Introduction

Self-harm has a strong prevalence within adolescent populations in Europe. In the UK, adolescent self-harm hospital admissions are rising each year. These statistics reflect the “tip of the iceberg”, with the majority of incidents hidden from public health networks, only a small percentage of this population group access hospital support. This invisibility creates barriers to: epidemiological information; the planning and evaluation of evidence-based support; health management within the complexity of adolescent self-harming behaviours to ensure recovery and healthy adolescent trajectories. It is also carries serious health risks: accidental death from self-harm is one of the common causes of injury-related adolescent death; clinical-based data posits self-harm on a risk spectrum that includes suicide. These issues mean that there are serious concerns and important public health issues to be addressed.

The UK adolescent self-harm issue is therefore a significant social and healthcare problem. Unfortunately the most recent Cochrane Review states that the evidence for treatment is limited by the poor quality of the research. Potential solutions include a collaborative approach with the population group to ensure their needs are being met, and the use of complex public health intervention guidance by the Medical Research Council. Some barriers to these include the majority of the population group residing within the community and not accessing public health services, meaning they are outside of public health research infrastructures.

A way forward to address these issues is to contact the “invisible population” through outreach research work, and go to the community settings where the population group exists. For UK adolescents, who are aged 13 years to 18 years, one of these settings is the secondary school context, where the majority of the population resides. It is posited that schools could provide a community-based setting for protective factors, through health management behaviours and support for the adolescent self-harm population group, however research is sparse. Finding out if the school context could be a potential community setting to gather such evidence is an important first step. The are some positive indications this could be the case. For example, in 2014, for the first time the Health Behaviour in School-aged Children Survey from Public Health England quantitatively surveyed 15 year old pupils about adolescent self-harm prevalence. This study gave a figure of 22% within the 15 year old secondary school population group. In 2016 the GW4 alliance (the research consortium of Bristol, Cardiff and Exeter universities) surveyed 148 UK secondary schools to ascertain their adolescent self-harm interventions and future support needs. This demonstrated that currently UK schools do very little work to prevent or raise awareness of adolescent self-harm, highlighting the need to understand the school-based context more fully in regards to adolescent self-harm. The current small-scale qualitative study was designed to begin to address this research gap, to build upon the GW4 work and to explore the potential contextual factors impacting a whole-school preventative support approach for adolescent self-harm. The project also accessed the perspectives of secondary school pupils, which had not been feasible within the initial GW4 study.
Methods

Due to the small-scale, exploratory nature of this project it focussed upon secondary schools in Wales. Two secondary schools were purposefully sampled for variations in key characteristics (geographical area; low and high socio-economic school community status; urban and rural) from the GW4 study. Two separate student/teacher group interviews in each school were undertaken using qualitative research methods (Participatory Rapid Appraisal - PRA). One pastoral staff member in each school recruited the study participants, which included six school-based professionals (an Acting Headteacher, one Head of Year Teacher, two Pastoral Centre staff, one PSE Teacher, one Mainstream Curriculum Teacher) and six post-16 year old students (one transgendered, two male, three female). Three of the student participants had lived experiences of long term self-harming behaviours; the three other students and all six staff had encountered students who self-harmed.

PRA facilitated a community-based appraisal of the current situation within the two school contexts by staff and students. PRA is used to engage communities through participatory methods, with interviewing techniques intended to facilitate a process of collective analysis about key issues. It also promotes equity and inclusion for participants, addressing barriers to participation for individuals with protected characteristics, such as age and disability. Participatory and consultative approaches are recommended in the Cochrane Review; the use of appropriate methods to facilitate these processes is mandatory in Wales to ensure co-production in any public service provision. Furthermore, PRA overcame the barriers that were active in the school context (see the results section) where the interviews were held, facilitating in-depth discussion from the research participants. PRA enabled rich quality data to be generated for grounded theory data saturation purposes to elicit the limits of core category dimensions and properties.

