

Conflicting trends and volume estimates in violent crime measured by police recorded crime and the Crime Survey in England and Wales since 2010

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Crime Survey User Conference 2026. March 11 online meeting.

Setting the scene

What is the best method of measuring violent crime?

The Crime Survey (CSEW) or police recorded crime (PRC)?

Their *data quality framework* (ONS,2024) states that the best way of measuring *trends* in violence is through the CSEW.

Data quality framework summary for selected offences			
Crime type	Data source	Reliability	Notes
Violence with or without injury	CSEW	Moderate	Reliable long-term trends for violence with or without injury but domestic violence is significantly under reported.

Note that this statement refers to **trend**, rather than the **volume** of crime (number of incidents). No advice is given on which to use for estimating volume.

The two data sources:

Police recorded crime (PRC). We refer to “*reported crime*” as crimes which have been reported to the police by the victim, friends of the victim, the police themselves, or others, and which is recorded by the police.

“*Recorded crime*” is a formal process where, since 2002, the police in England and Wales record crimes according to the National Crime Recording Standard, following counting rules. Not all crimes reported to the police are recorded – the offence needs to be a notifiable offence, it needs to be interpreted by the police as passing the threshold of being a crime, and it needs to be a crime against an identifiable victim or against society or the state.

Crime Survey of England and Wales. As a victimisation survey, it measures both crime not reported to the police as well as crimes reported to the police. The number of crimes and victims for a variety of types of crime are measured through the face-to-face (F2F) victimisation module. Each potential crime incident is described in a free-text box recorded by the interviewer, and specialist coders determine whether the incident is in fact a crime, and what offence code to assign it to.

Data quality

Police recorded crime data in England and Wales has long been criticised for its inconsistency and **underreporting** of crimes. In 2014, its designation as a “national statistic” was removed by the UK Statistics Authority, and the HMIC led efforts to improve its quality of police data. PRC data has still not regained its national statistic status.

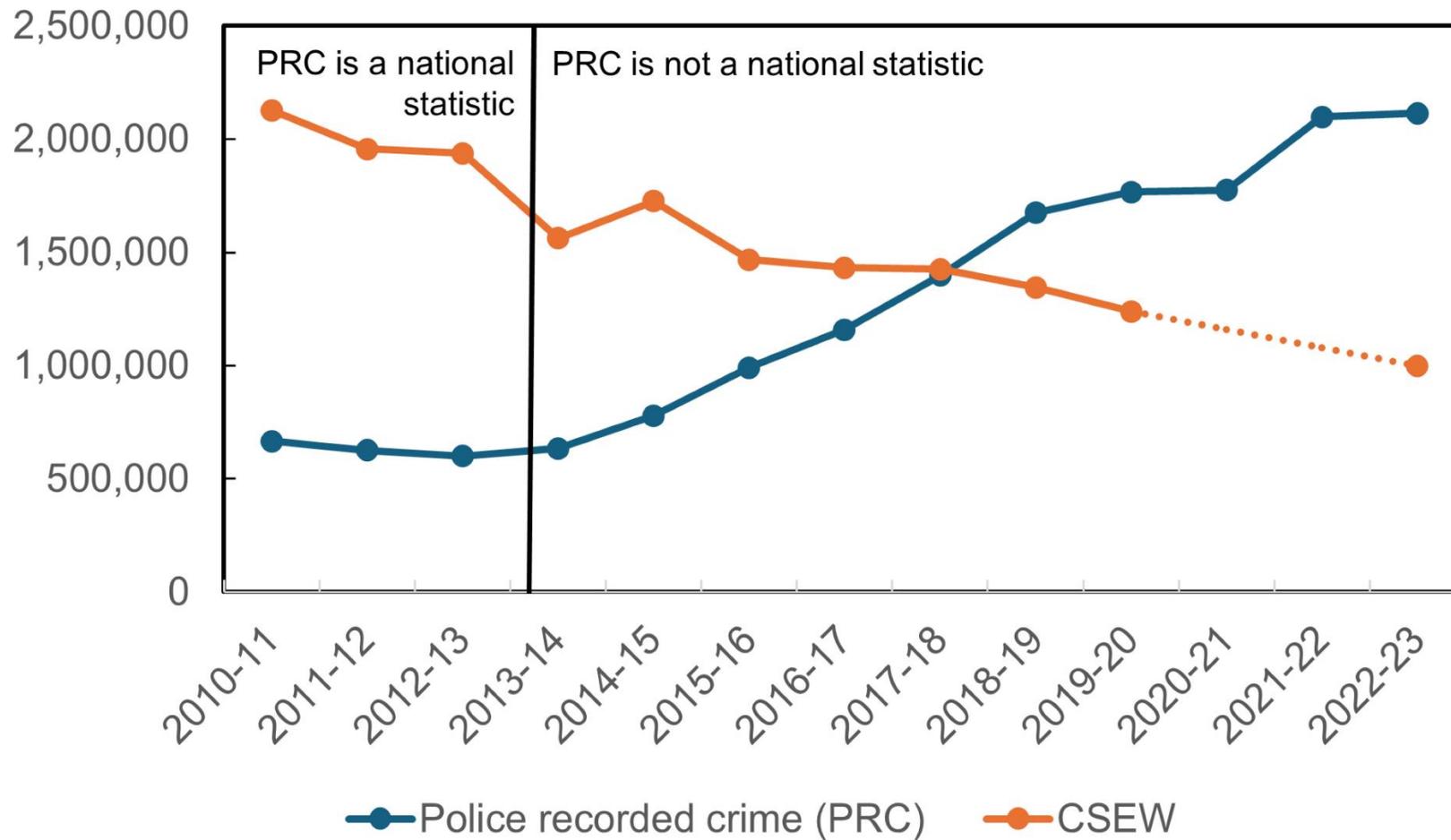
The CSEW also lost its quality designation in 2022 for a period of time amid concern for its **low response rates**. This has now been restored.

