get from us are educational resources that can help you do homework easier and faster.

(Essay Mill 31)

Writing assignments and making time for doing so isn't possible for a lot of students. This is because not everyone can manage time effectively. As a result, many students have to face one or more of the following consequences: poor grades, failing courses, failing terms, delays in graduation, feeling embarrassment, a decrease in self-confidence. (Essay Mill 87)

Even if your essays are error-free, authentic and non-plagiarized, but you fail to structure them in a good way, the teacher might overlook all your effort and won't give you the grades you deserve. To put an end to all of that you can contact us right now.

(Essay Mill 72)

By getting help with assignment from academic experts you'll not have to face any type of humiliation and embarrassment.

(Essay Mill 11)

Such market prerogatives are largely absent from the Fiverr and Gumtree corpora, which are less focused upon convincing potential clients to enlist their services by appealing to their fears, but rather, emphasise the professionalism, timeliness, and affordability of their services.

#### **5.1.4.2 SENTIMENT ANALYSIS**

To probe deeper into how the language between the different types of service providers differ, a sentiment analysis was performed. The sentiment scores below are normalised to account for variations in text length, and a greater score means that more positive language is used, relative to negative language. It can be observed in Figure 8 that the distributions of sentiment scores are quite varied, though the actual language used is not substantially different between the types of service providers. Indeed, essay mills are characterised by the narrowest range of sentiment scores, whereas Fiverr displays the widest range. A quite complex distribution is evident in the case of Gumtree: the two peaks are a result of a larger number of adverts being connected (and using the same textual content), thus causing the sentiment scores to be clustered. Only one case – a Fiverr gig – is characterised by using more negative than positive language. The median score is quite similar across the three sites (.057, 0.61, and .054, respectively), as is the mean score for the three groups: .059, 059, and 0.52. However, there is a greater dispersion around the mean for Fiverr and Gumtree (sd = .026 and .021), compared

to essay mills (sd = .017). From this, it can be concluded that the essay mills within the sample tend to be more homogenous in terms of sentiment, in comparison to Fiverr and Gumtree, in which there is more variability. Nevertheless, it is also important to point out that the sentiments across service providers are very similar, in which most cases tend to lean towards the positive end of the spectrum, or use fairly neutral language.

#### COMPARISON OF SENTIMENT SCORES

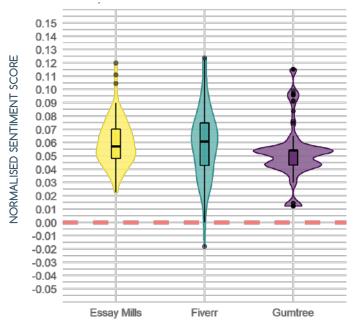


Figure 8. Comparison of sentiment scores

To provide more of an illustration of how sentiment differs, consider the three examples below. The first example consists of an excerpt from the highest scoring essay mill, the second shows the lowest scoring Fiverr profile, and the third example shows an example of a Gumtree advert with a median score:

We are here to assist our students and guide them into composing a well-structured essay. Our aim is to help our students get the desired results by letting our professional professors' work on their assignments ensuring subject accuracy and quality. We understand the value of our student's thesis and

how much worth it holds which is why our team is the best out there to help you achieve a grade that will unveil future opportunities easily.

(Essay Mill 4, normalised sentiment score = 0.12)

Hello Client! Contact me before placing an order. I will write business law essays and other law essays based on the following areas of law: contract law; Judicial Review; company law; constitutional law; commercial law; legal system; criminal law; employment law; family law; Jurisprudence.

(Fiverr Profile 87, normalised sentiment score = -0.02)

Do you need the best quality academic help? I am a UK based professional researcher and coach with a doctorate. I have been helping countless students with their academic problems for more than 12 years by enabling them to achieve higher grades in their dissertations, essays, reports, and other academic assignments. In this regard, my greatest strength is thousands of happy and satisfied customers who have shown their never-ending trust in me. This is because I have been consistently proving my commitment to the quality of work.

(Gumtree Advert 27, normalised sentiment score = 0.05)

As can be observed, the example of the essay mill frames their services in fairly positive terms, using words such as 'desired', 'quality', 'best' and 'easily'. In contrast, such positive sentiments are absent in the Fiverr profile, though claiming that the language is negative would be misleading: the text is framed in very neutral terms, simply outlining their services. The reason it yielded a negative score is that the word 'criminal' is used, albeit, in a legal context, and by no means negatively. The Gumtree advert bears more resemblance to the market prerogatives of essay mills, by using slightly more positive terms to highlight their services and professionalism.

As have been shown, the market prerogatives, and the strategies used to attract clients, are different and dependent upon the type of service provider. There are potential risks associated with each of them, and this is perhaps most likely in the more transient segments of the market, such as Gumtree adverts listing services whose reliability cannot be verified by any means, or Fiverr profiles that are merely weeks old, and essay mills that operate as part of wider networks with false marketing, such as non-existent TrustPilot ratings. Aside from this, the market prerogatives for essay mills appear to be focused on framing themselves as being highly professional organisations providing essential (and legitimate) services to the needs of struggling students. In doing so, they can arguably be considered more predatory than both Fiverr profiles and Gumtree adverts. Fiverr profiles reflect the much more individualised nature of the transactions occurring on Fiverr. Here, establishing trust through approachability and service-mindedness appear key. There is also evidence to suggest that some writers are focused upon specific disciplines and subject areas; this of course is natural, and perhaps what we would expect from a platform designed to connect individual service providers with prospective clients, as it is impossible to be an expert in all academic disciplines (even though some certainly frame themselves as capable of responding to any academic task, no matter what discipline). Gumtree appears to be situated somewhere between Fiverr and essay mills; some adverts are fairly similar to Fiverr profiles, whereas some adverts bear resemblance to the language used on essay mill websites.

5.2 QUALITATIVE DATA ANALYSIS

The findings from the qualitative data reverberate with many of the themes identified throughout the literature. Whilst this research only involved a small number of respondents, it nevertheless offers valuable insights into the current situation of contract cheating in Scotland. The

following analysis is focused upon five themes identified through semi-structured interviews with our respondents: (1) identifying and responding to contract cheating; (2) motivations, academic skills, and stress; (3) technology and blurred boundaries; (4) the nature of contract cheating service providers; and (5) academic policy and future directions.

## 5.2.1 IDENTIFYING AND RESPONDING TO CONTRACT CHEATING

Often, contract cheating is portrayed as a relatively recent phenomenon – indeed, the term 'contract cheating' was coined in 2006 – though it became clear some respondents had experiences related to both contract cheating and essay mills 'outing' students as cheaters due to unpaid debts. The market may not have been as organised, nor as extensive, in past decades, though there are nevertheless indications to the enduring nature of contract cheating within higher education:

I first heard of this kind of thing ... back in the early 1990s. But it wasn't organised. I was asked to rewrite a dissertation for a Taiwanese student. It was quite a sad case, I think he must've received very poor guidance or something, but anyway, he had submitted and failed his dissertation. And his wife, unbeknownst to him, came to me and asked me if I would rewrite his dissertation.

(Respondent 2, University 1)

All participants had dealt with instances of contract cheating. Difficulties associated with the identification of contract cheating cases were often highlighted as part of the reason that their knowledge concerning this was somewhat limited.

I really don't know the extent to which it is occurring, I think it's probably quite a wide range from which it could be happening, from not that much, to quite a lot. It's going to be difficult to try and work that out. (Respondent 1, University 1)

Besides the difficulties in identifying contract cheating cases, many respondents also expressed concerns that it is tremendously difficult to prove contract cheating. Even though respondents frequently had suspicions that contract cheating was occurring, it is considerably more difficult to prove that contract cheating has in fact occurred, which is one of the reasons that the number of confirmed cases remains very low.

I've only dealt with one case, which we are sure was contract cheating. There have been a number of other cases where we had our suspicions, and that is the problem, how do you actually go about evidencing the fact that this is a case of contract cheating? (Respondent 1, University 1)

I think a lot goes undetected, I mean, what levels that's at, I have no idea, but yeah, I mean I think, contract cheating is very difficult to prove, much more difficult than plagiarism ...

(Respondent 4, University 3)

Though it was highlighted that students in academic misconduct meetings would often deny that they had engaged in contract cheating, the cases that were definitively proven to be contract cheating often relied on a student's admission of guilt:

I think the only case since I've been in post, where it's been a clear identification of, probably, that an essay mill was involved, was a student that was about to graduate, and they just had a fit of guilt and owned up ...

(Respondent 3, University 2)

One respondent also alluded to the fact that commercial contract cheating is far from the only problem when it comes to assignment outsourcing; there was a recognition that the outsourcing of assignments to friends, family and acquaintances is – from an academic integrity perspective – equally problematic:

Currently, from the data I have, it's definitely the informal ones that are causing more identifiable issues. Yeah, multiple instances of family members or former colleagues, adding content, but there's highly unlikely to have been any money changing hands, so from an academic standards point of view, it's just as bad ...

(Respondent 3, University 2)

There was also a recognition that some faculties or subject areas may be disproportionately affected by contract cheating, though the explanations as to why that is the case differed. Indeed, some pointed to the fact that this is possibly related to the nature of the assignments, such that more numerical subject areas may be more vulnerable to contract cheating, and more widely, academic misconduct. However, one participant noted essays as particularly problematic, as opposed to more numerical or quantitative assignments, in relation to contract cheating specifically. It was also highlighted that particular degrees may have an influx of academically 'weaker' students, or students whose first language is not English.

... we get referrals from all over the university, but some areas much more ... normally, the [business school] sends us referrals, but they have a huge body of Chinese students, and they send us a lot of referrals.

(Respondent 4, University 3)

Academic staff involved in teaching and grading were often seen as key in identifying potential cases of contract cheating. Often, suspicions arise because educators are familiar with the previous work submitted by students, and any dramatic increases in quality, or changes in the style of writing, could potentially indicate that someone other than the student had produced the assignment.

With us, we have noticed a number of suspicious essays, quite a number of which we haven't been able to determine as being contract cheating, but we



are suspicious of them because of a dramatic change in the quality of the writing by the student.

(Respondent 1, University 1)

Anonymous marking was in this context seen as a barrier to better identify contract cheating. Since a familiarity with the student and their work is seen as pivotal in detecting fluctuations in performance or styles of writing, anonymous marking will hinder the ability of markers in detecting the signs that a submission may in fact have been written by someone other than the student. Some other potential indicators of contract cheating, other than fluctuation in the quality of writings between submissions, are that the assignments might be slightly off-topic, and that no references from the course content are cited. along with non-standard formatting.

They had really struggled with their earlier assessments, and then they handed something in that was superbly written, with loads of technical details, and the grader was suspicious, particularly as it was again slightly off-topic.

(Respondent 1, University 1)

... the reference list is full of references that you don't recognise, because you haven't taught from those sources, formatting is non-standard.

(Respondent 2, University 1)

Once educators had raised suspicions of contract cheating or potential academic misconduct, a common response is to invite the student to a meeting to discuss their submission and assert their knowledge. This was often referred to as a form of viva, or oral defence, which was often seen as fairly effective in elucidating whether or not the student could possibly have produced the assignment themselves.

... the purpose of those meetings is not to make a decision about misconduct or not, it just provides one extra item of information that we put into our process ... I'm pretty confident the chance of falsepositive is pretty low, actually. If there's any real

uncertainty, you don't penalise anyway, anything that's penalised, you really have to be pretty confident ... we've had a number of students, when they go through this, they do quite often end up owning up and providing extra information about what's actually happened.

(Respondent 3, University 2)

There was also a recognition that assessment design is important in the context of contract cheating. Some assessments can be more vulnerable to contract cheating or other forms of misconduct, and one participant mentioned how they are encouraging teaching staff to reflect upon potential weaknesses in their assessments. Others also pointed out that there is a potential to consider using more innovative forms of assessments. tailored around the particular cohorts of students that are frequent in some programmes of study.

... we could definitely improve our design of assessments ... we do need to be making sure we're not recycling the same assessments year after year. (Respondent 1, University 1)

#### 5.2.2 MOTIVATIONS, ACADEMIC SKILLS, AND STRESS

Our respondents have described some quite complex underlying processes that contribute to the propensity to engage in contract cheating, and more widely, become vulnerable to engage in academic misconduct. Whilst the number of confirmed contract cheating cases remain low across the universities of our respondents. what seems clear is that some student populations are disproportionately suspected or found guilty of either having used contract cheating services, or engaged in other forms of academic misconduct. In the words of one respondent,

... students who have put themselves in a position where they have effectively short-circuited a submission and quite happily submitted something that was not their own work, it's very non-random. (Respondent 1, University 1)

Academic misconduct was perceived as a result of several interlinked factors. Students whose first language is not English were deemed as being particularly vulnerable to engage in academic misconduct. Partially, this was attributed to either lacking the English skills or key academic skills required to undertake an undergraduate or postgraduate degree at Scottish institutions.

... the kind of balance of cases as a whole across our [faculty], is really heavily biased to international students, usually from one country, of course English is not a first language, that's more important than being an international student ... you could say just by the play of chance, it's falling more commonly among international students, but all the ones that I can recollect have usually involved international students and mostly from China.

(Respondent 3, University 2)

In this context, it was also recognised that there is a polarised debate within higher education between those who perceive students as lacking the necessary English skills to engage in further studies, and those that would argue that the support for more vulnerable students simply is not sufficient. As such, a growing concern appears to be that larger cohorts of international students are becoming more commonplace, yet student learning and support services might not be adequately resourced to deal with such an increase.

Among the international students, it always ends up with quite a polarised debate that I find here, there are staff members and people involved in teaching and misconduct saying there are students coming in whose English isn't good enough. And then there's another group of colleagues will be saying, well, there is not, it's a group of vulnerable students who aren't getting enough support. I think the reality is they're both correct, and both these statements are going on, and it's really difficult to unscramble the contribution of both of these.

(Respondent 3, University 2)

One respondent highlighted that there have been changes in the student cohorts from China, and that obtaining a postgraduate degree has almost become a 'rite of passage' for some Chinese populations. As such, the underlying motivations were also perceived to have changed as a result of this, with students having a more transactional approach to education, rather than a genuine interest in the learning process itself:

Most of them doesn't seem to care about the grade, they don't even read the feedback, as long as they pass.

(Respondent 2, University 1)

Notwithstanding the challenges faced by international students, in terms of language capabilities, it was also recognised that some international students may be experiencing huge amounts of pressure, in comparison to domestic students. Families might have dedicated significant financial sums to send their children to universities abroad, and many students are expected to perform very well, or at the very least, to successfully complete their education. From the discussions with our respondents, it became very clear that the mental health impact of students failing their degree, or being caught cheating, can be truly severe.

We've had some really, awful, personal circumstances emanating from that [impact of failure]. Really horrific stuff. So yeah, the pressures are huge.

(Respondent 3, University 2)

We had a really dreadful case of a student who we caught plagiarising several times, and in the end, we had to send her down from the university because the amount of plagiarism she eventually got ... she couldn't go back home and tell her parents, that she had failed her degree.

(Respondent 1, University 1)

However, in contrast to the narrative involving potentially vulnerable students under high pressure, it was also highlighted that in some cases, students might simply lack the motivation to fully engage with their education.

And what do you find? They've all disappeared off for a two, three-week holiday in Europe in June, July. And that's where they then find themselves having to make up a lot of time. So, if they were doing that, someone who feels under pressure to pass their dissertation doesn't take a big holiday.

(Respondent 2, University 1)

In addition to international students that may experience challenges related to language skills or undertaking a degree in a different country, it was also recognised that domestic students may also experience a high degree of pressure. Students may be in employment and have limited time to dedicate to their studies, and have to take shortcuts to pass their courses. However, it was also pointed out that many students have experienced significant stress and pressure due to the ongoing pandemic, especially those that have actually been carrying out frontline roles alongside their studies.

Despite the exceptional pressure that some students are facing, it is important to note that far from everyone goes down the route of trying to cheat.

It's not exclusive, of course, to [international students], by any manner of means, you know, home students as well, the students we then see are, well, quite often you'll see students that are just basically struggling with work, but more often I would say students who have problems going on in the background, so what I mean by that is kind of non-academic stuff that are affecting academic performance, so they might be suffering from depression or anxiety. They might be a single parent, and they might have had a family member dying. (Respondent 5, University 3)

### 5.2.3 TECHNOLOGY AND BLURRED BOUNDARIES

Another important theme of our conversations relates to the increasing technologisation of higher education, and the emergence of online markets for different kinds of academic services, which inevitably leads to complications in terms of what can be considered acceptable and non-acceptable academic practices. Though not directly related to contract cheating, one emergent practice of academic misconduct involved a form of 'essay scrambling', or 'essay spinning' in combination with translation software. Here, fragments from one or more academic sources in one language are automatically translated into English, and the quality of the output can be very good. This can be very challenging for plagiarism detectors such as Turnitin to identify, since the output might be unique – even though it were in fact plagiarised prior to being automatically translated.

And then we got an additional layer of problems at the moment with these translation websites ... there are apparently translation software that turn Chinese into brilliant English, absolutely brilliant English. And in fact, if we're talking about whistle-blowers, we had a Chinese student who was complaining to the university about Chinese students using this translation software to hand in brilliantly written English submissions, that they couldn't possibly have written themselves.

(Respondent 1, University 1)

Another, yet similar practice, that is really blurring the boundaries of what constitutes acceptable academic practice involves students writing assignments in their first language, automatically translating it into English, and then employing proofreaders to improve the quality further:

The other thing we've come across, it's very resourceful of students, international students, writing essays in their home language, putting it into Google Translate, into English, and then giving the

English translation to a professional proofreader, but adhering to our rules ... it gets kind of messy there, they have adhered to the rules in part, but you're ending up with something that, you know, can you actually attribute that the student understands the content? It's really difficult - so you get lots of lines blurring at the moment.

(Respondent 3, University 2)

One respondent also flagged up how resourceful students would themselves manipulate their drafts to bypass Turnitin's plagiarism detection. In this context, academic review articles were considered particularly problematic, and students had been found to paraphrase these and cross-check the Turnitin scores to ensure that their assignments would not arouse suspicions. Whilst it is normally acceptable for students to use proofreaders, some of our respondents pointed out that it can be very problematic when proofreaders go beyond their normal duties of correcting grammar and spelling, to actually influence the design of the assignment. In this context, it was also highlighted that there may have been an increasing blurring between proofreading services and essay mills.

I think that also, there seems to be a blurring of the line between essay mills and proofreading services, and of course, the catch there is proofreading is allowed, and we got really clear guidance on what is allowed and what's not allowed at [the university], but there's inevitably, in what's done and what's advertised by these companies, I think, there's now a blurred line. And also, some of these inquiries that came into the [student learning services] seem to be around people thinking they were getting proofreading that actually ended up, ostensibly, with essay mill content.

(Respondent 3, University 2)

### 5.2.4 THE NATURE OF CONTRACT CHEATING SERVICE PROVIDERS

Whilst confirmed instances of contract cheating were relatively rare, there were nevertheless concerns about the prevalence and availability of contract cheating service providers. These were conceived as rather predatory in nature, and employing aggressive marketing techniques to attract students. In particular, there was a concern that students who do not intend on cheating are lured in by contract cheating companies appearing to offer genuine and legitimate services:

what would concern me is students are finding them not with the intention of cheating; they're looking for study aids ... But I do worry that they are putting on a front, that they are completely genuine, and this is all allowed ...

(Respondent 1, University 1)

We were also informed how independent ghost-writers were infiltrating social media groups to sell their services. This seems to indicate that students are exposed to opportunities to contract cheating at a very early stage – in this case when they have not even begun their studies, but are applying to universities. Similarly, others also noted how students are constantly exposed to opportunities to engage in contract cheating, and may also be directly involved themselves in promoting such services:

The impression is that they're bombarded with emails suggesting and inviting people to use essay mills. We've had some instances of students being involved in distributing marketing information through their own social media channels, that have led to student conduct issues.

(Respondent 3, University 2)

There was very limited knowledge of cases involving blackmail or extortion, but most of our respondents were well aware that this could very well be occurring at their



institutions. There was, however, one respondent who had become aware of students being blackmailed at their institution. Students had disclosed, in confidentiality, to the university's student support services that they were being extorted, and the respondent therefore had limited knowledge with regards to how exactly this had occurred, other than that cases involving extortion attempts had come to the attention of university staff.

... I spoke to [student support services] a couple of weeks ago, asking about data over the last year and had they had any instances of confidential contact with students about needing help because of extortion attempts, and I was actually quite surprised at how low the numbers were, we're talking two or three, two or three individuals that were essentially owning up that they'd engaged an essay mill and had been subject to an extortion attempt. It was either two or three people.

(Respondent 3, University 2)

Another respondent provided a really illuminating example of the unscrupulous practices of essay mills, in reference to a contract cheating case that had come to their attention. In this case, the essay mill had contacted the university directly and 'outed' the student as having engaged in contract cheating, but failed to pay for their services.

... the reason it came to the attention of the [faculty] and then the [academic misconduct office], was because the contract cheating company, I can't remember when it was and what they were called, they got in touch with the uni and said, "this student bought an essay and is refusing to pay for it now", so they were then able to supply the essay and we could then cross-check that with what the student submitted, and lo and behold, it was identical. (Respondent 4. University 3)

Despite limited exposure to both confirmed contract cheating cases, and instances of blackmail or extortion, there was a broader recognition that this could very well occur, because of how essay mills operate, and how students expose themselves to risk when engaging with them. Here, it was also recognised that current academic policies might make students reluctant to come forward if they are being blackmailed, simply because the consequences, in terms of their academic future, can be disastrous.

I think our system would make them very vulnerable because we've got a clear black and white "you're out of the university if you're caught". I think that's a flawed policy.

(Respondent 1, University 1)

There are inevitably risks involved for students when they are engaging in contract cheating, and in terms of how contract cheating should be communicated to students, there were diverging views. One respondent highlighted that it would be untenable to not explicitly inform students about contract cheating as a form of serious academic misconduct, whereas another respondent was hesitant in wanting to communicate the existence of essay mills to students.

I think it's important that we start educating students about what's going on ... the university has been keen not to talk about contract cheating, because they don't want to bring them their attention to the existence of these sites to students that don't know about them. But I don't think we can carry on with that policy anymore, and their existence is going to be one of those things covered in the new student learning services module about good academic practice that they are going to be putting on. (Respondent 1, University 1)

I don't really ever mention contract cheating, partly, I think, because, I know students are probably aware that these websites are there, but I just don't even want to acknowledge to them the possibility that you can buy an essay or tests.

(Respondent 4, University 3)

In this context, one respondent highlighted a very important point in relation to an identified case of contract cheating at their university. In this instance, the student had admitted to engaging in contract cheating, but they were not penalised because of a successful appeal, arguing that they had not been informed that they were not allowed to do this. This reinforces the notion that there must be very clear and accessible guidance for students, in terms of what is considered acceptable versus non-acceptable academic practices.

### 5.2.5 ACADEMIC POLICY AND FUTURE DIRECTIONS

The final theme pertinent to our discussions relates to broader issues of academic policy. Parts of these are linked to previously outlined themes, such as the commercialisation of higher education, increasingly large cohorts of international students, and the suitability of current academic policy to adequately address some of the issues arising from this. One respondent pointed out that whilst student learning services for international students may be adequate, one of the issues is that entry requirements might be too low, with the result that students may not have the level of academic and language skills necessary to successfully complete an undergraduate or postgraduate degree in English:

... they're not actually in with the right background to be honest, to be able to do the course - now that's not their fault, that's the fault of admissions, probably. And, so, you know, they feel under pressure, and so they might turn to something like, you know, academic misconduct to try and get them through.

(Respondent 5, University 3)

Within this context, one respondent expressed concerns that increasingly large international student cohorts present a number of interlinked challenges. It is problematic in itself when increases in the student population are not met with a proportional increase in both academic and non-academic staff. Students who may be lacking essential academic and language skills to undertake degrees have greater needs in terms of student support services; if investments into student support and teaching staff are not increasing at the same rate as student recruitment, it is likely the quality of education and support will be compromised.

Are these services keeping up with the rate of which there are students? No, and in reality, students have to wait months for these appointments [with student learning services], by which point they might have left the university, and that's the same with counselling services as well, at the university, most students will have left the university by the time they get an appointment, probably, that's how bad it is. (Respondent 5, University 3)

On a very similar note, others were also concerned that academic expectations and issues of academic integrity are not communicated sufficiently to incoming international students. There is a need for a clear and consistent communication strategy across the university, and it is vital to instil good academic practice and highlight issues related to academic integrity at a very early stage. In terms of responses aimed at addressing contract cheating, some respondents emphasised that harsh penalties might be counterproductive, and that it might be beneficial to offer students a second chance if they engage meaningfully with the academic integrity process. One participant highlighted that such "courageous conversations" could be a very good way for us to learn more about the nature of contract cheating and possibly provide valuable information on how to better address it.

There's a few things really in the policy that I cannot fathom, along with, at the moment, the fact that contract cheating is down as automatically you leave the university, which I think is really unhelpful, because it means that no student is ever going to engage with an academic misconduct meeting in any positive way, because they got everything to lose and nothing to gain.

(Respondent 1, University 1)

### 5.2.6 SUMMARY OF QUALITATIVE FINDINGS

The findings from our qualitative interviews reverberated well with the themes and issues identified throughout the literature review. Perhaps one of the more important findings is that it is relatively common that suspected instances of contract cheating do occur, but that it is comparatively rare that cases of contract cheating are 'proven'. In other words, a substantial challenge is to evidence suspicions of contract cheating, and the most common way to confirm that this has indeed occurred is that students admit to it themselves. Cases of contract cheating had been confirmed at all institutions, and all respondents expressed difficulties related to how to best respond to it. There was also an awareness of the potential of student blackmail, and respondents recognised that students - who may already be vulnerable – could end up in volatile situations by engaging with contract cheating companies. A small number of instances of extortion had in fact occurred at one of the institutions, though the details surrounding those cases were limited. There was, nevertheless, a broader recognition about the 'dark figure' of contract cheating and student extortion, that is, that it is difficult to gauge the true extent of contract cheating and subsequent blackmailing, due to the hidden and illicit nature of these activities.

A set of complicated and intertwined factors were outlined as contributing to contract cheating, and academic misconduct more widely. A lack of academic skills,

motivation, and insufficient English language skills was often seen as some of the common denominators. Similarly, extreme pressure, stress, and limited time due to commitments outwith their education were also seen as potentially increasing the propensity to take academic 'shortcuts', whether that is plagiarism, collusion, or contract cheating. Two types of students could broadly be identified from this: (1) international students who may be facing a lot of stress due to familial or cultural pressures in combination with limited English skills; or (2) domestic students that have limited time for their studies due to external employment or caring responsibilities. However, international students were often seen as being overrepresented within academic integrity inquiries, and all respondents mentioned the Chinese student population in particular. Growth in the Chinese student market was seen as a significant contributor to this, with resulting pressure on student learning and support services. Here, in this context, it was recognised that insufficient language or academic skills, in combination with high expectations of performance and/or economic pressure from families, may make some students particularly vulnerable.

There was also a recognition that technology is playing an increasingly important role in mutating different forms of more traditional forms of academic misconduct, such as plagiarism. Some quite innovative approaches involving translation software and plagiarism were highlighted as a recent issue, or students writing assignments in their native language to then have them automatically translated into English and edited by a professional proofreader. Concerns were also raised about a blurring of the lines between proofreading and essay mill services, especially as the latter tend to portray themselves as professional student services, rather than facilitating contract cheating. However, knowledge concerning how students source for services was of course somewhat limited, due to the fact that the institutions had relatively few proven cases of contract cheating.

Finally, some broader, systemic concerns were also raised by our respondents. For instance, some respondents expressed concerns that the entry requirements might be too low, or that academic expectations and good academic practice are not communicated effectively. One respondent highlighted that it is really important to work with students as partners against contract cheating, and that harsh punishment is not only detrimental for individual students, but that it may be counterproductive for advancing good academic policy. Instead, it was suggested that students should be offered a second chance, if they positively engage with the academic integrity process.

### 5.3 CONCLUSIONS AND FUTURE RESEARCH

It is clear, from both the qualitative interview data, and the online data, that the contract cheating market poses a serious threat to not only academic integrity, but also to students. From our research, we have illuminated the enduring nature of contract cheating, and possibly alluded to the scale of the problem. Whilst we only had a handful of respondents, their experiences challenges the view of contract cheating and extortion as a recent phenomenon. Again, reinforcing the widespread nature of contract cheating, one of the researchers was on several occasions targeted with emails advertising contract cheating services, and on one occasion targeted for recruitment by a seemingly English essay mill.

Furthermore, it also clear from our online analysis that whilst we were essentially just scraping the surface, there is a burgeoning market for contract cheating services. Whilst it appears to be an endless supply of individuals and companies offering these services, it is of course

less clear how frequently commercial contract cheating actually occurs. It was also evident that a large number of essay mills and ghostwriters are based outside of the UK. The efficacy of any legislation aimed at preventing contract cheating services is therefore unlikely to have any significant impact upon the overall market, given how easy it is for a student to connect with a ghostwriter in a different jurisdiction.

A major issue is simply that due to the illicit and hidden nature of contract cheating, confirmed contract cheating cases are relatively rare. It is nevertheless clear from our interviews that there is a variety of intertwined factors that may motivate students to engage in contract cheating. At the centre of student decision-making processes, stress and pressure appear to be significant factors in driving students to engage in contract cheating. Pressure is possibly exacerbated by lacking the necessary academic and linguistic skills to successfully complete higher education studies, and in this context, students with English as a second language may be most vulnerable. Furthermore, it is also clear that international students from certain regions are overrepresented in academic integrity inquiries at the universities involved in our research. Some very serious mental health issues were disclosed to have affected students involved in academic misconduct, and student wellbeing must thus be at the centre of any responses to academic integrity.

Explicitly illegal forms of exploitation were also identified throughout our research, though information pertaining to the circumstances in which the blackmailing of students occurred was very limited. Whilst the numbers of reported instances of such exploitation were very low, it is nonetheless clear that students are exposed to significant risks by engaging with contract cheating service providers. From the online research, it could be observed that there is a somewhat covert element associated with contract cheating service providers: for instance, links could be established through shared IP addresses or semantic similarity between essay mills that

are otherwise posing as independent service providers. In addition to this, it is also apparent that contract cheating companies are directly appealing to potentially vulnerable students and try to frame their services as legitimate and distinct from academic misconduct, and also by promulgating a narrative that using such services is normalised within higher education. Some of the observed essay mills or independent writers appear more transient, and have a less prominent online presence, in comparison to more well-established essay mills, and these are perhaps the companies and individuals that could potentially offer more high-risk service provision within the contract cheating market.

This research was exploratory in nature and only involved small samples of respondents and online data, and it is not possible to estimate the extent of contract cheating and student exploitation within Scotland from our data. One of the greatest limitations of this research is that it did not any involve any interviews with students who have experiences of contract cheating or student exploitation. Given the severe impact that being suspected or discovered to have engaged in academic misconduct can have upon students – especially if they are under significant pressure – there is a dire need to explore student perspectives of these issues, and particularly those with lived experience of engaging in contract cheating and/or having been subjected to extortion or blackmail. On an institutional level, there is also a need to better capture data related to suspected and confirmed cases of contract cheating, and ideally if possible, to probe deeper into the mechanisms behind the decision-making processes of students involved in academic misconduct. It is only with such information that we can begin to develop more holistic responses to contract cheating, and such an approach is likely to only be successful by increased partnership working between institutions, students and educators, and student support services and academic integrity offices.



## 6. POLICY IMPLICATIONS

In this final section, we synthesise insights from the literature review with the findings from our qualitative and online research, and compile recommendations on a few key areas of academic policy. These are not exhaustive but rather serve as a starting point for more critical reflections upon how to ensure a fair and comprehensive response to contract cheating and academic integrity issues.

# 6.1 INSTITUTIONAL FRAMEWORKS AND PROCESSES

There are many barriers to identifying, investigating, and responding to contract cheating, which may result in staff being unable or unwilling to pursue cases emerging at their institutions (Harper et al. 2018). Indeed, perhaps one of the most pressing issues is that academic workloads are already severely high, and properly investigating contract cheating may simply not be manageable, and lead staff to "turn a blind eye" to the issue (Birks et al. 2020, p. 5). A lack of institutional frameworks and processes to address student misconduct has also been noted in the literature (Thomas and De Bruin 2014), and as Harper and colleagues (2018) have argued, there is a need for a wider institutional commitment and adequate resourcing to address the issue of contract cheating. From our own fieldwork, it was clear that increasingly large and diverse student cohorts put increased demand on academic staff and support services. If this trend continues, and unless further investments into adequately resourcing universities to deal with increasing workloads, not only the quality of teaching is likely to suffer, but also crucial student services which may otherwise act as a barrier against contract cheating. Given this lack of

resourcing, it becomes even more important to ensure there is an institutional framework in place, which may involve working more proactively to identify indicators of contract cheating as part of the marking process. As part of this, and as a potential means of more data-driven and proactive identification of contract cheating, there may be ample room to employ statistics to systematically monitor deviations in student performance (see, for instance, Clare et al. 2017).

## 6.2 TARGETED SUPPORT

As has already been noted, stress and mental health may already be a factor contributing to contract cheating, and being caught and investigated for academic misconduct can be a traumatic process for students (Pitt et al. 2020, p. 5), and it has previously been described as "the hardest, most challenging or worst experience of their lives". Besides the negative academic consequences of being found guilty (e.g. resubmission or repeating the module), respondents also reported a deterioration of relationships with peers and faculty members, and feelings of embarrassment and shame (Pitt et al. 2020). It is important to recognise that these outcomes were also reported for students whose alleged misconduct was not proven; this reinforces that academic misconduct procedures must be sensitive to the impact such processes can have upon students. In this context, Pitt et al. (2020) recommend offering targeted support to students faced with allegations of misconduct. This includes guidance on how to manage relationships throughout this process, financial counselling for those that may need to retake modules, and ensuring there is adequate advocacy and support services in place both during and following an academic investigation. From the interviews conducted through our own research, it also became clear that academic integrity processes can have detrimental effects upon student mental health, and this reinforces the need for targeted support.

## 6.3 COURAGEOUS CONVERSATIONS

In the context of contract cheating, Draper and colleagues (2021) have recently argued there need to be mechanisms in place for students to confess and seek support from their universities. This could potentially reduce some of the resources otherwise required to investigate and evidence student misconduct, and it could also lead to valuable intelligence on current developments in relation to contract cheating (Draper et al. 2021). Whilst sanctions are still necessary – to not give students who have cheated an unfair advantage - cooperating with their institutions could lead to a less formal hearing process, along with targeted support, guidance and monitoring (Draper et al. 2021). To have such a mechanism in place will undoubtedly be even more pertinent in those situations where a student is being blackmailed (Yorke et al. 2020). Students currently being blackmailed are likely to suffer severe stress and anxiety, and perhaps fearful their misconduct may lead to expulsion, and therefore be highly reluctant to seek support from their universities (Yorke et al. 2020). Mechanisms, aimed at encouraging students to have 'courageous conversations' and confess their misconduct in supportive environments, are likely to be key to any response to contract cheating, as well as student blackmail (Draper et al. 2021; QAA 2020; Yorke et al. 2020).

# 6.4 PROMOTING ACADEMIC INTEGRITY

It has previously been suggested that institutions increase their efforts in creating environments conducive to academic integrity (QAA 2020). In this context,

policies addressing contract cheating must be clear and accessible, both to students as well as to staff (Morris 2018; QAA 2020). From an early onset, it is key to communicate the value and benefits of students completing assignments themselves, and furthermore, the value of the skills acquired at university for entering the labour market (Lancaster and Clarke 2016). Specific academic integrity training may be necessary, as well as making sure to instil good academic writing practices (Pitt et al. 2020; Stoesz et al. 2019). Amigud and Lancaster (2019a) go so far as to suggest academic integrity should be an entrance requirement for being accepted to higher education. Whilst the emphasis on academic integrity in itself is positive, such an individualistic explanation – that students engage in contract cheating due to being undereducated in areas related to integrity – is perhaps a misconception; indeed, as was discussed in Section 3.3, there are many factors that contribute to the propensity to cheat, and unless we address the underlying causes of contract cheating, we are unlikely to see any significant reductions. Similarly, others have also noted how students may still elect to cheat - even though they consider it unethical and wrong (Yorke et al. 2020). Strong relationships between students and teachers are important for several reasons. First, educators who are familiar with their students are in a better position to identify potential academic breaches (Bretag et al. 2018). Second, familiarity with students may also allow for earlier identification of students who may be vulnerable to engaging in academic misconduct (Bretag et al. 2018). Moreover, there is likely to be substantial value in partnership working with students to collectively promote academic integrity and tackle contract cheating (QAA 2020). As Lancaster (2016) has pointed out, contract cheating is not a victimless crime; it devalues the effort of students who are investing a significant amount of effort in producing high-quality work. QAA (2020) recommends training students to act as 'academic integrity champions', to both promote academic integrity, but also to signpost those at risk of engaging in contract cheating.

## 6.5 DEVELOPING KEY SKILLS

In order for students to succeed with their studies, it is important to develop key skills integral to academic writing. Weaker students are more likely to cheat or plagiarise, and it is essential to teach referencing, paraphrasing and academic writing at an early stage (Pecorari 2016). International students, or LOTE students, may have additional support needs, given the linguistic skills required to study at a university level (Pecorari 2016; QAA 2020). More generally, Morris (2018) also highlights that it is essential to develop assessment literacy. Learning objectives and assessment criteria must be communicated effectively to students, and skills such as self-assessment and reflection are needed for students to successfully proceed with their studies (Morris 2018). Academic integrity itself should be embedded within modules, and part of core assessments, rather than delivered as separate workshops or seminars (Rogerson and Basanta 2016).

### 6.6 ASSESSMENT DESIGN

Assessment design plays an important role in relation to contract cheating, though it is not possible to completely eliminate contract cheating through effective assessment design (QAA 2020). Some assessments (e.g. generic essays) may be more suitable targets for contract cheating than other forms of assessments (Baird and Clare 2017). 'Authentic assessments', normally involving some form of real-world tasks, or linked to professional practice (Ellis et al. 2019), are often highlighted as both valuable for promoting deeper learning and engagement, but also as being more difficult to outsource (Dawson and Sutherland-Smith 2017). However, as Ellis and colleagues' (2019) research demonstrated, so-called authentic assessments are frequently outsourced to

contract cheating service providers, and though it may not be a direct solution to prevent contract cheating, it may have the benefit of engaging students in their studies and thus make them reconsider resorting to contract cheating. On a similar note, whereas it has previously been suggested that short turnaround times may make students less likely to outsource their assignments, this is unlikely to be helpful in the contemporary market for contract cheating, in which contracted assignments can be obtained in mere hours (Wallace and Newton 2014). It may also have the additional effect of increasing contract cheating, as students facing short deadlines may experience increased pressure and stress, and therefore be more likely to resort to contract cheating (Dawson and Sutherland-Smith 2017; Ellis et al. 2019). It can thus be beneficial, for students - and also for markers responsible for grading assignments for large classes - to consider more flexible submission times (QAA 2020).

### 6.7 INCREASING AWARENESS OF CONTRACT CHEATING AND BLACKMAIL

Awareness-raising is likely to be key to preventing contract cheating, and the blackmailing of students. First, academic and support staff must be made aware that contract cheating is likely to occur within their institutions, and markers should be trained to recognise indicators of contract cheating (Lancaster 2020a). Contract cheating is continually evolving, and processes related to academic integrity must be up to date and sensitive to these changes.

As for students, it is essential to communicate the possible negative consequences of contract cheating. Students should be made aware that they are likely to





be exposed to, or actively targeted, by contract cheating service providers, and that these companies are not operating in their best interest (Lancaster 2019a). Similarly, the slick marketing and promises advertised are unlikely to be realised: students need to know that they are more likely to be very disappointed, not to mention that there is always a risk that they get caught by submitting assignments produced by others than themselves. There is also a relatively high risk of being outright scammed, and not even receiving the product they have paid for (Rowland et al. 2017; Sutherland-Smith and Dullaghan 2019).

Students and educators alike should be made aware that blackmail and extortion is always a possibility when engaging with contract cheating service providers. It is important students become aware that the data they are providing when purchasing assignments can potentially involve long-term risks; some sites are openly stating that they will share their personal and credit card details with third-parties (Sutherland-Smith and Dullaghan 2019). As such, students need to be aware of the fact that the data provided through contract cheating transactions, makes them highly vulnerable to blackmail. Given that knowledge of student blackmail is relatively low – both amongst students and educators - raising awareness of blackmail may be a particularly important strategy to deter students from engaging in contract cheating (Draper et al. 2021; Yorke et al. 2020).

### 6.8 CRIMINALISATION AND DETERRENCE

Several jurisdictions have already introduced legislation to make the provision of contract cheating services illegal (Amigud and Dawson 2019), and in England, the government is in the process of criminalising contract cheating as part of the Skills and Post-16 Education Bill1:

The government intends to make it a criminal offence to provide, arrange or advertise these cheating services for financial gain to students taking a qualification at any institution in England providing post-16 education including universities.

(UK Government 2021)

In addition to this, the Higher Education Cheating Services Prohibition Bill<sup>2</sup> is currently being considered in the House of Lords, and like the previously outlined bill, it intends to "make it an offence to provide or advertise cheating services to students enrolled at higher education providers in England". At the moment, it is unclear precisely which of the proposed legislation will be accepted, and whether devolved governments in the UK will introduce similar bills. There is, however, little to suggest that the criminalisation of contract cheating provision would actually prevent contract cheating; legal cases of contract cheating are rare, and resource-intensive to pursue, and unlikely to

https://www.gov.uk/government/news/essay-mills-to-be-banned-under-plans-to-reform-post-16-education

https://lordslibrary.parliament.uk/higher-education-cheating-services-prohibition-bill-hl/

have a high priority for law enforcement (Amigud and Dawson 2019). Notwithstanding the resources required to prosecute contract cheating companies, the use of the internet and communication technologies render these companies highly mobile, and given how easy it is to set up virtual storefronts, service providers can operate their businesses in jurisdictions where contract cheating is not criminalised (Amigud and Dawson 2019). Our online research also supports this, as it was clear that there is an extensive global market for contract cheating services. As such, the value of the proposed legislation is conceivably more symbolic – in the sense of highlighting the seriousness of the issue – rather than being of instrumental value in actually preventing contract cheating. Legislation to prohibit contract cheating provision does not address the causes of students outsourcing their assignments, and additionally, such legislation would also not prohibit students from outsourcing their assignments to friends, families, and acquaintances, which occurs in the absence of any financial transactions or advertising. In addition, focusing on criminalisation and prosecution efforts could also divert resources away from alternative approaches, which could have a more potent effect upon reducing contract cheating (Amigud and Dawson 2019). Criminalisation might therefore do little to reduce contract cheating, especially since it is highly likely that the vast majority of contract cheating involves students outsourcing assignments in their personal networks, rather than to commercial enterprises (Bretag et al. 2018). The potential value, as Morris (2018, p. 10) points out, is that the criminalisation of contract cheating provision can "provide a clear and consistent message to students" about the gravity of contract cheating.

With regards to deterrence, even though there often are severe penalties in place for students engaged in contract cheating – such as having to retake a module or even expulsion – students are nevertheless continuing to outsource their assignments (Rowland et al. 2017). The issue, as Brimble (2016) argues, is that students often

perceive the risk of getting caught as minimal. If detection rates are increased, and students become aware that there is a reasonable risk that they will get caught, deterrence might play a part in potentially reducing contract cheating (Ellis et al. 2018). However, what is often neglected in discussions on deterring students from contract cheating, is that deterrence potentially can have differential effects; students who are doing reasonably well, and have a lot to lose by engaging in cheating, may be deterred from doing so, whilst deterrence might have a minimal effect upon those that already are desperate and at risk of failing their courses.

### 6.9 A HOLISTIC APPROACH TO PREVENT CONTRACT CHEATING

Contract cheating is a complex issue, and a holistic approach is likely needed to address it (Morris 2018), which encompasses all of the aspects previously examined. Academic integrity needs to be central to all aspects of higher education, and the learning environment needs to be conducive to strong studentteacher relationships, which may serve to improve student satisfaction, and ultimately, reduce the propensity to engage in contract cheating (Harper et al. 2018). There needs to be a greater emphasis upon developing key academic skills, which will provide learners with the capabilities and confidence to finish assignments themselves, and to provide increased support for international and LOTE students, who may face additional barriers in their studies (Bretag et al. 2018; Harper et al. 2018). As contract cheating advances, teaching staff must be better equipped to identify and respond to contract cheating; more resources will undoubtedly need to be dedicated to this (Eaton et al. 2019), and novel technologies – such as stylometrics - might come to play an increasingly important role in

scaling the efforts to identify contract cheating (Ison 2020). Increasing the detection rate may itself change student perceptions that engaging in contract cheating is relatively low-risk, and in doing so, potentially deter some students from outsourcing their assignments (Ellis et al. 2018). There is also a need to increase awareness of the potential for student blackmail; educators and university staff need to know how to support students who are experiencing blackmail, and students must be made aware of the risk they are exposing themselves to when engaging in contract cheating (Yorke et al. 2020). Students who are engaging in contract cheating may be experiencing poor mental health, and any approaches to prevent contract cheating ultimately need to be centred around student wellbeing; this is particularly important when students are being investigated for, or found guilty of, contract cheating, since this can have detrimental impacts upon student mental health (Pitt et al. 2020).



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### 8. APPENDIX A: VISUAL EXAMPLES OF DIFFERENT SERVICE PROVIDERS



Figure 9. Example of an essay mill homepage

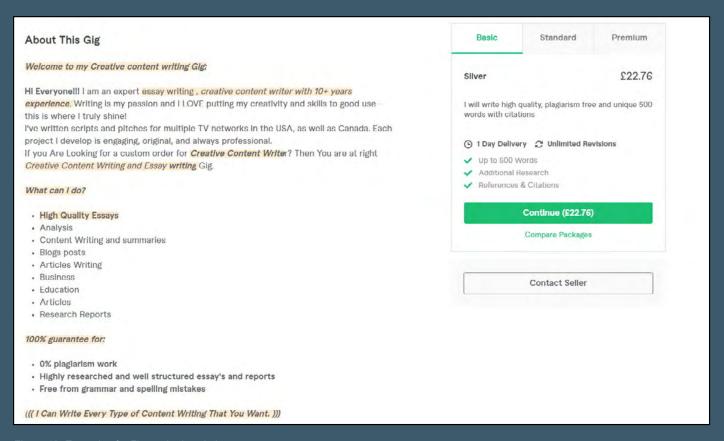


Figure 10. Example of a Fiverr gig description

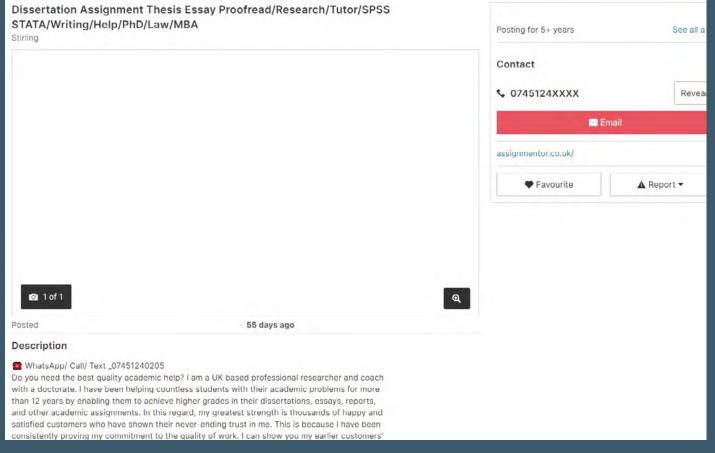


Figure 11. Example of Gumtree advert

### 9. APPENDIX B: VISUAL EXAMPLE OF TEXTUAL SIMILARITY

The visual comparison below illustrates the textual similarity between two distinct essay mills, that nevertheless use the close to identical text segments on their websites. The red highlights show textual features removed from one website, and the green highlights show text that was added to the other website. The text which is not highlighted is shared between the two websites (Essay Mill 15 and Essay Mill 47). The Jaccard index (i.e. textual correlation) is 0.35.

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Figure 12. Visual example of textual similarity