The interviews were transcribed verbatim, generating school-context-dependent information that was analysed through the logic of abduction using grounded theory. The ontology that shaped this work was critical realism, within a public health paradigm. Critical realism centres on revealing the underlying mechanisms that influence causal events within complex intervention design; theories are generated which posit the context-mechanism-outcome (CMO) configurations. The Medical Research Council Framework accepts critical realism for use as a meta-theory for understanding the contextual factors impacting complex intervention design. In this way, public health research taking place outside of clinical health settings, within the open social system of the school context, can be accommodated.

The constant comparative grounded theory method was used for the interview data analysis due to its ability to focus upon axial coding for context. Open coding enabled an in-depth examination of the data, and meant that each line of the interview was assigned a descriptive summary that identified its core characteristic for categorization purposes. Subsequent axial coding facilitated the explanation of the contextual conditions, interactions and outcomes. Conceptual memoing refined the categories, through reflection upon the emerging codes to bring them together for the theory generation to explain the social behaviour the analysis revealed. This analytical and theoretical work yielded the model in this paper’s results section, which delineates the grounded theory model’s main categories and sub-categories. Nvivo 10 Computer Aided Qualitative Data Analysis Software (CAQDAS) supported this coding process.

The quality of the research analysis and its findings was further enhanced through undergoing scholarly peer review by three senior academics within the School of Social Sciences at Cardiff University.
Ethics

The Social Science Research Ethics Committee at Cardiff University gave ethical approval for this study. This was a potentially sensitive research topic given the nature of the subject matter being discussed, and also that sixth form secondary school pupils who were part of the study might have experiences of adolescent self-harm themselves (which indeed was the case). The potential for harm was managed through the design and co-ordination of a detailed safety plan, which was one of the first stages of the planning process undertaken for the research interviews. There was also an age limit set for student participants (post 16-year olds only) to ensure that the young people were at a legal age where they had the capacity to make informed choices and decisions within the interview process. The researcher (whose professional background is a Child and Adolescent Mental Health Services Consultant) was able to plan the research environment carefully, working in partnership with the secondary schools, so there was system-level support in place to control any possible harms to the research participants. The informed consent process included additional safety measures such as: school visits; self-harm signposting and support information; parental permission; poster presentations and a detailed blog for pupils and their parents. In this way, the project information was delivered in many different ways in order to facilitate the most appropriate medium of communication for both staff and pupils, to enhance the informed consent process and ensure participants’ well-being and safety within the research interviews.

Results

A sample of the original dataset, which includes examples of qualitative interview data for the research result’s model and each of its main categories, is available at Mendeley Data (http://dx.doi.org/10.17632/9mrr97dtbd.1).

Summary model

A model of stigma resulted from the grounded theory analytical process, specifically in relation to staff and student perceptions about adolescent self-harm within the institutional context. This meant that social-based behaviours in the secondary school setting centred upon adolescent self-harm were structured by stigma. The model gives the specific details of the stigma-informed behaviours in relation to adolescent self-harm, meaning that the topic is excluded from the whole-school public environment, the consequence of which is that no whole-school preventative work is being undertaken. Applying the critical realist Context-Mechanism-Outcomes configuration, the school context (C) generated the mechanisms of the stigma model (M), which delivered the outcomes of the whole-school topic exclusion (O).

The model of stigma has five main categories (see figure 1): word tabooing - the actual use of the term “self-harm” was avoided in the research interviews; avoidance (individual) - these were individual techniques/behaviours used to physically avoid adolescent self-harm; a judgemental stance - this involved negative judgemental behaviours centred upon adolescent self-harm; exclusion (public) - this was the adolescent self-harm topic exclusion within the whole-school public arena; and finally, fear and/or danger beliefs – adolescent self-harm evoked a negative emotional response of fear and/or danger.