What are the trends in violent crime in PRC and CSEW, and the volume estimates since 2010?

As police data only includes crimes reported to the police, we might expect the PRC numbers to be smaller than the CSEW.

Raw trends and volume estimates

PRC and CSEW **raw** violent crimes in England and Wales, by financial year.



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Fig. 2. .

Data from ONS(2023a).

Commentary

- Before 2017/18, the number of PRC violent crimes is lower than the CSEW estimates.
- The trend lines **cross in 2017/18** when the amount of violent crime is found to be the same in both data sources.
- Police incidents continue to increase, whereas the CSEW estimates decline.
- In 2022/23, there are 2,113,383 PRC violent crimes, which is **over twice as many** as the estimated 998,038 violent crimes in the CSEW.

HOWEVER.....This graph is misleading in two ways.

- a) The definition of police violence is wider than that used in the Crime Survey.
- b) The PRC data includes only those crimes brought to the attention of the police, whereas the CSEW estimates makes no such restriction.

We therefore **align** the two data series by restricting PRC data to those crimes estimated in the CSEW, and **also adjust** to account for reporting differences.

Aligning the two series

The CSEW focuses on estimating **assaults**, whereas PRC data includes a wide variety of other forms of violence, such as homicide, kidnap, harassment, stalking and coercive control. We therefore restrict the PRC crimes to those measured in the CSEW. The PRC offences used are:

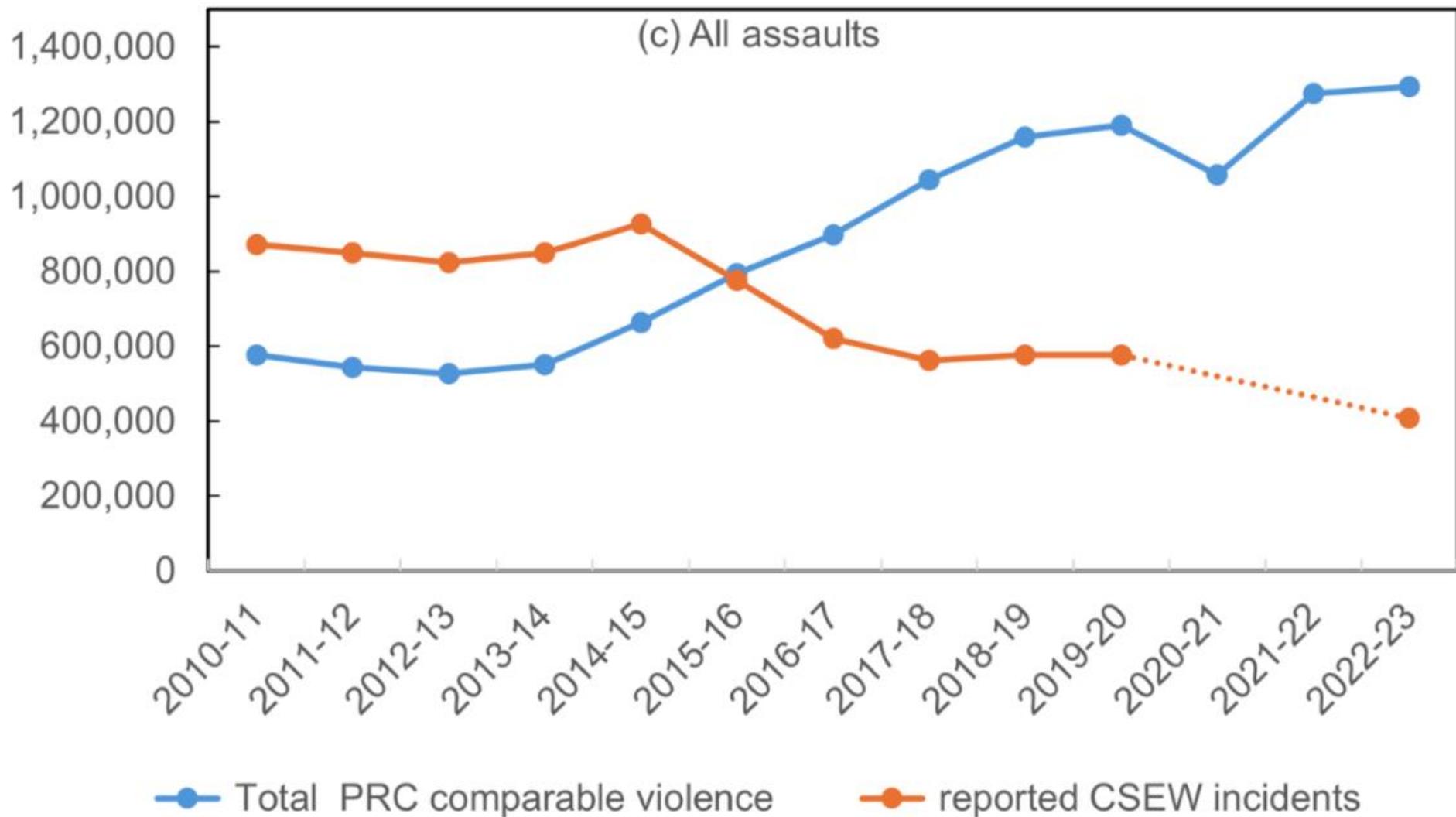
Violence severity	CSEW offence and CSEW code	Aligned Police recorded Crime offence and Home Office code
Assault with injury	Serious wounding (11) Serious wounding with sexual motive (31) Other wounding (12) Other wounding with sexual motive (32)	<ul style="list-style-type: none"> • Assault with intent to cause serious harm (5D) • Assault with injury (from 2012/13 on) (8N) • Racially or religiously aggravated assault with injury (8P) • Assault with injury on a constable (introduced in 2015/16) (8S) • Assault with injury on an emergency worker (other than a constable) (from April 2020) (8T) • Wounding (5A) • Actual bodily harm [ABH] (8G) • Racially or religiously aggravated ABH or other injury (8J)
Assault without injury	Common assault (13) Attempted assault (19)	<ul style="list-style-type: none"> • Assault without injury on a constable (104) • Assault without injury (105A) • Racially or religiously aggravated assault without injury (105B)

Crimes brought to the attention to the police

The CSEW asks respondents whether the violence was known to the police, and the ONS publishes data on this using the survey question COPSKNOW “Did the police come to know about the matter?”

We therefore restrict the CSEW violence estimates to those incidents brought to the attention of the police. Table D10 of ONS(2023b) provides these estimated proportions. There is little change over time. We have used a figure of 40.9%. over all forms of assault.

Aligned trends and volume estimates for all assaults.



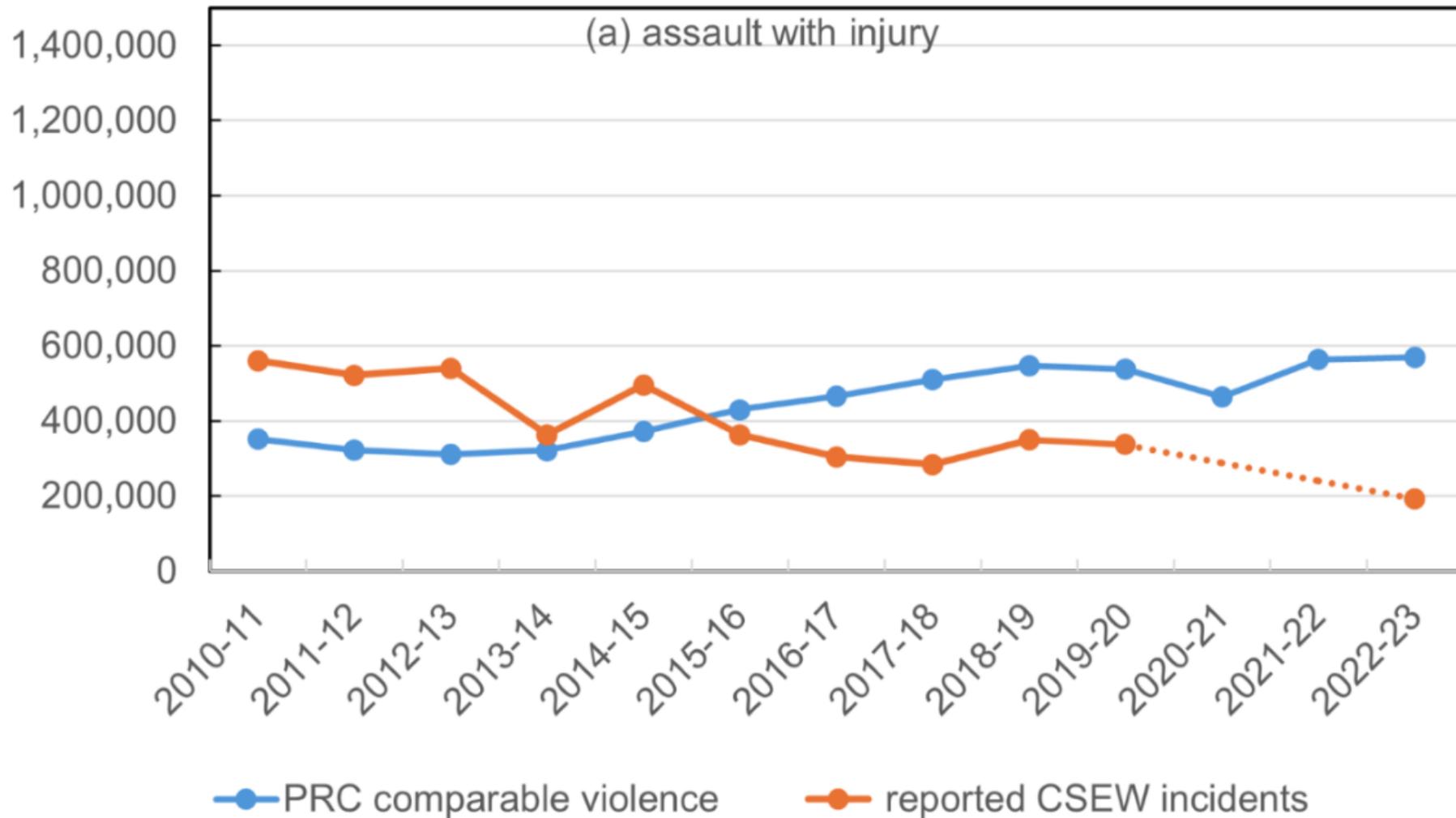
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Commentary for overall assaults reported to the police.

- For overall assault, PRC shows an *increase* of 134% over the period of 2010/11 to 2022/23, from 550,850 to 1,293,492, and CSEW a *decrease* of just over half from 848,467 to 407,806.
- PRC is lower than CSEW estimates up to 2015/16. Thereafter, PRC records more crime than the CSEW. In 2022/23, PRC records **more than three times** more crime than the CSEW.

Is this true for subcategories of assaults? We now restrict analysis to assaults with injury.

Aligned trends and volume estimates for assaults with injury.



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Commentary – assaults with injury

- For assaults with injury, there is a 77% increase in PRC from 2013/14, from 321,034 to 569,719 in 2022/23, with a small pandemic dip in 2020/21.
- In contrast, the estimated CSEW reported crime data shows a decline over the same period of 53%, from around 363,000 to 192,000.

PRC records 2.96 times as many assaults with injury in 2022/23 as the CSEW.

These are similar results to “all assaults”.

Is CSEW really the gold standard for violence trends and for volume estimates?

Discussion -quality of PRC data

We focus on assaults.

Are assaults really declining when PRC figures are increasing?

PRC is not recognised as a “national statistic”, and ONS is dismissive of PRC data, saying that it is subject to variations between police forces and therefore not useful for trends.

The Office for Statistics Regulation (OSR,2024) reported on the quality of PRC data. They said:
*ONS has considered several possible reasons for the divergence, such as the impact of **third-party reporting of crimes to the police**, introduced in 2015, which may not be covered by the CSEW.*

*It concluded that the **increased focus on improving crime recording by police forces is likely to have had an effect**, but that it is unlikely to fully explain the divergence. ONS is currently carrying out further work on the divergence, which is looking at other factors, such as the potential impact of **lower response rates** in the CSEW since the return to face-to-face interviewing after the Covid-19 pandemic. Another possible factor is **over-recording of crime by police forces**.*

Discussion -quality of PRC data (2)

- The quality of PRC data has improved dramatically. In 2014, only 67% of reported violent crime incidents were recorded by the police, whereas 92.4% of crimes in 2023 are now accurately recorded. This would produce a 37% increase in PRC crimes -the observed increase is much larger.
- **Third party reporting** of crimes. This affects vulnerable victims unable to report But, this change was introduced in 2015. Is this effect still causing year on year increases in PRC violence?
- **Overreporting of crimes.** OSR (2024) state that
that the pressure to secure a positive outcome in inspections has led some police forces to adopt an approach of ‘better record a crime in case HMICFRS fails us’. This risk-averse behaviour can lead to over-recording of crime..... It is difficult to quantify the scale of over-recording.

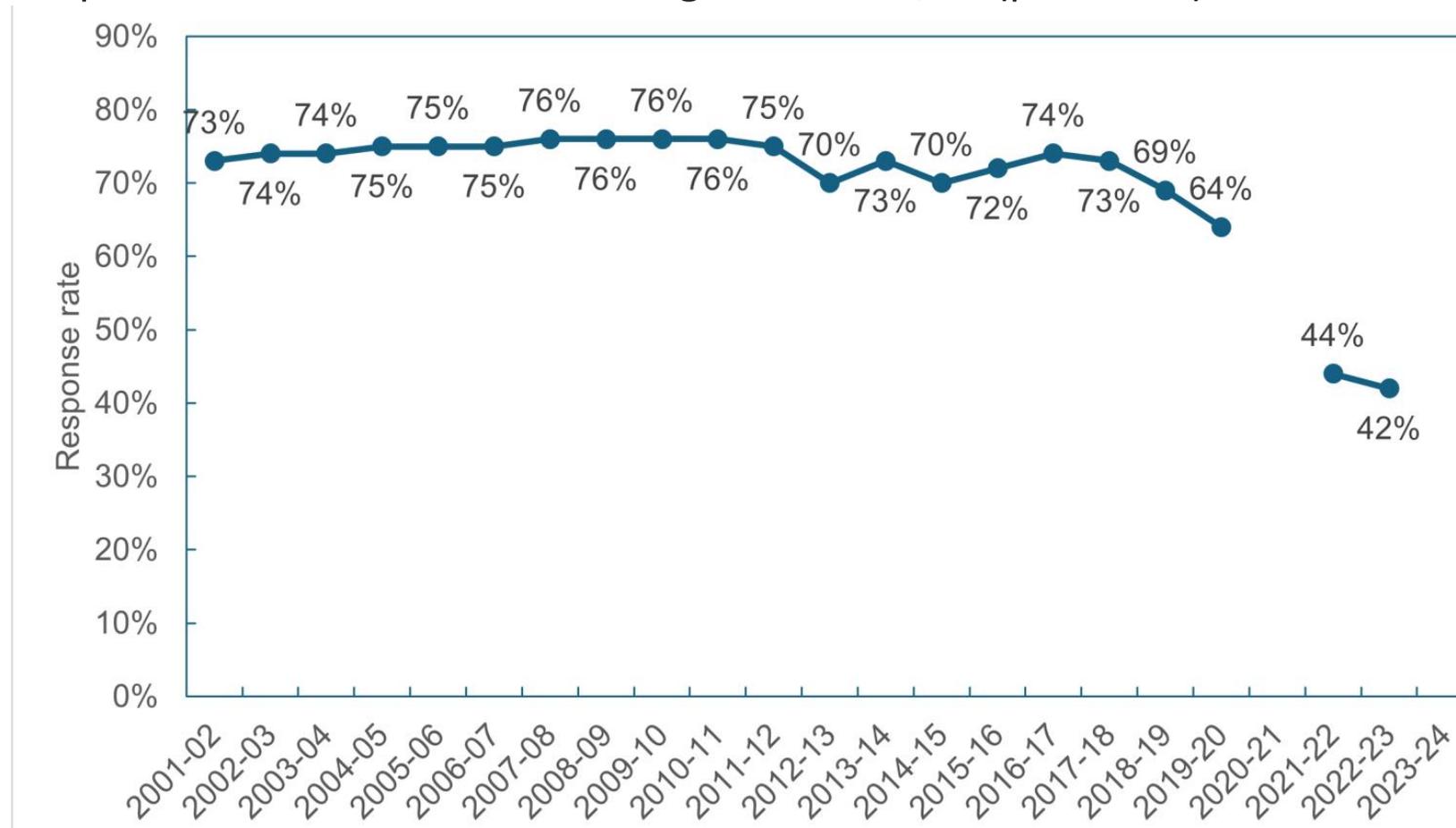
In our view this is unlikely to lead to such large differences. ONS(2025) state

“that overreporting is likely to be at a small scale and have had a minimal impact on the ratio disparity” (i.e. between PRC and CSEW).

Discussion -quality of CSEW data (1)

There are three main aspects of CSEW data that may be responsible for the decline in violent crime estimates. (There are more in the paper)

a) Response rates have been declining since 2018/19 (pre-covid).



. This is an open access figure first published by the Crime Survey User Conference 2024. Grant(2024).

Response rates

ONS (2024) stated that the quality of the CSEW data for 2022–23 was broadly similar to CSEW data for 2019–20, when they were accredited official statistics, and was not substantially affected by the lower response rate. They base this assessment on work by Sturgis et al. (2016) who investigated the relationship between non-response rates and non-response bias.

However, the Sturgis et al. analysis compared those answering the survey at the first door-knock to those who answered eventually at later contacts, treating the latter group as non-responders. But there are actually three groups:

First knock responders	Later knock responders	never responders.
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Sturgis et al compared the first two groups ignoring the third group; we are concerned with comparing the third group to groups 1 and 2.

However, there is evidence to suggest that *unmeasured* variables such as health and language issues are factors discouraging residents from answering the door, especially in high crime areas (e.g.Pashea and Kochel, 2016)

We suggest that other unmeasured variables such as previous negative experiences with officialdom, mistrust and involvement in low-level crime may also be factors in refusal to respond. Thus, crime rates are lowered as response rates decline and trends are distorted.

Capping

The CSEW treats high frequency violent victims (those who report high volumes of violent crime in a year) by capping (or one-sided winsorisation). This is known to introduce bias. The number of crimes in a year is capped at the 98th percentile of victim incident counts (in 2019/20 this was 10 crimes, but it varies from year to year.).

What effect does capping have on crime counts?

Walby, Francis and Phoenix (2026), using 19 years of CSEW data, showed that capping reduces estimated violence against women by 39% and violence against men by 26%. It also affects acquaintance violent crime as well as domestic violent crime.

Capping also distorts trends, but the downward trend in CSEW violence is still present when capping is removed.

So, capping certainly affects the estimated volume of crime, but does not fully explain the different trends (PRC vs CSEW).

Survey questions and mode of data collection in the CSEW

The self-complete part of the Crime Survey measures domestic abuse using a different series of questions than the face-to-face survey used in the main survey.

For example, ONS(2024) reports “that in 2023, estimates from the self-completion module showed that there were approximately 491,000 victims of domestic abuse where force was used. This was more than **six times higher** than the number of victims of domestic violence estimated using data from the face-to-face part of the CSEW (72,000 victims)”.

There is no reason why the same methodology can not be used for other forms of assault (acquaintance, stranger).

One problem is that the self-complete only measures 12-month **prevalence**. ONS (2024) states that the self-complete methodology is unable to estimate incidence. We find that a puzzling statement. There is a question in the new version of the domestic abuse questionnaire which measures lifetime incidence of domestic abuse with force but not 12-month incidence of domestic force. This needs correcting.

Conclusions

- Volume measures of violent crime are substantially underestimated by the Crime Survey. This is caused by poor response rates, underestimation caused by capping, and the use of face-to-face interview methodology.
- The CSEW focus on assault is strange, given that other offences such as harassment are included in the CSEW but not reported as part of violence. PRC data includes harassment as part of violence against the person. However, the definition of harassment used in the CSEW survey is not the legal definition.
- While police data has substantially improved over the years, it is unlikely to explain the large increase in police recorded crime observed in violence.
- The ONS should consider reporting both PRC data and CSEW side by side in future reports and admit that CSEW violence is underestimated.

RESEARCH ARTICLE

Conflicting trends in violent crime measured by police recorded crime and the crime survey in England and Wales since 2010

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Abstract

Police recorded violent crime (PRC) and the Crime Survey of England and Wales (CSEW) show substantially different trends in the rates of violent crime according to the Office of National Statistics (ONS), with rates rising in police data and falling in survey data. Both the PRC and CSEW have suffered periods in which the UK Statistics Authority has withdrawn their quality approval as 'national statistics'. This paper investigates a possible seven reasons for the disparity in the trend and volume of violent crime between the PRC and CSEW, with a focus on the processes of measurement deployed. The paper offers a new way to compare the methods and outcomes of the two data sources, by developing an 'aligned' data set to support comparison of trends in the PRC CSEW data since 2010. It analyses data from the PRC and from different sections of the CSEW, the main face-to-face module, the self-completion module on domestic abuse, and the children's module asked of those

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Citation: Francis BJ, Walby S (2025) Conflicting trends in violent crime measured by police recorded crime and the crime survey in England and Wales since 2010. PLoS One 20(6): e0324272. <https://doi.org/10.1371/journal.pone.0324272>

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