In the following sections, a brief descriptive overview is given of the model’s categories and sub-categories, which describe the negative socio-cultural behaviours within the school context surrounding adolescent self-harm.
Word-tabooing

Word tabooing existed within the school context, which meant both students and staff often avoided the actual use of the word “self-harm” within the research interviews. There were a number of sub-categories to the word-tabooing behaviour which included: replacement words (the use of “it”, and euphemisms); long pauses (which centred around the oblique or non-oblique word usage) and physical discomfort gestures. Replacement words included the pronoun “it” being used for the word self-harm, both as a descriptive label in noun form, and also as a verb, meaning the action of self-harm. The following interview extract gives an insight upon the word-tabooing taking place in the school context, which the pupil here also feels is mirrored in the wider society:

Pupil 1: That’s the thing. It’s (i.e. adolescent self-harm) very awkward to talk about in, like, every sense of the word. I think that’s just been from how it’s been dressed for so long in society... a lot more people will be like it’s less taboo to speak about it in an educated way, but it’s still awkward.

Pupil 2: There is like, even though more people are talking about it there is still negative ideas surrounding it obviously. Umm... but it’s .... it’s very difficult to talk about in school, because it is not talked about.
Avoidance (individual)
The model category of avoidance involved social interaction-based behaviours on an individual level that were used to physically avoid or limit contact with the self-harm topic and the behaviour. Its sub-categories included: a refusal to engage with the topic; keeping a physical distance (and giving reasons/excuses why); excluding a person from social norms (on grounds of the behaviour and topic); specialists being used to deliver care and support; passivity and inaction as a response to the behaviour. One explanation for these behaviours is offered below from a member of staff:

Staff Member: It's very difficult, because everyone is very aware of their safeguarding responsibilities. So it's kind of running counter to that. It's a bit of a subtle one really. I think it might come down to feeling unskilled. In kind of .... just .... you know .... what am I dealing with, and maybe feeling very apprehensive about the whole thing. And so perhaps that creates a sort of distance there. Without you wanting to distance. But .... um .... it's just like a whole can of worms .... that really you are thinking, “Oh my God, how do I deal with this, without making it a lot worse?”.

A judgemental stance
The third category of the stigma model was a judgemental stance, which was the use of negative judgemental behaviours by school professionals and students centred upon adolescent self-harm. It had the following sub-categories: minimisation of adolescent self-harm; negative joking (that belittled the seriousness of adolescent self-harm); and direct negative criticism (including the behaviour being labelled as extreme). The negative impact upon pupils’ help seeking behaviours is outlined below, from two pupils with long term self-harming behaviours themselves:

Pupil 1: “Someone” wasn't having a great time. So that “someone” went to the head of year, had a full blown meltdown, and just said, “I can’t do it any more. I’m done”. And she literally said, “Oh don’t say that, year 10 have it harder” .... some people don’t realise when they feel like that that they’ve got a problem. But at that point, that person knew they needed help ...Because what they were thinking was not right. They were like, “I can’t...”. To be brushed off like that...

Pupil 2: A student was in a lesson..they told the teacher that they were seriously going to end their life that day. And the teacher responded with, “is that going to take time away from doing your coursework?“.

Exclusion (public)
This category was the exclusion of the topic of self-harm from the whole school’s public discourse. This meant that there was no reference to the topic within a school’s public environment. The sub-categories centre upon the exclusion of the topic from the whole-school public context and include: the topic is not taught in the whole-school context (self-harm is excluded from the curriculum); training is not delivered in the whole-school context for all staff (the topic of self-harm is excluded from whole-school staff training); and no public information about the topic is given (this includes no signposting to help and support). Consequently pupils’ education about self-harm is coming from social media; a whole-school preventative approach could help to deliver protective factors for pupils perhaps before a deadly crisis situation occurs:

Staff Member: A pupil ..... she had what I call the superficial cuts, but she also had the vertical deep cut, which to me said something else. I haven’t got the training to say, it's just what I’ve picked up from reading and learning..... She was upset, and couldn’t cope with the fact that it didn’t work. And how she knew this, is because she watched on YouTube how to
do it, to make it work. So pupils have all these tools at their disposal, where they can actually learn very quickly, exactly how to do it, where to do it..

Fear and/or danger beliefs
The final strand of the model were the fear and/or danger beliefs that stem from the topic of adolescent self-harm, evoking a negative emotional reaction. Dimensions include: adolescent self-harm being a dangerous topic that cannot be taught in schools; stigma fear (an individual’s fear of the associated stigma which surrounds the topic); panic response (the topic and behaviour evokes an overwhelming fear); and complexity fear (the fear of the potential complexity of the behaviour, which includes not being able to manage the complexity safely). These can increase pupils’ vulnerability to being in receipt of negative and potentially abusive behaviour within the school context with limited ability to protect themselves - this is especially true if school staff’s professional behaviours are compromised through the stigma which negatively impacts staff’s responses to adolescent self-harm:

Pupil 1: People can have a tendency to hold it (i.e adolescent self-harm) against others...to be like, “Oh, I know this about you”. It's like if you had a secret, and somebody knew it about you, that does give them power over you.....
Pupil 2: But like in year 7 ... something happened ... it went round everyone, and she got called in to the office. And literally she got checked all over her body....
Pupil 1: It was very invasive....Like, not to like talk to her parents, nor to talk to her about it, or ask her any questions, it was just to go straight in to that.

Discussion
The stigma model demonstrates in detail how the topic and behaviour of adolescent self-harm is excluded from the socio-cultural norms of the institutional setting. The model brings to light the ubiquitous nature of stigma within a specific context, a characteristic that is highlighted in public stigma research as the key reason for its damaging impact upon public health. Tackling stigma in institutional settings can prove to be extremely difficult due to their powerful socio-cultural mechanisms. This is why the initial grounded theory model is useful, revealing the specific characteristics of public stigma surrounding adolescent self-harm within the two secondary school contexts. To date this is a limited research area, which the current study contributes to. Furthermore, the negative consequences of public stigma, which include social exclusion and health inequalities, are likely to be severe at times for the adolescent self-harm population group. These could negatively impact young people’s health trajectories at critical times, and pose a serious risk of harm, including accidental death and suicide. Exploration of the school-based contextual influences, including their risk and protective factors upon self-harm, is warranted.

The grounded theory model reveals adolescent self-harm as a powerful stigma marker, which lever differentiation and the resulting negative behaviours within the school context; another term for this is discrimination. Unpacking this point through the social and medical model perspectives embedded within the UK’s 2010 Equality Act, adolescent self-harm can be a fluctuating condition that may substantially impair ability at times, and is therefore a protected characteristic under the Act. Disability discrimination is illegal in the UK; this includes any treatment that places a person at a disadvantage, and a lack of anticipatory planning to address potential need. With all these points in mind, it should be understood that secondary schools reside within a socio-ecological system of wider influences that shape school-based behaviours, which now require further research investigation.

This is only a small scale and limited study, and its results should be treated cautiously. However, the project’s findings do align with the GW4 research from 148 UK secondary schools,
tentatively offers more details. Potentially, the grounded theory stigma model could be widescale. Further larger scale social science community-based research that can explore the aforementioned points is recommended, using participatory methods, in order to find system-level information and shared solutions to the current challenges.

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Endnotes
i. In the British court system, all persons under 18 are minors. Under 16 year olds are “children”, and require an assessment of Gillick competence, to demonstrate they have the capacity to make intelligent and mature decisions in order to give their consent. 16 to 17 year olds are “young people”, and do not require an assessment of Gillick competence.

ii. A supplementary in-depth report can be accessed at: https://www.researchgate.net/profile/Rachel_Parker6/contributions
REFERENCES:


43. Evans RE, Russell A, Mathews F, Parker R, the Self-harm and Suicide in Schools GW4 Research Collaboration, Janssens A. *Full Report. GW4 Children and Young People’s Self-harm and Suicide Research Collaboration*. GW4 Research Alliance 2016. Available at: