Improving Public Understanding of Economic Statistics: Media Reporting of Labour Market Statistics

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DISCUSSION PAPER

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Abstract

This study explores the role of the media as an intermediary for the communication of economic statistics to the UK public. To do so, we used the monthly labour market release, published by the Office for National Statistics (ONS), as a case study. We interviewed eight journalists and conducted a content analysis of 458 news stories that covered ONS labour market statistics, to examine how the labour market release is used by journalists and how the information affects the subsequent media coverage. We also ran a small-sample online experiment with journalists and journalism students to investigate how changes to the presentation of labour market statistics may affect media coverage.

We find that the ONS labour market release drives media reporting. The information in the monthly releases and the main quote from the ONS are central to the way the media report the labour market statistics, both in terms of the focus of reporting, and what numbers are used. This means that the ONS, through their releases, has an important role in shaping and improving communication to the public, even if their releases are not necessarily consumed directly by the public.

It is therefore important for the ONS, and similar organisations, to monitor the impact on media reporting when fundamental changes are made to key economic statistics releases, and to consider how changes to existing releases or the introduction of additional outputs could potentially help improve media reporting. In particular, it would be useful to explore ways to provide more context to figures or make it easier for journalists to identify other contexts themselves; continue to develop and improve administrative data sources that are sometimes easier to convey to the public compared to data based on surveys; and focus on explaining statistics that are important, but are seen as hard to communicate by journalists, such as economic inactivity. More broadly, we propose that the wider economics community should consider their role as an intermediary more carefully, including how to establish stronger relationships and support journalists' reporting on economic statistics more effectively, and whether and how to communicate more directly with the wider public.

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Improving Public Understanding of Economic Statistics

Paper 2: Media reporting of labour market statistics

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Executive Summary

Research goals and methods

This study – carried out as part of the research programme of the Economic Statistics Centre of Excellence (ESCoE) and funded by the Office for National Statistics (ONS) – explores the role of the media as an intermediary for the communication of economic statistics to the general public. We focus on understanding in more depth how journalists use ONS materials; how the materials can be improved; how economists and statisticians can support journalists to make better use of their materials; and how ONS' information ultimately affects the subsequent media coverage, in terms of what is reported, the depth of the coverage, and the type of coverage.

To do so, we used the ONS labour market release as a case study. We interviewed eight journalists to examine the "life journey" of the labour market release and how the information ends up in the news. We also conducted a content analysis of 458 news stories that covered ONS labour market statistics. Finally, we ran a small-sample online experiment with journalists and journalism students, to investigate how changes to the presentation of labour market statistics may affect their comprehension of the material, intentions to report, and sentiment.

This complements our accompanying report *Presenting labour market statistics to the public* which sets out findings from our research on designing and testing different ways for the ONS to communicate their labour market statistics directly to the UK public, through an alternative summary aimed specifically at a non-technical audience by using simple and relatable language (Cathro et al., 2022). Given that much of the public hears about labour market statistics through the media rather than from the ONS directly, the perspectives of journalists are key to learning about how to improve public comprehension of economics and economic statistics.

Findings

In our interviews with journalists, we find that ONS labour market figures are used extensively in producing news stories about labour market issues. Journalists who reported the breaking news story on the morning of the ONS labour market release typically produced the first draft at speed, using the ONS release and morning email, alongside quotes from the Treasury and opposition. It was not until later in the day that reporters potentially dived deeper into the data and incorporated comments from experts. Reporters said they mostly let the ONS data and release guide them to the headline story. Sometimes it was difficult to pick the focus at speed, but at other times the top lines were obvious, especially during the pandemic where there had been dramatic changes and record-breaking numbers. The pandemic had, however, also brought additional challenges in communicating figures, for instance in communicating the shift from self-employment to employment, and the caveats around the HMRC PAYE figures. Most journalists covered unemployment as one of the key indicators, though there was recognition that the concept wasn't always understood, and there was not as much coverage as there "should be" about economic inactivity alongside this. The journalists that we interviewed generally thought the existing ONS release was comprehensive and useful in setting out a general picture of the UK labour market, and

recognised it was their job to translate this to the general public, by using an accessible language, only using numbers sparingly, and by finding ways of contextualising the information, and relating the figures to broader debate. However, some journalists said the ONS could provide more context for numbers in their release, and interrogate the figures more proactively to help interpretation, and to correct misuse of the figures in the media.

Our content analysis of media reporting confirm the view of journalists that we interviewed that the ONS release drives media reporting. We find many examples that the existing ONS release, including the *Labour Market Overview* and the main quote from the ONS, are central to the way the media report the labour market figures, both in terms of the focus of reporting, and what numbers are used. We also find many examples of journalists using ways to contextualise figures, especially by noting the significance of the figures in a historical perspective, for instance that figures are record high. We find that media reporting about labour market statistics in August, September, October, and December 2021 were focused on job vacancies, unemployment, and payrolled employee figures. Other key statistics including the employment rate, the economic inactivity rate, redundancy rate, and hours worked are covered far less frequently and with less detail. Only around half mention the ONS directly as a source of the statistics.

Finally, our small-sample online experiment provides some suggestive evidence that providing alternative releases that use simpler language, different structures that cover wider context on the labour market (for example inactivity rates alongside core unemployment statistics) and includes additional methodological information could benefit journalists, as well as the general public. Journalists said they were more likely to report on the labour market after viewing our alternative release. This same release also improved comprehension among the general public (Cathro et al., 2022)

Recommendations

Based on the findings of this research, we make several recommendations for how to improve labour market communications to the wider public through media reporting. The recommendations are aimed at ONS and other statistics institutes, as well as intermediaries of communication to the public, such as academics, think tanks and the media.

Recommendations for ONS and other statistical institutes

The research has suggested several ways that the ONS, and other statistical institutes, could better support journalists to improve their reporting to the public.

Box 1: Recommendations for ONS and other statistics institutes to support journalists to improve their reporting of labour market statistics
Our report shows that the existing ONS release drives and shapes media reporting in terms of focus and the use of figures. It is therefore important to:

- Explore the impact on subsequent media reporting when fundamental changes are made to the *ONS Labour Market Overview*. How do changes to ONS outputs, or the introduction of additional outputs, shape and potentially improve the subsequent media reporting? In our parallel report, we propose that the ONS introduces an alternative, complementary summary of the ONS labour market release, aimed at the general public. If this was implemented, it may also be used by other less technical audiences, such as journalists. It would therefore be important to take advantage of this natural experiment, by exploring any changes to uptake, frequency, focus and quality of

reporting. It would also be important to explore potential negative impacts of an additional publication. For instance, having several and slightly different publications could potentially water down clear communication and confuse messaging.

- Explore ways to support journalists to improve their communication of those labour market statistics that are important, but seen as hard to communicate to the general public. The main example is economic inactivity, for instance by focusing more on the reasons for inactivity, such as illness, caring and early retirement, rather than the aggregated measure.

Our study shows that journalists focus on providing context and narrative to economic figures, to make it more accessible to the general public. It is therefore important to:

- Consider ways for the ONS to provide even more context to figures, and make it even easier for journalists to identify other contexts themselves, for instance through interactive time series data.
- Consider mechanisms to more proactively interrogate the figures from a data perspective, or support interpretation of the figures in the public debate, for instance by correcting misuse of economic statistics.

Our report also shows that journalists value new, timely and administrative sources on the labour market. Therefore, the ONS should:

- Continue to develop and improve administrative data sources on the labour market and other economic statistics. These are powerful tools in communicating the UK economic performance to the public, due to its timeliness and granularity, and because they are sometimes easier to convey than data based on surveys, especially in terms of simplicity and trustworthiness.

Recommendations for other producers of economic statistics

Many of the recommendations above can be generalised for other organisations and researchers who produce publications or communications about economic statistics. The below recommendations outline some additional ways that the wider economics community, including economic organisations, such as think tanks and academics, could support the communication of labour market statistics.

Box 2: Recommendations for the wider economics community to improve the communication of labour market statistics

- Prioritise referencing the ONS as the source of the figures, and consider how best to present the ONS as the source of economic figures and explain who they are, in a way that builds trust and maintains engagement in the economic statistics.
- Consider how to provide better and earlier opportunities for independent labour market experts to inform the media coverage on the breaking news story. This would, for instance, enable these experts to identify contexts and narratives around the figures, including political ones, at an early point, which would make the subsequent media reporting more accessible, relevant and engaging for the public.
- Explore potential mechanisms to establish stronger relationships between journalists and economists / statisticians, to support journalists' reporting on labour market and other economic statistics. An example from science is the Science Media Centre, which connects scientists and journalists through the organisation of interviews and briefings. This may also involve exploring how to engage more economists in the debate about labour market statistics.
- Overall, the wider economics community should consider the balance between their role as intermediaries to support media reporting, with their potential role to communicate more directly with the general public. As a messenger, the ONS is a

trusted source, but due to their independence and impartiality they are restricted in some of the things they can say, which may sometimes inhibit their ability to communicate effectively. On the other hand, the media do not have such restrictions and are mostly skilled in translating complex material into accessible and engaging content; however they are widely distrusted by the public. There may be an important space for other economic organisations to become trusted and effective communicators to the public, including by communicating economic statistics releases in engaging and accessible ways.

Areas for future research

We additionally believe that this research has uncovered a few areas for future research, which could further shed light on how media reporting of these statistics to the general public could be improved, and how journalists could be better supported by economists and statisticians. These highlight the importance of iterating and testing different ways of communicating to journalists and supporting their reporting, to understand and implement those that work best.

Box 3: Future research could explore:
- Explore whether and how potential changes to ONS outputs, or the introduction of additional outputs, shape the subsequent media reporting in the real world; this could be done via a natural experiment in the event of an introduction of a parallel release on the ONS website. Potential impacts to be explored include uptake, frequency, focus and quality of reporting.

- Explore the accessibility of media articles to the general population. How easy is it to understand news articles written on labour market statistics compared to other news? This could provide another data point on whether more needs to be done to support the general public to understand key economic data, and how. This exercise should be completed pre- and post-changes in ONS outputs to assess the potential impact on media reporting.

- Explore how best to present the ONS as the source of economic figures and explain who they are, in a way that builds trust and maintains engagement.

- Explore how the media conveys economic uncertainty, including for labour market statistics, and how this is understood by the public.

Contents

Introduction

Background and aims

In our accompanying report, we design and test different ways for the Office for National Statistics (ONS) to communicate their labour market statistics directly to the UK public, through an alternative summary aimed specifically at a non-technical audience by using simple and relatable language (Cathro et al., 2022). The project was inspired by similar work by the Bank of England who now publishes a more accessible version of their Monetary Policy Report when they announce interest rate decisions (Bholat et al., 2019). Similarly, the alternative summary in our study were shown to improve comprehension, engagement, and trust in ONS labour market statistics (Cathro et al., 2022), suggesting that the wider public could benefit from being able to access an alternative, less technical summary on the ONS website.

However, even if the UK public can access and read accessible and engaging statistical bulletins or monetary policy reports directly on the websites of the Office for National Statistics (ONS) and the Bank of England, respectively, it is more likely they will hear about these indirectly through other sources, such as TV, radio, newspapers, online news sites, and social media. Therefore, this report will focus specifically on the media as an intermediary in conveying economic statistics to the wider public. Similar to the accompanying report, we will focus on ONS labour market statistics, and specifically focus on how the UK media currently report labour market statistics to the public.

Our previous research on public understanding of economics and economic statistics showed that economists and statisticians sometimes struggled with how to convey economic information through the media, and they often saw it as a key barrier to successful economic communication (Runge & Killick, 2021). Some argued that a better understanding and relationship between journalists and economists would be essential to improve public communication and understanding (ibid).

Therefore, this study – carried out as part of the research programme of the Economic Statistics Centre of Excellence (ESCoE) and funded by the ONS – explores this relationship, focusing on understanding in more depth how journalists use existing ONS releases; how the releases can be improved or complemented; how economists and statisticians can support journalists to make better use of their releases; and how ONS' information ultimately affects the subsequent media coverage, in terms of what is reported, the depth of the coverage, and the type of coverage.

We want this report to lay the foundation for upcoming studies to explore whether better communication to journalists through the ONS or through other economic organisations, or stronger relationships between economists and journalists, may result in better media reporting and subsequently improve public understanding: for instance, if the ONS starts publishing an alternative release aimed at a non-technical audience, or if other support mechanisms are created to build closer connections between labour market economists and journalists.

Finally, it is important to highlight that this study does not set out to assess the quality of media reporting, or to criticise the coverage. This report is intended to provide a detailed account of how ONS releases are translated into media reporting, especially for the benefit of economists and statisticians, so they can consider these issues in depth, and reflect on how to support and foster a strong relationship with the media, ultimately to improve public understanding.

Methodology

The report is divided into three parts, based on three different methodologies. In **Chapter 1**, we interviewed eight journalists to examine the "life journey" of a statistical release. We explored the process, from when a journalist picks up the monthly ONS labour market release, to how they subsequently communicate it to the wider public through a news story. We were interested in how they approach the story, what considerations they have, what challenges they face, and what sources they use, especially their use of ONS releases, including how useful they are and how they can be improved to support their reporting. The chapter is based on the views and experiences of relatively experienced economic journalists, which means it may not necessarily be generilasable to the wider population of journalists.

In **Chapter 2**, we explored the outputs of that process, that is how the media reports the ONS labour market release. Using the LexisNexis database, we downloaded a sample of 458 news stories that covered ONS labour market statistics. These included stories from a range of national UK news sources, including articles in newspapers and online news sites, as well as transcripts from national TV and radio. These were then analysed using a framework approach, identifying common themes and exploring the type of coverage of the different labour market indicators.

In **Chapter 3**, we did an exploratory small-sample experiment with 24 journalists, to explore how two different designs of the ONS labour market summary would influence journalists' understanding of labour market statistics, and whether a different presentation would make the release more useful to journalists.

Each of the chapters include a detailed description of the methodology and the findings.

In **Chapter 4**, we then summarise the findings of all the three strands of research, and we discuss the implications and way forward for future work in this area, including by providing recommendations.

Chapter 1: Interviews with journalists: the process of reporting labour market statistics

1.1. Methodology

As part of this study, we interviewed eight journalists to explore their views and experiences of reporting labour market statistics to the public. We examined their approach to reporting labour market data, how they used the ONS release and other sources, how they chose the focus of their pieces, and how they reported different labour market concepts.

Of the eight journalists we interviewed, six worked at national newspapers or broadcasters, one at a local newspaper, and one at an international news organisation covering the UK. They were all economic reporters. Most reported on ONS labour market statistics on the day of the release, some covered the figures through other pieces and more in-depth analyses, and some had weekly national newspaper columns. All journalists that we spoke to were relatively experienced economic reporters, often with many years of experience and with a fairly detailed understanding of the UK labour market and ONS data. As such, we are not necessarily capturing the broader experiences, especially those of less experienced economic reporters. The strength of this data is to provide a detailed account of the practices of reporting labour market data among experienced journalists.

We recruited for these interviews by emailing journalists who had recently reported on the UK labour market. Most of the reporters had produced stories that are analysed as part of our content analysis in Chapter 2. The interviews were informal and semi-structured, and the conversations were led by the experiences and views of the journalists, including the content of their recent pieces on the UK labour market. The interview transcripts were analysed using a framework approach, by identifying and coding different themes.

1.2. Results

The results of the journalist interviews are documented below. Key findings are summarised in Box 3.

> **Box 3: Findings at a glance**
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> - Journalists who reported the breaking news story on the morning of the ONS labour market release typically produced the first draft at speed, using the ONS release and morning email, alongside quotes from the Treasury and opposition. It was not until later in the day that reporters potentially dived deeper into the data and incorporated comments from experts.
>
> - Reporters said they mostly let the ONS data and release guide them to the headline story. Sometimes it was difficult to pick the focus at speed, especially if the release only included incremental changes. At other times, the top lines were obvious, especially during the pandemic where there had been more dramatic changes and record-breaking numbers.

- The pandemic had provided additional challenges in communicating the figures. For instance, journalists admitted that the media had not necessarily been successful in communicating the shift from self-employment to employment, and that it was challenging to explain the caveats around the HMRC PAYE figures.

- Some journalists considered unemployment figures as one of the main indicators of labour market performance, and almost always covered them. The reporters said they very rarely explained how the unemployment rate was defined and measured, though there was recognition among some that the figures were not always understood or trusted by the public.

- A number of journalists, however, emphasised that unemployment was not always the top line, and that they had increasingly moved away from reporting that as the key figure during the pandemic, especially using timely, administrative data, such as job vacancy and payroll employee figures.

- Some journalists said the media should have reported the rising economic inactivity more extensively during the pandemic. They gave two potential reasons why this had not been the case. First, the term was not currently well understood or part of the public vocabulary, though some counterargued that it should be easy to focus on the reasons of inactivity, such as illness, caring and early retirement. Second, some said the ONS could have done more to highlight this trend.

- Journalists said they reported figures and numbers, but only sparingly. It was important for them to look for ways to put the numbers into context for their readers. This could be by describing why the numbers mattered, whether it was a record figure, or by comparing them to the past or to other countries. Some said the ONS could provide more context for numbers in their release, though some recognised that those are often political in nature. Generally, journalists said the ONS *Labour Market Overview* was comprehensive and useful in setting out a general picture of the UK labour market, and they recognised that it was their job as journalists to identify how figures related to the broader public debate.

- Some journalists, however, said the ONS could do more to interrogate the figures more proactively from a data perspective, for instance by exploring to what extent the increase in vacancy numbers could be attributed to structure reasons such as changes to how vacancies are advertised online. Similarly, some also argued that the ONS could take a more proactive role in helping with interpretation of the figures post-release, including correcting misuse of the figures in the media.

1.2.1. Process of writing the piece

Those journalists who reported the breaking news story on the morning of the ONS labour market release all described a fairly similar process. They typically had the date of the ONS release in their diary and got up early to be ready for the 7am release. Most journalists did not comment further on this, though two reporters said the early hour made it "logistically difficult" and invited mistakes and bad reporting.

At 7am, the journalists then typically produced their breaking news story at speed. They usually produced and published the first draft within the first hour, and sometimes within the

first half an hour. This was usually a brief story incorporating an impactful headline, two or three toplines, as well as quotes from the ONS, Treasury and sometimes the opposition. Reporters said they would typically refine and expand the story throughout the day. This depended on that day's news agenda, including whether their editor wanted a longer version and whether the commentary throughout the day uncovered interesting issues in the data that deserved further reporting.

Some reporters would also go back to the labour market statistics in pieces during the following days and weeks, with more detailed and in-depth analyses of thematic issues. This included those reporters who had columns on the economy in national newspapers. As an example, one columnist who described labour market statistics as their home territory would spend days thinking about their column, but the actual writing process would only last for a few hours leading up to the deadline. Another columnist said they looked regularly at the labour market statistics, sometimes up to four times a month, and would often use them for columns on the broader economy.

1.2.2. Choosing the focus of the piece

Reporters said they mostly let the data and the ONS release guide them to the headline story, but they would also look at other factors such as the focus in the political domain and public debate at the time of the release. Journalists said the monthly labour market data included many more figures and concepts compared to most other ONS release. Mostly, this was valued as it allowed reporters to focus on what they thought was the most important story, but it was also sometimes described as a journalistic challenge to choose the focus and headline of a story, especially when it was done at speed. In particular, it could be challenging to pick out the top line when there were only incremental changes in the labour market numbers. At other times, the top lines were obvious. In some ways, the pandemic had made it easier to report on the labour market because the changes were more dramatic. The reporters gave many examples of this, for instance when data showed that real wages were falling, or when the ONS data for the first time revealed the impact of lockdowns and measures such as the furlough scheme on employment.

While the pandemic had often made it easier to choose the focus of the story, the last two years provided additional challenges in communicating some of the labour market figures appropriately. One example was the HMRC PAYE figures. Journalists agreed the introduction of this data had been immensely valuable and that it had been important to report them as they provided the most up-to-date figures on the labour market during the pandemic. However, some reporters admitted that the media had not necessarily communicated the changes in self-employment and employment well, and that it had been challenging to explain the caveats around the figures, especially in the context of the government quoting them in a misleading way. Reporters said it was even more difficult to explain the difference to the standard employment figures, based on the Labour Force Survey. They also said they rarely attempted to describe the methodology behind those. For instance, this reporter explained:

> *'Once you try to explain that it is based on a survey of 64,000 people or whatever it is now, it is the same response you get with opinion polls. People say, well they never talked to me, and how do they know. And you might try to explain it is a huge sample, and this is the way that sampling works. But it doesn't work. If you show too much of the ONS's workings, it actually diminishes confidence in the figures, among non-statistical, non-economic people.'*

Another similar example during the pandemic was the base and compositional effects affecting the earnings data. Reporters appreciated this was explained in depth by the ONS, but they said it was "very tricky" and "hard" to convey to the public.

Some journalists said they always covered the unemployment figures, as it was considered one of the main indicators of labour market performance. One example was:

> 'We also use the unemployment figure. That is the essential figure. I don't know why. Everybody else covers that… I think there is a consensus among journalists and labour market economists that the unemployment rate tells a lot about the state of the economy.'

The journalists said they would rarely explain the definition of the unemployment rate. However, there was recognition among some reporters that the unemployment figures were not necessary always understood by their audience, and that members of the public were often sceptical of the figures. Some appreciated that people did not think unemployment figures matched their lived experiences, and others mentioned that people would criticise the employment figures for including people who work very small number of hours. Another example was a journalist who recalled the changes in unemployment measurement decades ago, and said this still affected people's perceptions when he spoke to them on the street:

> 'People literally were talking about it in the pub. People still ask about it on the street to this day. 'Oh, do you remember, they changed the way unemployment was measured 24 times?''

Some of the reporters, however, emphasised that unemployment was not always their top line. Some said they had increasingly moved away from reporting unemployment as the key figure during the pandemic. Recently, they had often reported other figures as the main story, especially the job vacancy and the payrolled employee figures, and earlier in the pandemic the furlough data.

A number of journalists discussed that the economic inactivity figures also could, and maybe should, have been one of those main stories during the pandemic. There was agreement among many of the experienced journalists that we spoke to that rising economic inactivity, including among younger and older people, was an important trend in the current UK labour market. However, some argued that the media, including themselves, had not sufficiently reported it, and accepted that the profession as a whole had not managed to convey the important story of rising inactivity. As an example, one reporter said they were far from sure that they had managed to *"get the inactivity story in the public domain"*.

Many of the reporters we spoke to said the inactivity rate was not usually a focus of their reporting, but in recent months they had started to mention it occasionally. For instance, one explained they had reported that the unemployment figures looked better than they in reality were due to the rise in economic inactivity. Another journalist had focused on the recovery in the demand for labour, reflected in the high level of vacancies that would normally draw people back into the labour market, but then focused on the rising economic inactivity figures that explained the lack of rise in employment.

The reporters gave two broad reasons why the reporting of inactivity and labour market participation was difficult and had likely been insufficient. First, some said it was a difficult concept to report compared to other figures, as the words were not well understood. They

explained that they generally needed to cover the important points within the first few sentences or paragraphs, and an explanation of a concept was not their top priority and disturbed the flow of the story. On the other hand, some argued that there was really nothing complicated about economic inactivity, if you reported it as, for instance, *"more people being off due to long-term sickness"* or as *"people who can't work because of childcare or other characteristics"*. Second, some said the ONS had not highlighted the rise in economic inactivity clearly enough in their releases during the pandemic, and that this would help getting the story of economic inactivity into the public domain and the public narrative around the labour market. For instance, one reporter argued that if the ONS *"made more fuss about participation, then that would feed into the media."*

Finally, the journalist in our sample who reported for a local paper had used regional Claimant Count figures in his reporting. Our media content analysis in Chapter 2 does not include local media sources or Claimant Count figures, but it was clear in our research for this project that local papers use these extensively. The appeal for other local reporters is likely to be the same as for the journalist that we spoke to; the administrative data allows them to report figures at local levels that are relevant and interesting to their readers. In addition, the local journalist said it had been beneficial during the pandemic, though the lack of historical timeseries made it harder to explain the figures properly to readers, for instance by providing context to past levels in their local area.

1.2.3. Reporting figures and numbers

Journalists often said they could only report a certain number of figures and numbers in a piece without losing their reader. As an example, a reporter explained that there was *an "unspoken threshold about the number of millions or the number of percentages"* that they could include in a piece. Another explained:

> *'If unemployment is not the main feature, just say it fell. Don't make a big deal out of it. The reader is only going to retain a certain amount of information. So you should only use figures for the main thrust of the article, the others are peripheral.'*

We also heard that journalists look for ways to put numbers into context for the reader. This was also reflected in the content analysis in Chapter 2. This could be by describing the significance of the figures or *"why they matter"*, by comparing them to the last time they were at that level, or the last time they had risen or fallen by a comparable amount. It could also be that the figure had reached an *"important numerical threshold"*, though this could sometimes be arbitrary, such as when the number of job vacancies reached one million or the number of hours worked reached one billion per week. A couple of journalists in our sample said it would be helpful to get more guidance about comparisons to previous levels and changes, as they would often have to search in the data tables themselves to find those benchmarks, and it was difficult to do this at speed:

> *'Most economic figures are meaningless to most people, unless you can compare them… We need more comparisons because otherwise people just don't know what to make of the figures.'*

One journalist said they understood why that could sometimes be difficult for the ONS to do, as inevitably those comparisons could be political in nature. They said it was fairly uncontroversial during the pandemic to provide those benchmarks, but during more normal

times the comparisons would often be longer-term and associated with political events such as Brexit or the financial crisis, or a particular Conservative or Labour government. However, they still wanted the ONS to make it easier for journalists to find the comparisons, for instance through providing more easily and quickly accessible historical time series data that went as far back in time as possible. Some also mentioned that this was the main weakness with some of the new real-time indicators. Those indicators were described as great and immensely valuable, but sometimes they were hard to report on and put into context for readers, without longer-term time series.

1.2.4. Reporting the source of the figures

The journalists were asked how they presented the ONS as the source of the data, and what considerations they had. As the content analysis in Chapter 2 shows, the ONS is usually mentioned either directly or indirectly in pieces covering the labour market data. Some journalists explained that they would usually only refer indirectly to the source of the data in the first few paragraphs, before then mentioning the full name of the ONS:

> *'I wouldn't put the Office for National Statistics in the first sentence, or even the third paragraph, because it slows down the rhythm… With the best will in the world, "according to the Office for National Statistics" is not the snappiest phrase in the English language.'*

Many said they would very rarely explain who the Office for National Statistics are. Some said they assumed many readers would know it was an official body, and in any case, they relied on their readers to trust them as reporters when they quoted the figures:

> *'They are reading my column. They trust me. If I'm quoting a number, saying it's the Office for National Statistics, I don't need to say "the official data-gathering body, as mandated by the British government"'.*

> *'To some extent it relies on trust, you expect your reader to trust you. Our newspaper has a very high level of trust.'*

1.2.5. Using ONS materials

All the journalists that we interviewed used the main materials provided by the ONS. This included the *Labour Market Overview* on the ONS website and the morning email that were both received at 7am in the morning of the release. Only one of the reporters we spoke to occasionally joined the ONS briefing call for journalists, which since the pandemic has been hosted online rather than in-person. Those who did not attend said this was simply because the existing written materials were comprehensive and methodically put together, so they did not feel they needed to attend. The reporter who sometimes attended described the briefing as a chance to ask *"more techie questions"*; however, they said it rarely added much to what they got from the release itself. Many of the journalists that we spoke to, however, said that they feared that many, less experienced, economic reporters did not use the ONS materials directly, but instead would use and copy the press wire services, such as Reuters and Press Associations, or the reporting of reputable papers such as the FT.

Among many of the experienced journalists, there was a general feeling that the mainstream media, or *"most of the serious papers"*, covered the labour market data fairly extensively and generally communicated the most important points of each monthly release. However, there was a concern that this was not always the case for less experienced journalists across a

wider variety of media organisations, and some expressed a general concern that there were *"far too few people with proper economics training making it into journalists"*.

The journalists were also asked if they thought the ONS release, and other materials, supported them sufficiently in reporting the labour market statistics. The answers were mixed, but broadly positive. Most said the *Labour Market Overview* on the ONS website was comprehensive and accessible, and it met their needs. Some also highlighted that they had good contacts with the statisticians and the press office which was described as helpful.

Some people, however, said there were too many different sources of information. They said they would typically have many tabs open, including the *Labour Market Overview* on the website, some of the subpages on the ONS website, and the morning email that was very similar to the *Labour Market Overview* but also included some different information, in particular the quote from the ONS. Later in the day, there would also be different information on the ONS Twitter page, which summarised the data in a slightly different way than the website but was not included in the early outputs. Some journalists said the many sources, with slightly different information, could lead to mistakes when the data was reported at speed, and some said it would be preferrable to have all the main information in one place, for instance in the email, including the *Labour Market Overview*, the ONS quote and the pre-prepared Twitter posts. They explained:

> *'It generally makes it fiddly that there is different information in different places… It's an opportunity to make mistakes. You should think of reporters as children who are also hungover. It's not that I am dumb, but I would benefit from being considered dumb.'*

> *'Your brain has too many tabs open. Should I be looking at this page or this page?... When you are trying to do it at those silly, silly news speeds, then it becomes tricky to find your way around.'*

Some journalists noted the *Labour Market Overview* on the website had improved in recent years, especially at setting out a general picture of the UK labour market. However, many recognised that the ONS had to be cautious and that their *"hands were tied"*. They recognised that it was not the ONS' job to identify how figures fit the political narrative, and it was in fact their job as journalists to identify the key numbers and tell the story in a way that related it to the broader public debate. In this way, it was argued, and recognised, that the role of the ONS should be as a "data agency" rather than a "news agency". This meant, from a news point of view, that the ONS summary did not always pinpoint the most striking or newsworthy developments over the last month. The journalists accepted and understood that they sometimes had to search for those key numbers themselves, though others noted that the ONS still provided the clues in the release so that a "smarter and motivated reader" could easily identify the most interesting figures. Some also referred to this as the "narrative" in the release, and they generally argued that this information was useful for journalists, for instance:

> *'I would like them to go as far as they can and be engaging in questions that people want answered, but I can see the sensitivities.'*

As a data agency, some journalists said the ONS could sometimes do more, for instance by exploring and interrogating the data and methodological issues more proactively rather than defensively. As an example, a reporter highlighted previous ONS work to explore the prevalence of zero hours contracts, which had provided a lot of materials for them in their

reporting. Similarly, this reporter argued the ONS should explore the increase in job vacancies from a data perspective, including to understand how much of the increase could be attributed to structural reasons such as changes to how vacancies are advertised online. Another reporter who made the same argument concluded:

> *'It is interesting to get the perspective of the statisticians. They're getting the data in, they will have a feel for it, and I don't think we get enough of that.'*

Similarly, some argued that it would be useful for them if the ONS were more proactive in helping with interpretation of figures after the publication of the release. In particular, some reporters argued that it would improve media reporting if the ONS took a more active part on the debate around the figures, including *"berating those newspapers and media outlets that are misinterpreting their figures"*.

1.2.6. Using other sources

The reporters said they usually used other sources in their stories on the ONS labour market data. They said they would almost always use the quote from the Chancellor of the Exchequer, and usually the opposition, to get the political perspective. During the day of the release, they would also monitor the perspectives from labour market experts, including from research organisations such as the Institute of Employment Studies, Resolution Foundation, and Learning and Work Institute. The reporters said staff at these organisations would be *"pouring over the data all day"* and sometimes would identify interesting themes in the data. Some reporters said they may call a couple of contacts at those organisations or check their Twitter posts, when they wrote up the longer version of the labour market story. A local journalist said they received many unsolicited emails on the day of the release analysing the data. Those would only be used if it was a trusted and well-known organisation, and if it passed the *"sniff test"*.

Chapter 2: Media content analysis: how the media report labour market statistics

2.1. Methodology

We used the database LexisNexis to download documents (written news articles and TV/radio transcripts) from the following media publications:

> Daily Mail
> Daily Mirror
> Telegraph
> The Express
> The Guardian
> The Independent
> Metro
> The Sun
> The Times and the Sunday Times
> Financial Times[1]
> ITV 1
> Channel 4
> BBC 1
> BBC Radio 4
> BBC online[2]

We used the following key search terms, aiming to capture all news stories covering the ONS labour market release:

> "unemployment" OR "unemployment rate" OR "inactive" OR "vacancies" OR "hours worked" OR "redundancy" OR "redundancies" OR "payroll" OR "payrolled" OR "employment rate" OR "employment" OR "economically inactive"

We downloaded all news stories published during the seven-day period following the publication of an ONS labour market release (August, September, October, December). We skipped the November release as we wanted the last analysis to cover the most recent release before the survey fieldwork. This means we collected sources published during the following four time periods:

> 17-23 August 2021
> 14-20 September 2021
> 12-18 October 2021
> 14-20 December 2021

We then sifted the news stories based on relevance to the ONS labour market statistics release. If the ONS labour market statistics were covered in any way in the news story, the document was included in our analysis. Everything else was excluded. This resulted in a total of 458 news stories covering ONS labour market statistics across a total of 28 days.

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[1] This source was not available through LexisNexis but downloaded directly through their website.
[2] Same as above.

Table 1 below shows the number of sources by media publication, and by monthly release. In total, the data includes 310 written articles (newspaper and online) and 148 transcript excerpts from broadcast media.

Table 1: Number of sources, by media publication and by month

Name of source	August 2021	September 2021	October 2021	December 2021
Daily Mail	8	8	13	7
Daily Mirror	4	3	8	1
Telegraph	9	10	7	15
The Express	7	15	12	6
The Guardian	6	4	5	3
The Independent	4	11	10	6
Metro	2	3	2	2
The Sun	5	8	4	2
The Times	14	16	10	21
Financial Times	4	1	1	1
ITV 1	3	6	3	0
Channel 4	3	4	3	0
BBC 1	15	10	11	9
BBC Radio 4	24	30	19	8
BBC online	11	10	8	3
Total sources	*119*	*139*	*116*	*84*

The majority of pieces were released on the day of the bulletin (on average, 45%) or on the following day (on average, 22%). This means, taken together, two-thirds (67%) were released on these first two days, as shown in Table 2 below. This table, and the tables going forward, are formatted to make them easier to read. The green colours indicate higher proportions within the column and red numbers indicate lower proportions.

Table 2: Number of sources, by days after ONS labour market release

Name of source	August 2021	September 2021	October 2021	December 2021	Average
On the day	40%	51%	50%	37%	45%
1 day after	14%	25%	23%	27%	22%
2 days after	0%	10%	10%	14%	9%
3 days after	8%	4%	6%	5%	6%
4 days after	1%	2%	4%	11%	5%
5 days after	4%	4%	2%	2%	3%
6 days after	4%	5%	6%	4%	5%
Total sources	*119*	*139*	*116*	*84*	*458*

These sources were then analysed using a pre-determined framework, identifying, and coding different themes, including the prevalence and ways of reporting specific labour market data (see Appendix A).

2.2. Results

The results of the media content analysis are documented below. Key findings are summarised in Box 4.

Box 4: Findings at a glance

- Media reporting in August, September, October, and December 2021 focused on three labour market statistics, in particular. First, the **job vacancy** figures are covered in 80% of all sources. They describe how the number of job vacancies reached a record high and passed one million, in the context of staff shortages. Many sources provide additional information about vacancies by sectors.

- Second, the **unemployment rate** figures are covered by 51% all sources. They describe the continuous fall in unemployment over this period. The sources typically provide the percentage figure for the rate of unemployment, sometimes alongside the percentage point changes. Most sources refer to the "unemployment rate" or simply "unemployment", though another commonly used phrase is the "jobless rate" or "joblessness rate". It is very rare that the sources define or explain how unemployment is measured.

- Third, the media sources mention the **payrolled employee** figures in 40% of all sources. They are reported especially from September onwards as the number reached and went beyond pre-pandemic levels. Compared to other statistics analysed in this chapter, a wide variety of phrases are used to refer to payroll employee figures, suggesting there is no established way of describing these statistics. Some refer to "employees" / "employment", some focus on "jobs" / "work", and others emphasise that employees are "payrolled" / "paid". With the exception of referring broadly to payroll, only a small number of articles describe that the data comes from HMRC payroll data, and how it differs from employment rate figures.

- The other main ONS labour market statistics are covered in much less detail and less frequently. The **employment rate** is only mentioned in 13% of sources. In the context of the payroll employee figures reaching pre-pandemic levels, some sources – though still relatively few – cite the employment figures to make the point that there are still less people in employment compared to before the pandemic. Most often, however, the employment rate is simply stated in percentage terms, sometimes alongside the quarterly change in percentage points.

- The **economic inactivity rate** is only mentioned in 5% of the sources. Echoing the view of journalists in Chapter 1, it is clear that labour market participation and inactivity have not been reported to a large extent over this period. The sources that do cover economic inactivity in more detail typically describe the longer-term trend of a rise in economic inactivity during the pandemic. They tend to provide some explanation of the concept, reflecting that journalists are aware that the term is not commonly understood. The sources that cover inactivity figures often simply mention the figure in percentage terms, alongside the quarterly change in percentage points, briefly and without providing further explanation.

- The **redundancy rate** is covered in 8% of sources, and mostly in the context of the end of the furlough scheme. The majority use narrative descriptions, rather than figures, to explain that the end of the furlough scheme did not cause a rise in redundancies. **Hours worked** is only covered in 3% of sources, almost exclusively in August when the total number passed the one billion mark for the first time since the start of the pandemic.

- Around half of media stories (49%) mention the ONS directly as a **source**. However, the other half of stories in our analysis (51%) do not. Around half of these use indirect references, such as "employment/jobs/labour market figures/data/numbers", and a small number refer to "official figures". The other half do not mention the sources of the figures in any meaningful way, simply stating that the "unemployment rate is low", for instance, without giving any indication of the source. ONS was directly quoted in 9% of the sources.

- Overall, our analysis reveals many examples that the ONS release, including the *Labour Market Overview* and the ONS quote, drives the way the media report the labour market figures, both in terms of the focus of reporting, and what numbers are used.

Table 3 below shows that the most frequently mentioned statistics were those relating to **job vacancies**. They were mentioned, on average, by 80% of news stories, with a notable reduction in December. The **unemployment rate** was mentioned, on average, by 51% of news stories, with large differences between months. Alongside vacancies, it was mentioned by most sources in December. **Payrolled employees** was mentioned, on average, by 40% of news stories, and was especially prominent in September. **Pay and earnings** was mentioned, on average, by 32% of news stories, and was especially prominent in August. The rest of the measures that are covered in the ONS *Labour Market Overview* are mentioned in less than 15% of the sources.

Table 3: Number of sources, by mention of specific statistics in main body

Name of source	August 2021	September 2021	October 2021	December 2021	Average
Job vacancies	80%	87%	90%	64%	80%
Unemployment	59%	45%	37%	63%	51%
Payroll employees	29%	55%	41%	35%	40%
Pay and earnings	48%	25%	34%	19%	32%
Employment	10%	12%	15%	13%	13%
Redundancy rate	7%	5%	13%	5%	8%
Inactivity rate	1%	7%	11%	2%	5%
Hours worked	6%	3%	1%	1%	3%
Total sources	*119*	*139*	*116*	*84*	*458*

In terms of mentions in the headlines of the stories (Table 4), **job vacancies** are mentioned most frequently in August, September, and October. Similarly, **unemployment** was mentioned quite frequently in especially August and December, while **payrolled employees** grabbed the headlines in September, October, and December. **Pay and earnings** were frequently mentioned in headlines in August, but almost out of the headlines in the other

months. In our analysis, **employment** was mentioned relatively frequently in headlines compared to how often it was mentioned main body of the sources. This is due to vague mentions of jobs and employment in headlines, which sometimes in reality likely refer to payrolled employee figures.

Table 4: Number of sources, by mention of specific statistics in headline

(only written articles)

Name of source	August 2021	September 2021	October 2021	December 2021	Average
Job vacancies	13%	16%	16%	4%	12%
Unemployment	7%	2%	1%	11%	5%
Payroll employees	3%	11%	8%	7%	7%
Pay and earnings	8%	1%	1%	1%	3%
Employment	5%	1%	5%	4%	4%
Redundancy rate	0%	0%	0%	0%	0%
Inactivity rate	0%	0%	0%	0%	0%
Hours worked	0%	0%	0%	0%	0%
Total sources	*74*	*89*	*80*	*67*	*310*

The following sections will explore how each of these labour market statistics were reported in the media sources. This is based on a detailed and manual qualitative, framework analysis of all the sources in our sample.

Each section briefly provides the context by describing broadly how the ONS reported those statistics each month through their labour market release on their website, and then describes the subsequent media reporting in our sample. The sections are ordered by how prevalent each concept was in the reporting, as outlined above. Appendix B provides a more detailed analysis of the ONS and media reporting, including by month.

2.2.1. Job vacancies

Job vacancy figures are covered in all the releases as part of the section on main points in the *Labour Market Overview.* They all explain that the number of quarterly job vacancies has increased to a record high, compare the levels to pre-pandemic levels and sometimes provide the figures for the change in the last three months. Apart from August, all releases include some information about job vacancies in specific sectors, for instance that accommodation and food services have seen the largest quarterly increases in the number of vacancies. Apart from the September release, all releases also reference the experimental single month vacancy estimates.

Our media sample contains 374 sources that mention the job vacancy statistics, accounting for 80% of all the sources in our sample. During this period, the media reports the vacancy figures as the main story in the labour market statistics, and it is mentioned in 12% of headlines in our sample. Throughout this period, many sources describe the high number of job vacancies as remarkable, using phrases such as "record-high", "a record number", "highest ever", "first time ever" or "highest since records began". Most articles also cite the figure for the number of vacancies, and often the change in absolute terms since the start of the pandemic. In particular, in September, a majority of articles mention that vacancies were now over a million.

Many articles link the vacancy statistics to staff shortages in certain sectors, particularly retail and hospitality. Generally, many sources cite additional sector-specific figures, or simply mention that vacancies are particularly high in these sectors. These sectors are referred to in many different ways, and often grouped together into different categories, likely reflecting the different sector groupings in the single month vacancies and the Adzuna online job adverts estimates. Many of the articles claim that a particular sector saw the "largest increase in vacancies", though many seem to mention different sectors. While we did not explore this in detail, this is again likely due to the two different measures, as well as the many ways this can be calculated, including as the quarterly change and the change since the pandemic, either in absolute or percentage terms. Most sources only highlight one or two of these sectors, but combined, the sources cover a wide range of sectors, and ways of describing those sectors:

> "hospitality", "retail sector", "retail, hospitality and leisure"; "accommodation and food services sectors"; "accommodation and food services - the sector which includes hotels, pubs and restaurants", "hospitality and logistics"; "hotels and restaurants"; "pubs and restaurants"; "manufacturing, hospitality and transport"; "manufacturers, haulage companies, retailers and restaurants"; "social work, hospitality, science, retail and manufacturing"; "care", "construction industry", "construction and transport", "administration and support sector", "motor vehicle repair sector", "car and motorbike maintenance", "professional activities and manufacturing", "wholesale and retail businesses", "transport and storage", "HGV drivers", "logistics and warehousing".

Most sources simply refer to "vacancies" or "job vacancies", without any further explanation or definition of the term. However, the sample also contains other phrases such as:

> 'empty positions', 'new positions', 'post advertised', 'jobs on offer', 'available jobs', 'job adverts', 'jobs up for grabs', 'posts'.

2.2.2. Unemployment rate

The unemployment rate is covered in all *Labour Market Overviews* as part of the section on main points. Apart from the December release, they all explain that there was low unemployment before the pandemic, and that there was then an initial increase in unemployment after the start of the pandemic, which has then been followed by a period of recovery. All the releases then provide percentage point figures for the most recent quarterly change, as well as the most recent level of the unemployment rate in percentage terms. The September and December releases provide additional figures for young people. The December release provides additional detail on part-time workers, though it does not summarise the broad development since the onset of the pandemic. The *Employment in the UK* subpage provides additional detail about the UK unemployment rate. This includes the percentage point change compared to pre-pandemic, as well as information about unemployment by sex and by duration of unemployment.

Our media sample includes a total of 230 sources that reference the unemployment figures, amounting to 51% of all sources. The articles most often refer to either the "unemployment rate" or simply to "unemployment" when describing the figures. Another commonly used phrase, which is different to the ONS products, is the "jobless rate" or "joblessness rate". A small number of articles refer to "headline unemployment".

It is very rare that the sources define or explain how unemployment is measured. Only 10% of sources covering the unemployment figures also covers economic inactivity figures. As such, unemployment figures are usually mentioned separately, and as the only indicator describing the proportion or number of people out of work. A very small number of use phrases such as *"people seeking jobs"* and *"one in 20 British workers who are actively looking for a job are unable to find one"*. However, there are also imprecise references to people *"out of work"* to describe unemployed people, though this should technically also include economically inactive people.

Most sources mention the percentage figure for the level of unemployment, while very few sources mention the absolute numbers of people who are unemployed. There is a tendency for (smaller) subnational figures to be reported more frequently as absolute numbers (e.g., *"there were 65,000 unemployed in Wales (4.2%)", "unemployment [in Scotland] was at 118,000"*). The vast majority of articles refer to unemployment as *"falling"* or describe the fall in unemployment in recent months, including the quarterly change in percentage points. Similarly, some sources describe unemployment as *"dropping"* or being *"down"*, or in some months that *"unemployment is now down to a record low level"* and *"unemployment is close to an all-time low"*. Many articles also mentioned that unemployment had fallen for a certain number of months, as highlighted by the quote by the Chancellor of Exchequer in those months. It was common for sources to compare the current figure with pre-pandemic figures. They often noted that the unemployment rate had not risen as much since the start of the pandemic as some economists had anticipated, or that the recent fall was in line with the expectations of economists.

It was common for sources to omit any specific time reference, only implying a comparison over time through words such as "falling". However, many of the sources did refer to specific time periods. For example, many used the phrase "between June and August" or "in June-August" (for the October release). Several also used the following phrases: "in the quarter to August", "in the latest quarter to August", and "the three months to August", "in August" and "in the last quarter".

We did not include any local newspapers in the media sample for the content analysis. However, it is worth noting that in our background searches of local and regional newspapers, there is a large proportion that complements the unemployment figures with the Claimant Count figures that allow local journalists to report on a more disaggregated level. While we have not analysed it systematically, similarly to the national newspapers, it seems that these papers very rarely explain or define the differences in measurement methods. Often, these papers seem to report the unemployment rate and Claimant Count figures interchangeably.

2.2.3. Payrolled employees

The *Labour Market Overview* on the ONS website report the payrolled employee figures in the first paragraph in all four releases. All four describe the monthly change (in all cases, increases), the change since the start of the pandemic (the September release highlights that the number has returned to pre-pandemic levels, except in three regions) and the current level, all in absolute numbers. The December release cautions that some redundancies at the end of the furlough scheme may not filter through to the data for a few

further months. Finally, there are additional detailed information on the subpage *Earnings and employment from PAYE Real Time Information*

Our media sample contains 188 sources that mention payrolled employee statistics, equivalent to 40% of the sources in our sample. It was reported across all four months. In August, many sources describe the growth in in the number of people on payroll and noted that it was still slightly below pre-pandemic levels. A large proportion of the mentions in the sample are in September (41%) where the number of payrolled employees returned to pre-pandemic levels, as highlighted by the ONS release and the ONS quote. Throughout all four months, a large proportion of the articles follow the reporting by the ONS closely, in particular by using the three figures in the *Labour Market Overview*, that is the change in the number of payroll employees in the last month, the increase since the start of the pandemic, and the current level – all in absolute numbers. Especially in December, many sources describe the rise as substantial using terms such as "record rise", "rocketing", "formidable rate", "boom", "surge" and "jumped".

The reporting in October is worth noting, as the ONS reporting is slightly inconsistent: the *Labour Market Overview* states that the number of payroll employees "returned to pre-coronavirus pandemic levels" while the ONS quote states that the number was now "well-exceeding pre-pandemic levels". This is reflected in the media reporting. Some sources state that the number of payroll employees was now the same as pre-pandemic levels (e.g., "more than 29m people back in work as employment returns to pre-pandemic levels", "returned to levels seen before the pandemic struck", "back to pre-Covid levels"), while some report that it was now higher (e.g., "up 122,000 before the pandemic struck", "0.4pc higher than immediately before the pandemic", "above the pre-Covid peak of 29.06m", "more people are now in work than before the pandemic").

Compared to other statistics analysed in this chapter, the sources use a very wide variety of different phrases to describe the payrolled employee figures. Some sources refer to *"employees"* and *"employment"*:

> *"employment", "employee levels", "employee numbers", "number of people employed", "number of people in employment".*

Some focus on *"jobs"* and being *"in work"* when referring to the figures, such as:

> *"the number of people in jobs", "new jobs", "people in work", "the number in work", "UK worker numbers".*

Some emphasise that the employees or workers are *"payrolled"* or *"paid"*:

> *"the number of UK workers on payrolls", "UK payrolled workers", "the number of payrolled employees", "the number of workers on payrolls", "workers moving on to the payroll", "people entering paid employment", "number of people on pay-as-you-earn".*

Some refer more specifically to the payroll of employers:

> *"company payrolls", "employers added…staff to payrolls", "staff on companies' books", "citizens joining the nation's payroll".*

And finally, some sources refer more vaguely to *"payroll"* and *"staffing"* levels:

> *"payroll levels", "payroll numbers", "staffing levels", "August payrolls".*

The majority of the sources do not mention that the data comes from HMRC, or they attribute it to the ONS. There are a small number of articles that mention the HMRC as the source, and a handful highlighted the timeliness of the data (e.g., *"most timely data"*, *"more timely administrative data"*) and some described this timeliness in conjunction with describing the HMRC as the source (e.g., *"HMRC payroll data is the most timely and best single overall indicator of the labour market"*, *"more timely data from HM Revenue and Customs"*, *"real time data from HMRC"*). A very small number of articles describes the differences between the HRMC and LFS figures. Some sources – especially in October, the second month where payrolled employees are no longer below pre-pandemic levels – do highlight that there are still less people in employment compared to before the pandemic; however, they still rarely describe why these figures are different (see next section).

2.2.4. Employment rate

The employment rate is covered in all *Labour Market Overviews* as part of the section on main points. Apart from the December release, they all explain that there was growth in employment before the pandemic, and that there was then an initial decrease in employment after the start of the pandemic, which has then been followed by a period of recovery. All the releases then provide percentage point figures for the most recent quarterly change (all showing that employment has increased), as well as the most recent level of the employment rate in percentage terms (from 75.1% in the first release to 75.5% in the last release). The September and December releases provide additional figures for young people. The December release provides additional information that it is particularly the recent increase in the number of part-time workers that has driven the quarterly increase in employment. The *Employment in the UK* subpage provides additional detail about the UK employment rate. This includes the percentage point change compared to pre-pandemic and breakdowns by full-time and part-time workers.

Our media sample contains 37 sources that reference figures for the employment rate, equal to only 13% of all sources. The sources usually mention the figures for the employment rate only briefly. They are fairly consistent in using the term "employment rate", and very often cite the percentage figure and sometimes the quarterly change in percentage points. A typical example from August is: *"the employment rate rose 0.3 percentage points to 75.1%"*. However, in October, unusually, most articles used the absolute figures. In the context of payrolled employee figures being above pre-pandemic levels for the second month in a row, these sources use the employment rate figures to make the point that there are still less people in employment compared to before the pandemic (e.g., *"the total in work is still down by more than 650,000 on pre-Covid levels"*, *"the number of people in a job remains down by 660,000"*, *"total employment is still down by more than 650,000 on pre-Covid levels"*).

Similarly to other figures based on the Labour Force Survey, most articles do not define or explain how the employment rate is measured. This is also the case in most of the articles that highlight the difference between the payrolled employees and employment rate figures.

There is a slight tendency for the (much smaller) subnational figures to be reported in absolute terms (e.g., *"numbers in work in Wales rose by 25,000 in the three months to*

August", "statistics showed there were 2.538 million people aged 16 to 64 in employment between April and June [in Scotland]".

In September, the coverage of the employment rate figures are driven by articles that cite the ONS quote: *"The overall employment rate continues to recover, particularly among young workers who were hard hit at the outset of the pandemic."* Similarly, in December, there are several articles that focus on the increase in part-time workers, as highlighted by the ONS release.

2.2.5. Redundancy rate

In the four monthly releases, the redundancy figures are only covered in August as part of the main points in the *Labour Market Overview*. This describes how the redundancy rate had decreased in the last quarter and returned to pre-pandemic levels. For all months, the *Employment in the UK* subpage describes the change in the rate of redundancies during the last three months, and then indicates how this compared to pre-pandemic levels. The main difference between the four releases is that the December release describes that the level of redundancies is "below" rather than "similar to" pre-pandemic levels, though this is not flagged as a change.

Our media sample contains 37 sources that reference the redundancy figures, equal to 8% of all sources. The term is referred to in a variety of ways such as *"redundancies proposed by employers"*, *"notified redundancies"*, *"expected redundancies"*, "*redundancy notices firms are issuing"* or simply *"redundancies"* and *"redundancy levels".* In most cases, the figures are reported in the context of the end of the furlough scheme. The majority of sources uses narrative descriptions, rather than figures, to explain that there was *"no surge in redundancies"* or *"no rise in redundancies".*

There were also some comparisons to pre-pandemic levels, including in December when redundancies were reported to be *"below pre-pandemic levels".* However, only four sources picked up this change in figures in December, despite the fact that ONS describes it as "below" rather than "similar to" pre-pandemic levels. Overall, the figures were barely reported in December, but consistently throughout the other three months.

2.2.6. Economic inactivity rate

All four ONS releases cover the economic inactivity rate alongside the employment and unemployment rate as part of the main points in the *Labour Market Overview* (see Appendix A)*.* They report the quarterly change in percentage points as well as the most recent level in percentage terms. In addition, two of the releases provide additional information about inactivity figures for young people. The *Employment in the UK* subpage describes the inactivity figures in more detail. It explains that the economic inactivity rate has generally fallen since records began in 1971, but that it has increased during the pandemic, largely driven by a rise in students and "other" reasons.

Our media content analysis shows that the media barely mentions economic inactivity figures in August and December; however, it is covered by some sources in September and October. In total, the sample only contains 25 sources that mention economic inactivity

figures directly or indirectly, accounting for only five percent of all sources.[3] Echoing the view of some journalists in Chapter 1, it is clear that labour market participation and inactivity have not been reported to a large extent over this period.

The sources that do cover economic inactivity in more detail typically provide some explanation of the concept, highlighting that journalists are aware that the term is not generally understood. These include references to: *"people out of the labour market"*, *"people who are not working but are not available to work"*, *"people removing themselves from the jobs market"*, and *"people who are not on anyone's payroll, nor are they actively looking for work"*. In a few instances, the sources point out that the term "economically inactive" is the phrase used *"by economists"* or that this is the term used *"in jargon"*.

There are also some sources that cover the inactivity figures briefly and without providing further explanation or interpretation of the significance of the figures. These follow the ONS *Labour Market Overview* release by simply reporting the quarterly changes in percentage point terms and sometimes the level in percentage terms. In contrast, the sources that covers inactivity figures in more detail always describe the longer-term trends of a rise in economic inactivity since the start of the pandemic, and attributes this to the rising number of people studying, becoming ill, and taking early retirement.

2.2.7. Hours worked

Only the August *Labour Market Overview* covers the number of hours worked as part of the section on main points. It explains that total hours worked increased on the quarter, but that it is still below pre-pandemic levels. For all four months, the *Employment in the UK* subpage describes that the total actual weekly hours worked has increased and gives the level in absolute terms. It notes this "coincided with the relaxation of coronavirus lockdown measures", though it then remarks that the current level is still "below pre-pandemic levels", providing the difference to pre-pandemic in absolute terms.

Our media content analysis shows that the number of hours worked was the concept that was least reported in the media during this period. The sample only contains 15 sources that reference figures for hours worked, accounting for 3% of the sources. These almost exclusively come in August when the total number of hours worked per week passed the one billion mark for the first time since the start of the pandemic. This was not mentioned in the *Labour Market Overview*, but it was highlighted on the *Employment in the UK* page and more prominently in an ONS quote. In contrast to some other labour market indicators, sources most often referred to the levels and changes in absolute numbers, likely driven by the presentation in the ONS release where both levels and changes are reported in this way. There were a few sources that referenced percentage changes since the pandemic and in the past three months, though these seem inconsistent likely reflecting the fact that this figure was not provided by the ONS.

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[3] We may have missed some indirect references to economic inactivity in our sample of articles. This could be references to reasons for economic inactivity, such as studying, illness and early retirement, in articles that do not include any keywords.

2.2.8. Sources

One of the key findings in our previous studies was that the public was not always aware that the labour market figures are produced and collected independently of the government (Runge & Hudson, 2020). Therefore, we were interested in exploring how the source of labour market figures are presented by the UK media.

Table 5 below shows that around half of the media items (49%) mentioned the ONS directly. The sources generally used its full name initially, using the acronym ONS only in subsequent references. Some of the most common phrasings included: *"according to the Office for National Statistics"*, *"the Office for National Statistics said"*; and *"data/figures from the Office for National Statistics show".* A number of articles also used the word "estimate", for instance *"the ONS estimated"*. There are also a few more indirect references to the ONS, such as the *"national statistics office"* and to the *"statistics agency"*. Around a third of the items that mentioned ONS directly (16% of all items) additionally described the labour market statistics as "official figures/data". However, apart from this phrase, it was very rare to see any explanations about what type of organisations the ONS was.

47% of the media items that covered the labour market statistics did not mention the ONS directly as a source. Some of these (20% of all items) used a range of indirect references to the ONS, the most common being references to *"figures"*, *"data"* and *"numbers"*. These were sometimes described more specifically as *"employment figures"* or *"employment data"*, *"labour market data"* or *"labour market figures"*, *"jobs data"* or *"jobs figures"*, and *"employment numbers"*. References to *"statistics"* were much less common than to *"figures"*, *"data"* or *"numbers"*, but did occur occasionally. There were some references to *"labour force data"* and a few also talked about the *"latest jobs report"*. 5% of sources mentioned the ONS indirectly through referencing to the labour market statistics as "official figures/data".

Finally, 27% of the media items did not reference the source of the figures in any meaningful way. These would simply state that the *"unemployment rate is low"* or *"company payrolls are back to pre-pandemic levels"* or *"there are more than 1 million vacancies"*, without giving any indication of the source at any point.

In both direct and indirect references, it was common for sources to signal that the data was recently released, using phrasings such as: *"yesterday's figures"*, *"the latest figures/data"*, *"figures revealed this week"*, *"today's release"* and *"figures released today"*.

Table 5: References and descriptions of the ONS as a source, by month

Mentions of the ONS as a source	September 2021	October 2021	December 2021	Average
ONS directly + "official figures/data"	11%	13%	23%	16%
ONS directly	40%	39%	19%	33%
"Official figures/data" only	4%	9%	2%	5%
ONS indirectly only	19%	16%	24%	20%
Nothing on source	26%	22%	32%	27%
Total sources	*139*	*116*	*84*	*458*

*Not coded for August

We also analysed how many of the media items quoted the ONS or other sources (Table 6). We only coded cases where the sources referenced the ONS quote using quotation marks;

however, there are many other cases where sources may use certain ONS phrases from the *Labour Market Bulletin* or other ONS products, which is not recorded in the table below. The use of quotes from the ONS and other sources have also been described in more detail throughout this chapter.

Table 6: Quotes by source, by month

Quote by source	August 2021	September 2021	October 2021	December 2021	Average
Quote by ONS	10%	9%	7%	11%	9%
Quote by other sources	26%	27%	21%	18%	23%
Total sources	*119*	*139*	*116*	*84*	*458*

Chapter 3: Journalist experiment

3.1. Methodology and experiment design
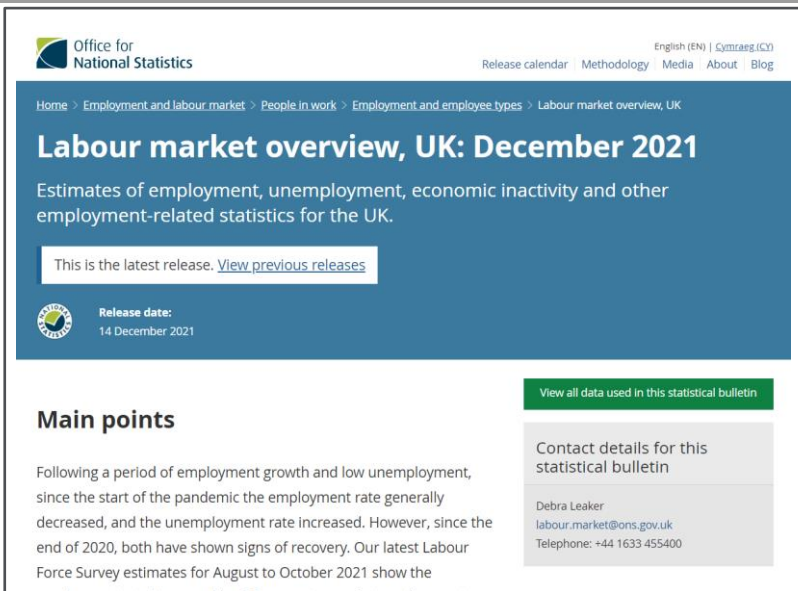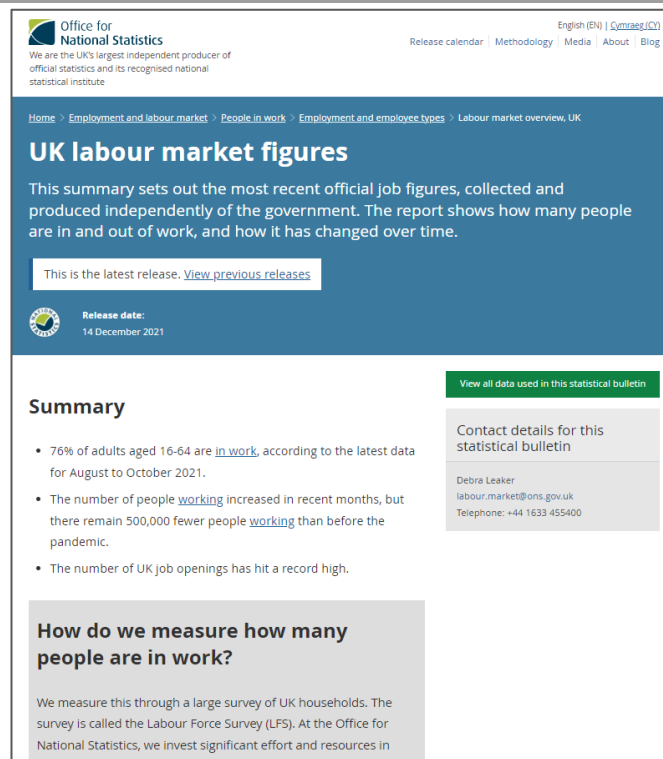
3.1.1. Overview

We wanted to test how different designs of the ONS' labour market summary would influence journalists' understanding of labour market statistics, and whether a different presentation would make the release more useful to journalists and help them explain complex topics in their reporting.

In previous work (Cathro et al., 2022) we developed five alternative ONS labour market summaries and tested them in a randomised controlled trial (RCT). In an RCT, participants are randomly assigned to see only one version of the labour market summary. This would allow us to tell if different forms of the release caused systematic differences in outcomes of interest, given a large enough sample size.

In our experiment with the general population, we were able to recruit a large number of participants, representative of the UK population, from an online panel. This option was not available to recruit a targeted sample of journalists or others working in media; therefore, we had to recruit participants from a variety of other channels. We anticipated that it would be difficult to recruit enough participants, so we decided to test only one of the prototypes against the existing release, the "Control" in our journalist experiment. A brief overview of these two versions is provided below (Table 7), and additional detail on their design can be seen in our previous report, Cathro et al., 2022.

As anticipated, recruitment was difficult and we ended up with a very small sample of only 24 journalists or journalism students, meaning we have too few participants to make definitive statements about how their performance varied depending on which version of the release they saw. We also are unable to verify whether participants in our releases are in fact journalists or journalism students as this information was self-reported. For these reasons, our results should be interpreted more cautiously than those in the accompanying report.

Table 7: Overview of prototypes tested in journalist & media experiment

	Existing Release (Control)	**Methodology**
Overview and purpose	The Control release was a revised version of the monthly Labour Market Overview release from January 2022, focusing only on employment, unemployment and inactivity, and vacancy rates. The main content of the release that we tested (excluding figures & graphs and accompanying text) was approximately 530 words, with a reading ease score of 48 or post-secondary level.	The Methodology prototype differs from the Control in four ways. It uses simplified language and contains some additional information to clarify concepts, such as the types of people that are considered unemployed. We grouped the information into "topic" structures - e.g., *"how many people are in work?"* and added additional visualisations. We also included a box on Methodology, that provided additional information on how the ONS collects labour market statistics. The main content was 563 words, with a reading ease score of 67, and a reading level of Year 9 or 10. The purpose of testing this release was to understand whether changes to language, structure, and providing some additional content would influence outcomes of interest for journalists
Example snapshots from versions tested		

3.1.2. What we did

We used a variety of channels to recruit journalists and journalism students to our experiment. We directly emailed journalists a link to the experiment via a PR platform (expected reach ~1,800). We also approached fifteen unions and universities representing or teaching journalists to see if they would be willing to distribute a link to the experiment to their members. In the end, we believe a link to the experiment was shared by a journalism union via newsletters and social media channels to members (expected reach ~25,000), and university teaching staff sharing with their students (expected reach ~300).[4]

48 unique participants clicked on the link, taking them to BIT's online experiment platform Predictiv. Upon entering, participants were asked some questions on eligibility, namely on their age and location; participants were required to be above 18 and based in the UK. Participants were allocated randomly to see one of two versions of the website, shown the materials and asked a series of questions.

The questions asked of these participants in the experiment covered a range of topics. Our primary focus for this experiment was **comprehension of the material presented**.

Participants were then asked additional questions, which covered topics of secondary interest to the research, including participants' intentions to write about the labour market and their general sentiment. We also collected data on a number of other measures, including demographic characteristics, time spent completing the survey, and other feedback on the labour market summary.

At the end of the experiment, participants were entered into a random free draw, with the chance to win £50 in the form of a gift card or a donation to charity. In total, 24 participants completed the experiment. Due to the small sample size the randomisation led to 16 individuals in the Control arm and 8 individuals in the Methodology arm.[5]

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[4] We were not able to verify exactly to whom these messages were sent.
[5] Given the limited evidence of differential attrition, there was a 7.6% chance of 8 or fewer individuals being allocated to the Methodology arm. Please see the technical appendix for more on attrition.

3.2. Results

Results of our journalist experiment are documented below, starting with comprehension, and then looking at intentions to report, and sentiment. Key findings are summarised in Box 5.

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Box 5: Findings at a glance

- Due to the small sample size, we were unable to carry out statistical analysis so all results are based on descriptive statistics.

- Journalists scored substantially higher than the general population on comprehension, with no apparent difference in performance on comprehension questions between Methodology and Control prototypes. Despite this, not all journalists answered 100% of the questions correctly, suggesting that even with these more engaged / knowledgeable audiences, there is room for improvement in their understanding of the concepts covered by the labour market releases.

- Consistent with our general population experiment, the Methodology treatment appeared to increase the number of journalists that said it was easy to understand.

- A higher proportion of participants in the Methodology arm indicated they'd like to write about the labour market summary. Participants generally seemed to think the public would find the statistics interesting or surprising.

- Relatively few journalists said the ONS labour market release had all the information needed to write an article on the content because it lacked the quantitative and qualitative granularity needed for journalists to create compelling narratives and didn't explain surprising facts clearly enough.

3.2.1. Comprehension

To gauge comprehension, participants were asked 14 questions: 5 requiring participants to **identify** numbers from the text (e.g., the current unemployment rate) and 9 testing participants' understanding of the definitions of key concepts; we call these "**applied**" comprehension questions. Overall, we found that **comprehension was similar for journalists that saw the Control versus the Methodology prototype** (Figure 1).

It is worth noting comprehension in this sample is substantially higher than in the general population, where overall comprehension was 65% in the Control arm and 69% in the Methodology arm, compared to the 90% and 89% we see for each arm respectively here. However, this means that each participant got around 1.5 to 2 questions wrong - suggesting that even with more knowledgeable or engaged audiences, there is still room to improve understanding.

Figure 1: Comprehension scores

Total n=24, no statistical testing conducted
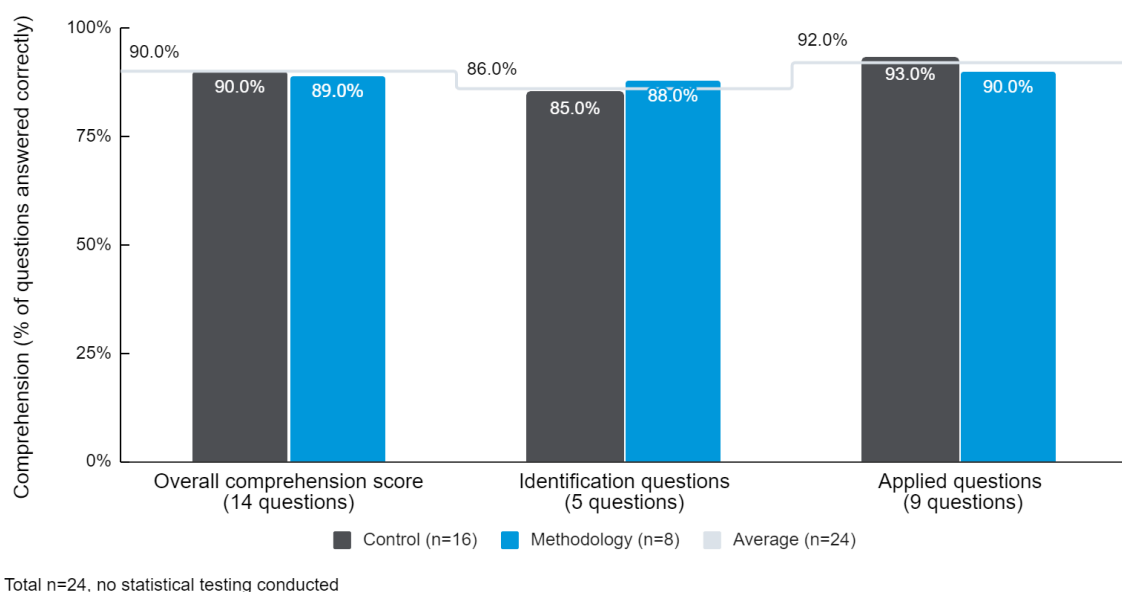
The average score on **identification questions** was 86% across all participants in this sample, meaning that each participant answered roughly 4.3 of 5 questions correctly. This was substantially higher than in the general population sample, where the average score on these questions for participants that saw the same material was 58%.

The average score on **applied questions** was 92%, substantially higher than the 72% reported in the general population sample. This equates to each participant answering roughly 8.3 questions correctly, compared to each participant in the general population sample answering 6.4 questions correctly on average. This suggests better comprehension in the journalist sample, though notably it is not perfect.

The differences in comprehension may reflect the fact that the journalists in our sample report more education and more frequently engaging with business and economic news. They may have been more familiar with the subjects of the summaries than those in the general population sample. Consistent with this, more than 9 in 10 journalists perceived the

information as being easy to understand, compared to only 2 in 3 members of the general population thinking the same.

3.2.2. Intentions to report

We also asked journalists about their intentions to report about the material covered in the ONS labour market summary. A larger fraction of journalists in the Methodology arm said they would 'probably' or 'definitely' produce a feature about the labour market summary (Figure 2): 75% in the Methodology arm compared with 56% in the Control arm.

Figure 2: Intentions to report about labour market after seeing summary

Total n=24, no statistical testing conducted
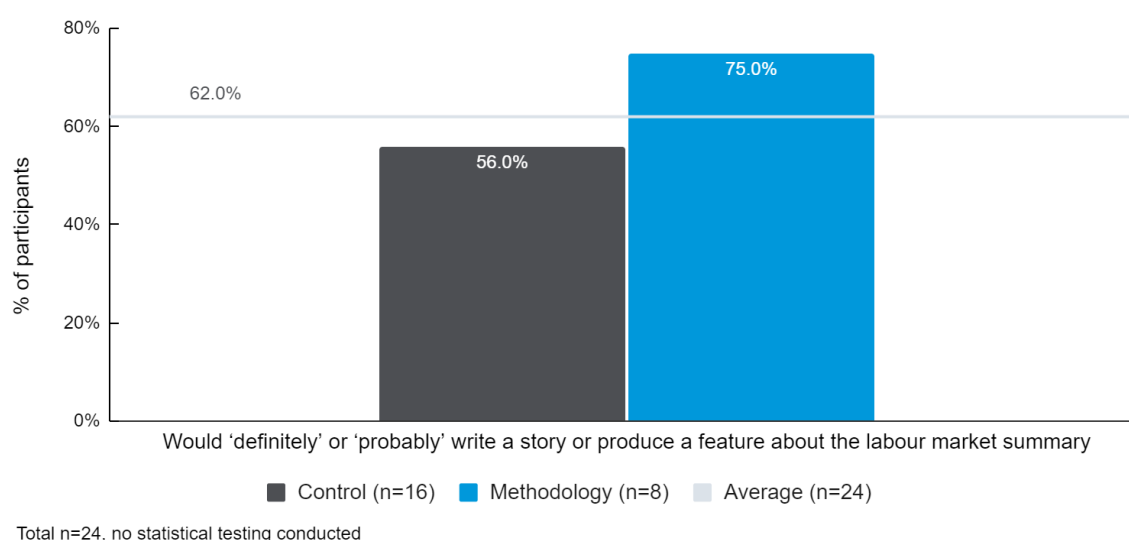
When asked why they would want to write a report, journalists in both arms said they thought the public would find the information generally interesting, especially considering the pandemic. Those in the Methodology arm cited the job vacancies and employment statistics as particularly interesting, which weren't mentioned by anyone in the Control arm. The information is provided in both arms, but it seems any surprising findings were harder to find in the Control arm (Table 8).

The three journalists in the Control arm who said that they would not write a feature, said so because the release *"doesn't seem to describe a milestone or turning point in the labour market in the aftermath of the pandemic. [It's] progress, but not very exciting.",* the release was *"not presented well enough",* or they did not agree with the statistics and said "*this economically inactive is [expletive]. just be honest and say [the] unemployment rate is 25%!".* The latter point has been echoed in previous work (Runge and Hudson, 2020; page 110). We hoped that the greater prominence and explanation of economic inactivity in the Methodology arm would be effective at reducing the intensity of this viewpoint, but further testing is needed due to our limited sample size.

Just one journalist in the Methodology arm said they would not write a feature. Their reason was that they *"don't have a habit of writing comments about social issues".*

Overall, it seems the journalists found the Methodology arm more compelling, though this requires further testing to make firm conclusions.

Table 8: What made you want to write about the labour market release?

NEWS	**Because the information about the current state of the economy is generally newsworthy, especially following the pandemic.**

Control	Methodology
"It is relevant to society and the economy"	*"It's very topical and affects many people"*
"There have been changes over time - which makes it newsworthy"	*"Covering the UK's employment and wider economic conditions is important, especially post-pandemic"*
"Because people want to know the state of the economy"	
"To examine the speed of the post-pandemic recovery"	

💡	**Because some of the information was surprising and/or interesting, especially the statistics on job vacancies and employment. This was particularly apparent in the Methodology arm.**

Control	Methodology
"Current information that dispels some myths"	*"Who are the 24% not in work?"*
	"Surprising how many more people not looking for work when so many vacancies"
	"The number of unfilled vacancies has hit a record high"
	"Some facts seem counterintuitive but concern the general public and deserve to be clarified."

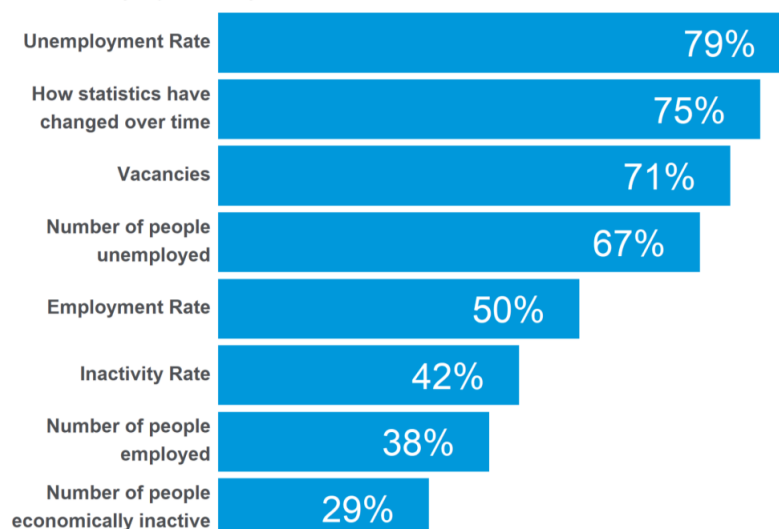## 3.2.3. Topics of interest

When asked what they would write about, journalists consistently picked the level of the unemployment rate, change in various statistics over time and level vacancies as the three most important pieces of information they'd use when reporting on the labour market (Figure 3).

Journalists thought that the public would want to better understand the reasons why the economy looks like it does and have more context around the statistics. We specifically tried to add additional context and explanation of this in our 'Relatable' and 'Personas' prototypes that we tested in our General Population experiment (Cathro et al., 2022), though these weren't tested in this experiment.

A greater fraction of journalists in the Methodology arm stated the release had all or most of the information they'd need to report on the labour market than in the Control group: 63% of journalists in the Methodology arm, compared to 38% of those in the Control. We asked what else they would like added to the ONS summary to fill that gap. Two themes that emerged were similar to that of the general population: more demographic breakdowns (on age, region, race and more) and a more detailed explanation of vacancies. A final theme was specific to the journalists; they were also interested in additional context for the general public or humanising the statistics (Table 9).

Figure 3: Statistics journalists would use when reporting

"Imagine now that you've been asked to write an article or produce a feature on the latest employment figures. Which facts would you pull out for your audience?"

Statistic	Percentage
Unemployment Rate	79%
How statistics have changed over time	75%
Vacancies	71%
Number of people unemployed	67%
Employment Rate	50%
Inactivity Rate	42%
Number of people employed	38%
Number of people economically inactive	29%

*N=24 journalists sampled between January 21st and February 14th, 2022

Table 9: What other information would you want to see in this ONS summary?

People in both arms wanted splits of the data by region and demographic characteristics (e.g., age, gender, race, income).

"Breakdowns by age, region, ethnicity, gender, unemployment levels, employment levels, skills shortages, popular / unpopular work sectors" **- Control**

"Regional breakdown" **– Control**

"County by County figures" **– Methodology**

"Who are these people not in work?" **– Methodology**

People in the Control additionally wanted more detail on job vacancies and availability of jobs.	**People in the Methodology arm wanted real world context, i.e., what the information means for real people.**
"Number of candidates per vacancy in various sectors."	*"Maybe quotes I could use or more explanation of why but I would go to other sources for this as well anyway"*
"...Sense of proportion for the vacancies - what size each sector is"	*"I want to hear some of the real feelings of ordinary people about the situation, or why this situation happens"*
"What are the fastest growing work sectors and the slowest ? Where are most of the workers based and how has that changed in the last few years…"	
"A figure for those leaving employment hence the increase in vacancies. This in turn might be linked to migration figures"	

3.2.3. Sentiment

Answers to our sentiment questions showed that journalists find the ONS release more interesting than the general population. 60% of the general population who saw the same

materials found the information moderately or very interesting, compared to 88% we see in this sample (Figure 4).

There is suggestive evidence that the Methodology group think the release was less important to understand the UK, whilst also increasing the view that the statistics are politically neutral. It might be that the additional transparency over the sampling strategy in the Methodology arm makes people realise the results may not generalise, but simultaneously illustrates the government has nothing to do with the data collection or reporting process.

The general population experiment provided evidence that perceived political influence is significantly lower in the methodology arm, but not that it reduces those thinking it is important (Cathro et al., 2022). This may mean our results are driven by statistical noise and a small sample, or that journalists react differently to the sampling information.

Figure 4: Sentiment
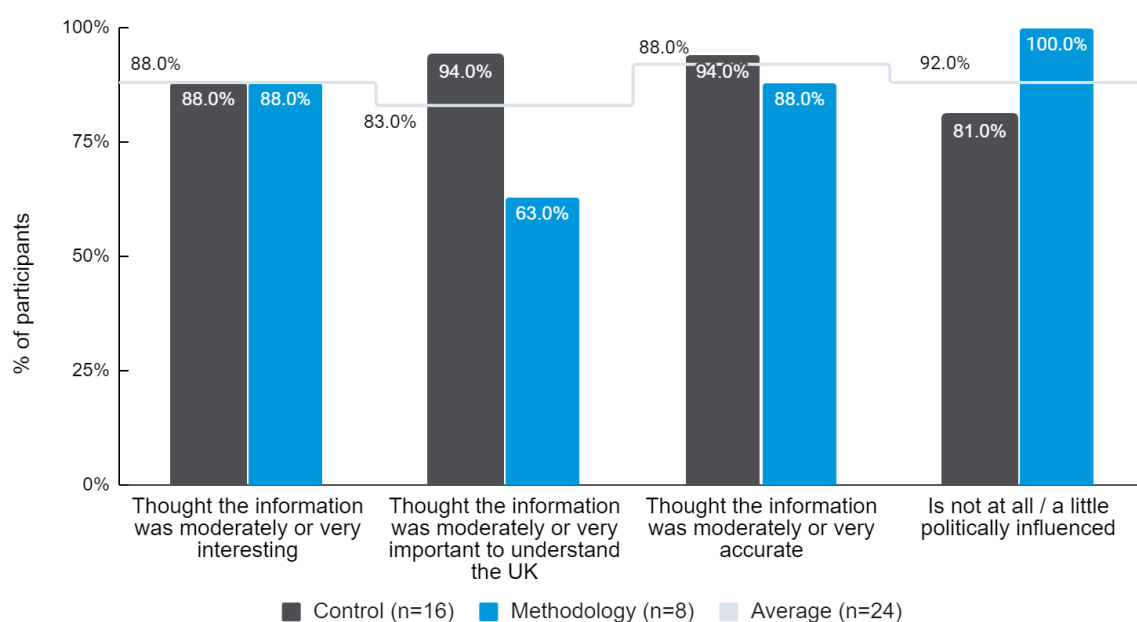
Total n=24, no statistical testing conducted

We gave participants an opportunity to give any further feedback they had on the ONS summary (Table 10). Overall, most of the feedback was positive for the release, though there was some helpful constructive criticism.

There was criticism that the information was "too dense" from the Control arm, with some mentioning the use of percentages might alienate the public and another suggesting a greater focus on tables and figures would be helpful. The Eurostat reports were mentioned as a reference. Others in the Methodology arm said that the "*macro picture doesn't speak of the whole story*" and that adding some case studies, or "*cultural opinions*" might improve the release. In the Control arm, one participant specifically called for more information about how the data is generated, a concern that was addressed in the Methodology release!

Table 10: Do you have any other feedback on this labour market summary?

Control	Methodology
Participants that saw the Control release thought it was too dense, and that greater use of tables, figures and references to other releases may be helpful.	**Participants in the Methodology release wanted context and opinion**
"Like all ONS releases, the information is far too dense. As a reporter I just need some tables with figures and a few sentences of text. Eurostat manages this for 27 countries in a couple of pages and it is much clearer and informative." *"The last of the pages was the easiest to understand. I know what percentage points are but I doubt many of the general public do."*	*"[The] macro picture doesn't speak of the whole story"* - ***Methodology*** *"It is relatively objective. Sometimes I want to know more about the social and cultural opinions."* - ***Methodology***
Control participants identified concerns that may have been clarified in the methodology arm	
"I am not altogether convinced of the accuracy of the bare stats about employment and unemployment and vacancies, partly because I do not know how they are gathered, except that it by a survey, which can be unreliable." *"… Also the information on employed, unemployed and economically inactive categories lacks clarity on where students, retired people and full-time carers fit."*	

Chapter 4: Discussion and recommendations

Our journalist interviews, media content analysis and online experiment provided valuable learnings about some of the practices and challenges in reporting labour market statistics through the media to the wider public. The study also offers insights into how ONS outputs may affect the frequency, focus and quality of media reporting. We also uncover many areas which would benefit from future research, potential ways to support media organisations in the future, and how the media can improve their reporting of labour market statistics.

The impact of ONS outputs on subsequent media reporting

The journalists that we spoke to explained they reported the monthly breaking news story on the labour market statistics at speed, using the ONS *Labour Market Overview* and morning email. They said they let the ONS release and data guide them to the headline stories, though they felt less experienced reporters would be less likely to use ONS outputs directly, and use the outputs of newswires such as Reuters and Press Association, as well as stories in leading newspapers.

Our analysis of media reporting between August and December 2021 also contains many examples that ONS outputs drive media reporting, both in terms of the focus of reporting and the numbers that are used. Similarly, our small-scale online experiment with journalists suggested that a simplified and restructured output was welcomed by journalists. After seeing a revised version of the release, journalists in our sample were more likely to say it was easier to understand and that they would write about the labour market compared to those that saw the existing release. However, due to small sample sizes these findings should be interpreted cautiously, and more research is needed.

While our journalist sample performed better than the general population experiment on comprehension questions, they did not score perfectly despite reporting having more education and being more engaged with economic news. This suggests there is still room for improvement in how journalists comprehend labour market statistics. We showed in our parallel report that an alternative, less technical release would work well for improving comprehension of the general public; this report suggests that a similar approach may also work well for journalists. Additionally, this would allow the ONS to potentially reach a wider group of journalists directly, especially those who are less experienced economic reporters who may currently engage less with the ONS outputs.

Recommendations for ONS and other statistical institutes:

- **Consider publishing an alternative summary on the ONS website that is not only aimed at the general public, but also other less technical audiences such as journalists.**
- **Explore whether and how potential changes to ONS outputs, or the introduction of additional outputs, shape and potentially improve the subsequent media reporting; this could be done via a natural experiment in the event of an introduction of a parallel summary on the ONS website. Potential impacts to be explored include uptake, frequency, focus and quality of reporting.**

Media reporting of different labour market concepts and statistics

There is a demand among journalists for ONS releases to include a wide range of core statistics. In our content analysis, we found that job vacancies and payrolled employees, alongside the unemployment rate, were the top statistics reported between August and December 2021. Some journalists said they had recently pivoted away from reporting unemployment as the main indicator of labour market performance, towards new administrative data sources, such as job vacancies and payrolled employees, and earlier in the pandemic furlough data. These data sources were welcomed for their timeliness and granularity in terms of sectors and regions. These advantages also drove local journalists' extensive use of Claimant Count statistics. Another benefit of administrative data is that it tends to be more intuitive to the general public; in fact, most people assume this is how employment statistics are collected. They also tend to trust them more as it is collected from the whole population, rather than a small share through a survey.

Despite the rise in economic inactivity becoming a growing policy concern during the pandemic and during the period of this study, our media content analysis found there had been little reporting of this. The journalists that we spoke to also felt this had been underreported in the media, partly because it was not highlighted sufficiently in early ONS releases, and partly because it is not part of the public vocabulary and not well understood among the public which makes it tricky to report. Some journalists argued, however, that the reasons for economic inactivity, such as illness, caring and early retirement, are well understood, so it should be feasible to communicate this better.

We found very few examples of media sources explaining the collection and measurement of labour market statistics, despite a lack of public understanding and trust of many of these. Journalists described it as challenging. For instance, explaining the methodology behind Labour Force Survey figures could create confusion and even fuel scepticism in the reliability of the data, and equally, it could be challenging to describe the caveats of real-time administrative data.

Recommendations for the ONS and other statistical institutes:

- **Continue developing and improving administrative data sources on the labour market and other economic statistics. These are powerful tools in communicating the UK economic performance to the public, due to its timeliness and granularity.**
- **Explore how to improve the understanding and communication of traditional measures, such as economic inactivity, for instance through focusing on the reasons for inactivity, such as illness, caring and early retirement, rather than the aggregated measure.**

Media reporting of numbers and figures

Our content analysis suggests that some reporters engage in depth with the figures and are able to translate the ONS outputs into less technical language, using numbers only sparingly and explaining the context and significance of these numbers. However, the analysis also shows that reporters often copy phrases and figures directly from the ONS release, and that these are not always appropriate for a public audience. This includes, for instance, many references to quarterly percentage point changes, which our previous research shows the

public often find confusing, and sometimes irrelevant as they are more interested in longer-term developments.

During our interviews, journalists explained it was important for them to look for ways to put numbers into context for their readers, for instance by describing why they mattered, whether it was a record figure, when was the last time they had changed by that much, or by comparing them to the past or to other countries. Some said the ONS outputs could provide more guidance to help journalists identify the context at speed, though others recognised that the context was often political in nature and that it was their job as journalists to identify how figures related to the broader public debate.

Some journalists, however, said the ONS could do more to interrogate the figures more proactively from a data perspective, for instance by exploring to what extent the increase in vacancy numbers could be attributed to structure reasons such as changes to how vacancies are advertised online. Similarly, some also argued that the ONS could take a more proactive role in helping with interpretation of the figures post-release, including correcting misuse of the figures in the media.

Recommendations for the ONS and other statistical institutes:

- **Consider ways to provide more context to figures, for instance through interactive time series data.**
- **Consider mechanisms to more proactively interrogate the figures from a data perspective, or support interpretation of the figures in the public debate.**

ONS as the source of the figures

Only around half of media stories that covered labour market statistics during August to December 2021 mentioned the ONS directly as a source. The other half only used indirect references, such as "employment figures", "jobs data" or "labour market numbers", or did not provide any indication of the source of the data.

During our interviews, journalists often said they would only refer indirectly to the source of the data in the first few paragraphs to maintain the flow of the piece, before mentioning the full name later. Some of the most common phrases included: *"according to the Office for National Statistics"*, *"the Office for National Statistics said"*; and *"data/figures from the Office for National Statistics show"*. Journalists said they would very rarely explain what type of organisation ONS is, assuming their readers would know it was an official body, or that they relied on their readers to trust them as reporters when they quoted the figures.

However, we know from our previous research that the public are often uncertain about the source of labour market figures and would likely benefit from knowing where the information comes from. They often trust the ONS, especially when they are aware of what type of organisation it is, but they distrust the media and politicians.

Recommendations for other economic organisations and the media:

- **Emphasise the importance of referencing the ONS as the source of the figures.**
- **Explore how best to present the ONS as the source of economic figures and explain who they are, in a way that builds trust and maintains engagement.**

Other messengers of the figures

Currently, reporters say they almost exclusively rely on ONS outputs to report the breaking news story around the labour market release. The initial news stories on the morning's labour market data are occasionally updated during the first day, and in subsequent pieces, to allow for a deeper dive into the data and to incorporate comments from experts. However, our content analysis shows that almost half of stories are reported on the day of the release, and two-thirds are reported by the second day. This means that most stories on labour market data are currently primarily driven by the ONS outputs, and arguably not enough by labour market experts outside the ONS who are less constrained in how they can interpret the figures.

Recommendations for other economic organisations and the media:

- **Consider how to provide better and earlier opportunities for independent labour market experts to inform the media coverage on the breaking news story. This would, for instance, enable these experts to identify contexts and narratives around the figures, including political ones, at an early point, which would make the subsequent media reporting more accessible, relevant and engaging for the public.**
- **Consider establishing a body similar to the Science Media Centre (such as the 'Economics Media Centre'), which facilitates the contact between journalists and economic experts, and organises briefings to support journalists in contextualising the figures.**

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Technical Annex

Appendix A: Media content analysis

A.1. Job vacancies

Table A.1: How did the ONS report job vacancy figures?

August 2021	**Main points:** "There were an estimated 953,000 job vacancies in May to July 2021, a record high, having grown by 290,000 compared with the previous quarter and 168,000 more than its pre-pandemic level (January to March 2020). Growth has also been seen in the experimental single month vacancy estimates and Adzuna online job adverts; both continue to surpass their pre-pandemic levels in July 2021, with the single-month vacancy estimates exceeding 1,000,000 for the first time."
September 2021	**Main points:** "The number of job vacancies in June to August 2021 was 1,034,000, which is the first-time vacancies have risen over 1 million since records began, and is now 249,000 above its pre-pandemic January to March 2020 level. Vacancies grew on the quarter in June to August 2021 by 269,300 (35.2%), with all industry sectors increasing their number of vacancies and the majority reaching record levels; the largest increase was seen in accommodation and food service activities, which rose by 57,600 (75.4%)."
October 2021	**Main points:** "The number of job vacancies in July to September 2021 was a record high of 1,102,000, an increase of 318,000 from its pre-pandemic (January to March 2020) level; this was the second consecutive month that the three-month average has risen over one million. All industry sectors were above or equal to their January to March 2020 pre-pandemic levels in July to September 2021, with Accommodation and food service activities increasing the most, by nearly 50,000 (59%). The experimental single-month vacancy estimates recorded almost 1.2 million in September 2021, which is a record high."
December 2021	**Main points:** "The number of job vacancies in September to November 2021 continued to rise to a new record of 1,219,000, an increase of 434,500 from the pre-coronavirus January to March 2020 level, with 13 of the 18 industry sectors showing record highs. However, on the quarter, the rate of growth in vacancies continued to slow down and the experimental single month vacancy estimates showed their first reduction in vacancy numbers since February 2021."

Table A.2: How did the media report the job vacancy figures?

August 2021	95 sources. Most articles referred to "vacancies" although some instead referred to "empty positions", "new jobs", "new posts" or "posts advertised". Many sources described these figures as remarkable, often using phrases such as "record-high", "a record number", "highest ever", "first time ever" or "highest since records began". Most articles cited either the exact figure (935 000) or the fact that vacancies were "over 1m" in July. Many articles also included figures to show the relative increase since the last quarter. Many sources link the vacancy stats to staff shortages in certain sectors, particularly retail and hospitality, the latter driven by the ONS release and quote, which is often cited ("[the hospitality sector recorded] the highest proportion of employers reporting their job openings are hard to fill").
September 2021	121 sources. The majority of the articles refer simply to "job vacancies" without any explanation/definition of the term. Unlike in August and in October, there were few other terms used (i.e., new jobs/new posts). The majority of articles mentioned that vacancies were now over a million, and almost all mentioned that vacancies were at a record high. Some sources also cited statistics on the increase compared to pre-pandemic (i.e., 249,000 more jobs). Some of the articles cited additional statistics on specific sectors, or simply mentioned that vacancies were particularly high in these sectors. These sectors were referred to in different ways, however, and often grouped together into different categories.

	Examples of references: "retail, hospitality and leisure"; "accommodation and food services sectors"; "hospitality and logistics"; "hotels and restaurants"; "transport and storage"; "pubs and restaurants"; "manufacturing, hospitality and transport"; "manufacturers, haulage companies, retailers and restaurants"; "social work, hospitality, science, retail and manufacturing"; "accommodation and food services - the sector which includes hotels, pubs and restaurants". Most articles only listed one or two of these sectors as examples. [Note that the ONS bulletin states the following: "the largest increase was seen in accommodation and food service activities, which rose by 57,600 (75.4%)"] A handful of the articles listed all the vacancy statistics by sector in full.
October 2021	104 sources. The majority of the articles refer simply to "job vacancies" without any explanation/definition of the term. There are a few examples of other phrasings, such as "jobs on offer", "available jobs", "jobs adverts", "jobs up for grabs" and "posts". The majority of articles mentioned that vacancies were now near 1.2 million, and almost all mentioned that vacancies were at a record high. Many mentioned this was a 20 year high. Many also mentioned that this was a 318,000 increase since pre pandemic – some rounded this figure down to 300,000. Many of the articles focused on sector-specific information, for example, providing figures for or descriptions of vacancies for: "HGV drivers", "construction industry", "construction and transport", "transport and storage", "logistics and warehousing", "hospitality", "care", "administration and support sector" "retail sector" "motor vehicle repair sector" "car and motorbike maintenance" "professional activities and manufacturing" "Wholesale and retail businesses". Most articles only mention one or two of these specific sectors. Somewhat confusingly, many of the articles claim that a particular sector saw the "largest increase in vacancies" although these all seem to mention different sectors. Many of the articles described the figures as applying to the period between July and September, while some stated the numbers applied only to September, reflecting the different ways of measuring job vacancies.
December 2021	54 sources. The majority of the articles mentioned a figure, rounding it up to 1.2 million or 1.22 million. One article reported as 1.21 million. Many articles also mentioned the amount of increase -- 184,700. Those articles that did not mention a figure tended to use phrases such as "record numbers of staff vacancies". The majority of the articles refer simply to "job vacancies" without any explanation/definition of the term. A handful of the articles mentioned that there had been a drop in the number of vacancies: "80,000 drop month-on-month - the first fall since February" while other articles simply said that the figures were a "new record".

A.2. Unemployment rate

Table A.3: How did the ONS report unemployment rate?

August 2021	**Main points:** "Following a period of employment growth and low unemployment, since the start of the pandemic, the employment rate has generally decreased, and the unemployment rate increased. However, since the end of 2020, both have shown signs of recovery. In the latest period (April to June 2021), there was a quarterly increase in the employment rate of 0.3 percentage points, to 75.1%, and a decrease in the unemployment rate of 0.2 percentage points, to 4.7%. The economic inactivity rate is down 0.2 percentage points on the previous quarter, to 21.1%." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic, information about unemployment by sex and by duration.
September 2021	**Main points:** "Following a period of employment growth and low unemployment, since the start of the pandemic the employment rate has generally decreased, and the unemployment rate has increased. However, since the end of 2020, both have shown signs of recovery. In the latest period (May to July 2021), there was a quarterly increase in the employment rate of 0.5 percentage points, to 75.2%, and a decrease in the unemployment rate of 0.3 percentage points, to 4.6%. The economic inactivity rate is down 0.3 percentage points on the previous quarter, to 21.1%." **Main points:** "Young people (those aged 16 to 24 years) have been particularly affected by the pandemic, with the employment rate decreasing and the unemployment and economic inactivity

	rates increasing by more than seen for those aged 25 years and over. Over the last quarter, however, there was a strong increase in the employment rate and decrease in the unemployment and inactivity rates for young people." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic, information about unemployment by sex and by duration.
October 2021	**Main points:** "Following a period of employment growth and low unemployment, since the start of the pandemic the employment rate generally decreased, and the unemployment rate increased. However, since the end of 2020, both have shown signs of recovery. Our latest Labour Force estimates for June to August 2021 show the employment rate increased by 0.5 percentage points on the quarter, to 75.3%. and the unemployment rate decreased by 0.4 percentage points, to 4.5%. The economic inactivity rate is down 0.2 percentage points on the previous quarter, to 21.1%." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic, information about unemployment by sex and by duration.
December 2021	**Main points:** "Our latest Labour Force Survey estimates for August to October 2021 show the employment rate increased by 0.2 percentage points on the quarter, to 75.5%. The number of part-time workers decreased strongly during the coronavirus pandemic, but has been increasing since April to June 2021, driving the quarterly increase in employment. The unemployment rate decreased by 0.4 percentage points on the quarter to 4.2% while the inactivity rate increased by 0.1 percentage points to 21.2%." **Main points:** "Young people (those aged 16 to 24 years) have been particularly affected by the pandemic, with the employment rate decreasing and the unemployment and economic inactivity rates increasing by more than for those aged 25 years and over. Over the last quarter, however, there was an increase in the employment rate and a decrease in the unemployment rate to below pre-coronavirus rates." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic, information about unemployment by sex and by duration.

Table A.4: How did the media report the unemployment rate?

August 2021	70 sources. Most sources simply referred to "unemployment" followed by a figure or a description, however a number of the sources did use the term "unemployment rate". Most sources mentioned a specific figure for the unemployment rate (4.7%), usually also indicating that this represented a fall in unemployment in recent months. By contrast, some sources did not mention a figure but simply described a decrease/fall in the rate. Very few sources mentioned the absolute numbers of people who were unemployed. It was common for sources to compare the current figure with pre-pandemic figures. Additionally, sources often noted that the unemployment rate had not risen as much as some economists had anticipated. A small number of the sources focused in on the unemployment statistics for subgroups, such as those in certain regions (Scotland) or ethnic minority groups. Almost none of the sources defined or explained how unemployment is measured.
September 2021	63 sources. It was common for articles to refer to the unemployment "rate", although some just referred to "unemployment" alone. A small number of articles referred to "headline unemployment". One article used the phrase "people out of work" instead of unemployment. The majority of the articles referenced the percentage figure (4.6%) for unemployment, while only a couple mentioned the actual numbers of people who were unemployed. Most of the articles that did mention numbers were on Scotland and thus cited the number of unemployed people in Scotland (118,000 people). "There were 65,000 unemployed in Wales (4.2%), according to the Office for National Statistics." The vast majority of the articles referred to unemployment "falling", while a few talked of it "dropping" or being "down". It was common for sources to omit any specific time reference, only implying change over time through words such as "fallen". However, many of the sources did refer to specific time periods. For example, several used the phrase the "three months to July". Several also stated that the figures referred "to the last quarter" while one referred to "the second quarter". Others used phrases such as "a drop of 0.3% percentage points on the previous quarter" or referred to specific months, for example: "unemployment rates fell to 4.6 percent in May-July". Several of the articles stated that unemployment was "down for the seventh month in a row" – which was also stated by Rishi Sunak in his quote.

	Several of the articles focused on unemployment figures specifically for London and Scotland, as these differed from the national average. The sources often highlight that the recent fall is in line with economists'/analysts' expectations or predictions A very small number of sources defined or explained how unemployment is measured (e.g., the ONS estimates that one in 20 British workers who are actively looking for a job are unable to find one".
October 2021	44 sources. Many of the articles referred to the unemployment "rate", while some just referred to "unemployment" alone. One article referred to "headline unemployment". Many of the articles compare this month's figure to previous ones, particularly last month's figure of 4.6%, as well as the figure for unemployment prior to the pandemic – although some had this at 5% and some at 4%. Thus, while some sources claim that unemployment is lower than it was prior to the pandemic, others claim it is now higher. The vast majority of the articles referred to unemployment "falling", while a few talked of it "dropping" or being "down". It was common for sources to omit any specific time reference, only implying a comparison over time through words such as "fallen". However, many of the sources did refer to specific time periods. For example, several used the phrase "between June and August". Several also used the following phrases: "in the quarter to August", "in the latest quarter to August", and "the three months to August". Some used a combination of these phrases to capture change over time: e.g., "the unemployment rate fell from 4.6 per cent in the three months to the end of July to 4.5 per cent between June and August." None of the sources defined or explained how unemployment is measured.
December 2021	53 sources. Many of the articles referred to the unemployment "rate", while some just referred to "unemployment" alone. The majority of the articles referenced the percentage figure for unemployment, while a small number mentioned the actual numbers of people who were unemployed. The vast majority of the articles referred to unemployment "falling", while a few talked of it "dropping" or being "down". However, several articles stated that there had been a small increase in unemployment in October. Several articles used descriptions such as "unemployment is now down to a record low level"; "unemployment remains steady"; "unemployment is close to an all-time low"; "lowest rate since spring 2020". Many of the sources referred to specific time periods. For example, several used the phrase "in the three months to October"; as well as "in October" and "in the last quarter". Several of the articles mentioned Scotland-specific figures and also figures for youth unemployment. None of the sources defined or explained how unemployment is measured. There are a few references to "people seeking jobs".

A.3. Payrolled employees

Table A.5: How did the ONS report payrolled employee figures?

August 2021	**Main points:** "The number of payroll employees showed another monthly increase, up 182,000 to 28.9 million in July 2021. However, it remains 201,000 below pre-coronavirus (COVID-19) pandemic levels."
September 2021	**Main points:** "The number of payroll employees showed another monthly increase, up 241,000 to 29.1 million in August 2021, returning to pre-coronavirus (COVID-19) pandemic (February 2020) levels. All regions except London, Scotland and South East are now above pre-pandemic levels."
October 2021	**Main points:** "The number of payroll employees showed another monthly increase, up 207,000 to a record 29.2 million in September 2021, returning to pre-coronavirus (COVID-19) pandemic (February 2020) levels."
December 2021	**Main points:** "Our most timely estimate of payrolled employees indicates that in November 2021 there were 29.4 million employees in the UK: up 257,000 on the revised October 2021 level and up

	424,000 on the pre-coronavirus (COVID-19) February 2020 level. It is possible that those made redundant at the end of the furlough scheme will be included in the Real Time Information (RTI) data for a few further months, while they work out their notice period. However, responses to our business survey suggest that the numbers made redundant were likely to be a small share of those still on furlough at the end of September 2021. "

Table A.6: How did the media report the payrolled employee figures?

August 2021	35 sources. Many of the sources cited figures on the number of people currently on payrolls, and their difference with pre-pandemic figures. Many of the sources cited both the total number of people on payrolls, and the relative increase in the last three months. These points were sometimes supported by citing the ONS quote: "The number of people on payroll was up again strongly and has now grown over half a million in the past three months, regaining about four-fifths of the fall seen at the start of the pandemic." The statistic was generally referred by sources as either "payroll jobs", "payrolls", "workers on payroll" or "people in payroll employment". Almost none of the sources defined or explained the concept of payroll employment. There is one source which defines it as "those on PAYE".
September 2021	76 sources. Almost all those sources reported on the fact that the number of payroll employees had returned to pre-pandemic levels, and many of the articles also noted that London and Scotland were exceptions to those. Many of the articles mentioned the two specific figures highlighted in the ONS release, i.e., the change in the number of payroll employees in the last month (241,000) and the current level (29.1 million). The only other figure that was mentioned, though only twice, was that the new level was 1,000 above the pre-pandemic level. As such, media reporting closely followed the figures in the main ONS release. The media did not cover figures in the subpages on the website, such as the annual rise in employees (836,000) or the percentage annual rise (3%). The monthly rise (0%) was covered indirectly through the many mentions to the figures returning to pre-pandemic levels. Many articles reported the ONS quote, either in full or parts of it: *'Early estimates from payroll data suggest that in August the total number of employees is around the same level as before the pandemic, though our surveys show well over a million are still on furlough. However, this recovery isn't even: in hard-hit areas such as London and sectors such as hospitality and arts and leisure the numbers of workers remain well down on pre-pandemic levels.'* It was also common to report the quote by the Chancellor of the Exchequer ("today's statistics show that our plan for jobs is working.... the number of employees on payrolls is back above pre-pandemic levels").
October 2021	48 sources. The majority of the articles compared the current figure to pre-pandemic levels, although some stated that the number of payroll employees was now the same as pre-pandemic levels (e.g., "more than 29m people back in work as employment returns to pre-pandemic levels", "returned to levels seen before the pandemic struck", "back to pre-Covid levels"), while some reported that it was now higher (e.g., "up 122,000 before the pandemic struck", "0.4pc higher than immediately before the pandemic", "above the pre-Covid peak of 29.06m", "more people are now in work than before the pandemic"). Many of the articles mentioned specific figures, in particular the change in the number of payroll employees (207,000), the increase since pre-pandemic (122,00) and the current level (29.2 million). Some articles included the ONS quote ("the jobs market has continued to recover from the effects of the coronavirus, with the number of employees on payroll in September now well exceeding pre-pandemic levels") and it was also common to include the quote from the Chancellor of the Exchequer ("there are now more people on payrolls than ever before").
December 2021	29 sources. A majority of the articles referenced specific figures, in particular three numbers that were all covered in the first sentence of the ONS *Labour Market Overview*: the total number of payrolled employees (29.4 million), the change since the previous month (257,000) and the change compared to pre-pandemic (424,000). Many articles described this rise as substantial using terms such as "record rise", "rocketing", "formidable rate", "boom", "surge", "jumped", "almost half a million".

A.4. Employment rate

Table A.7: How did the ONS report employment rate?

August 2021	**Main points:** "Following a period of employment growth and low unemployment, since the start of the pandemic, the employment rate has generally decreased, and the unemployment rate increased. However, since the end of 2020, both have shown signs of recovery. In the latest period (April to June 2021), there was a quarterly increase in the employment rate of 0.3 percentage points, to 75.1%, and a decrease in the unemployment rate of 0.2 percentage points, to 4.7%. The economic inactivity rate is down 0.2 percentage points on the previous quarter, to 21.1%." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic and breakdown by full-time and part-time workers.
September 2021	**Main points:** "Following a period of employment growth and low unemployment, since the start of the pandemic the employment rate has generally decreased, and the unemployment rate has increased. However, since the end of 2020, both have shown signs of recovery. In the latest period (May to July 2021), there was a quarterly increase in the employment rate of 0.5 percentage points, to 75.2%, and a decrease in the unemployment rate of 0.3 percentage points, to 4.6%. The economic inactivity rate is down 0.3 percentage points on the previous quarter, to 21.1%." **Main points:** "Young people (those aged 16 to 24 years) have been particularly affected by the pandemic, with the employment rate decreasing and the unemployment and economic inactivity rates increasing by more than seen for those aged 25 years and over. Over the last quarter, however, there was a strong increase in the employment rate and decrease in the unemployment and inactivity rates for young people." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic and breakdown by full-time and part-time workers.
October 2021	**Main points:** "Following a period of employment growth and low unemployment, since the start of the pandemic the employment rate generally decreased, and the unemployment rate increased. However, since the end of 2020, both have shown signs of recovery. Our latest Labour Force estimates for June to August 2021 show the employment rate increased by 0.5 percentage points on the quarter, to 75.3%. and the unemployment rate decreased by 0.4 percentage points, to 4.5%. The economic inactivity rate is down 0.2 percentage points on the previous quarter, to 21.1%." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic, and breakdown by full-time and part-time workers.
December 2021	**Main points:** "Our latest Labour Force Survey estimates for August to October 2021 show the employment rate increased by 0.2 percentage points on the quarter, to 75.5%. The number of part-time workers decreased strongly during the coronavirus pandemic, but has been increasing since April to June 2021, driving the quarterly increase in employment. The unemployment rate decreased by 0.4 percentage points on the quarter to 4.2% while the inactivity rate increased by 0.1 percentage points to 21.2%." **Main points:** "Young people (those aged 16 to 24 years) have been particularly affected by the pandemic, with the employment rate decreasing and the unemployment and economic inactivity rates increasing by more than for those aged 25 years and over. Over the last quarter, however, there was an increase in the employment rate and a decrease in the unemployment rate to below pre-coronavirus rates." **Employment in the UK:** Detailed information, including percentage point change compared to pre-pandemic and breakdown by full-time and part-time workers.

Table A.8: How did the media report the employment rate?

August 2021	12 sources. In the sources that referenced employment, the term "rate" was often used and was typically followed by a percentage figure, and sometimes the quarterly change in percentage points. None of the sources defined or explained how employment is measured. Only two sources mention that the employment rate is below pre-pandemic levels (*"overall employment, including the self-employed, rose to 32.3m in the three months to June-the highest level so far this year but still more than 700,000 short of the pre-Covid peak of just over 33m", "employment and unemployment figures are not back to where they were pre-pandemic yet"*). Two of the three times that absolute numbers are used is for subnational figures for Scotland (e.g., "there was a 0.1 percentage point fall in Scotland's employment rate to 74.2 per cent with almost 2.54 million people in work. Across the UK there was a 0.3 percentage point rise to 75.1 per cent", "statistics showed there were 2.538 million people aged 16 to 64 in employment between April and June [in Scotland]").
September 2021	17 sources. 9 out of these 17 focused specifically on the fact that the employment rate had risen among young people. For most of these, it is highlighted through citing the ONS quote: *"the overall employment rate continues to recover, particularly among young workers who were hard hit at the outset of the pandemic"*. Similar to the August release, the majority of articles refer to the

	"employment rate", either quoting the percentage figure or just referring to it as having increased. The majority do not mention the specific numbers of people in work. Most of the articles do not define or explain the employment rate. A notable exception is an article that explains the difference between employment data from the ONS and the HMRC payroll data: *"Despite the rise in the number of payrolled employees in August, which is collected from HMRC data, the ONS said employment in the UK still remained below pre-Covid levels in official data gathered in its labour force survey in the three months to July. Employment, which measures the proportion of people aged 16 to 64 in work, rose steadily to 75.2% [my emphasis] in the three months to the end of July, but remains 1.3 percentage points lower than pre-Covid levels. The official headline rates differ from the HMRC payroll numbers because they are based on surveys rather than company filings and cover a three-month period. The HMRC figures also exclude self-employment and may double count some workers who have more than one job."*
October 2021	17 sources. In contrast to all other months, the vast majority of articles in October all focused on absolute numbers of people in the workforce. In the context of payrolled employee figures being above pre-pandemic levels for a second month in a row, these sources use the employment rate figures to make the points that there are still less people in employment compared to before the pandemic (e.g., *"the ONS labour force survey showed that the employment rate stood at 75.3 per cent in the three months to August, 1.3 percentage points lower than in February 2020, with about 650,000 fewer people in employment"*, *"the working labour force is still nearly 760,000 smaller than before the pandemic"*, *"the total in work is still more than 650,000 down on pre-Covid levels"*, *"total employment is still down by more than 650,000 on pre-Covid levels"*, *"the number of people in a job remains down by 660,000"*, *"by some estimates, the potential workforce - that is people of working age either in employment or seeking it - has shrunk by nearly a million"*, *"there has been a fall of 89,000 workers aged 65 and over compared to the first three months of 2020"*; *"payroll employment may be at record levels, but confusingly the working labour force is still nearly 760,000 smaller than before the pandemic."*). None of the articles define or explain how the employment rate is measured, or how it differs from payroll data, though there are a very small handful of indirect references to this, e.g.: *"the difference is partly explained by the reversal in migrant labour, higher numbers of students, and a big rise in those taking early retirement. But the biggest factor is a big drop in self-employment. For reasons unknown, many of those who used to be self-employed have taken themselves out of the workforce."*
December 2021	11 sources. Similar to August, most sources for this month simply state the employment rate as a percentage figure, sometimes noting the quarterly change in percentage points (e.g., "employment rate rose to 75.5 per cent in the three months to October, up 0.2 percentage points on the previous quarter"). None of the articles define the employment rate, or how it differs from payroll data. In December, a small number of articles focus on the increase in part-time workers, as highlighted by the ONS release for this month. For instance, these sources explain that the increase in the employment rate is "driven by a rise in part-time work", and that there is a "surge in part-time workers" following a sharp fall in the start of the pandemic.

A.5. Redundancy rate

Table A.9: How did the ONS report the redundancy rate?

August 2021	**Main points:** "The redundancy rate decreased on the quarter and has returned to pre-pandemic levels." **Employment in the UK:** "In April to June 2021, reports of redundancies in the three months prior to interview decreased by 1.9 per thousand employees on the quarter to 3.6 per thousand employees, similar to pre- coronavirus (COVID-19) pandemic levels."
September 2021	**Main points:** Not covered. **Employment in the UK:** "In May to July 2021, reports of redundancies in the three months prior to interview decreased by 0.6 per thousand employees on the quarter to 3.4 per thousand employees, similar to pre-coronavirus (COVID-19) pandemic levels.
October 2021	**Main points:** Not covered. **Employment in the UK:** "In June to August 2021, reports of redundancies in the three months prior to interview decreased by 0.2 per thousand on the quarter to 3.6 per thousand employees, similar to pre-coronavirus (COVID-19) pandemic levels."
December 2021	**Main points:** Not covered. **Employment in the UK:** "In August to October 2021, reports of redundancies in the three months prior to interview increased by 0.1 per thousand on the quarter to 3.5 per thousand employees, below pre-coronavirus levels."

Table A.10: How did the media report the redundancy rate?

August 2021	11 sources. Many of these used narrative descriptions, rather than numbers. In the context of the furlough scheme ending the following month, these sources reported that there had not yet been any increase in redundancies (e.g., "no sign of rising redundancies", "no evidence of redundancies increasing", "no sign of a surge in redundancies"). This also included an ONS quote that "there was no sign of redundancies starting to pick up in our survey data ahead of the furlough scheme beginning to wind down". There were also references to the text on the ONS website that the rate was at "pre-pandemic levels" (e.g., "the redundancy rate is back to pre-pandemic levels"). Two sources provided further details by quoting the figures as rates, reporting that the redundancy rate had fallen to "3.6 per 1,000 employees".
September 2021	7 sources. Three references were through a quote by the Chancellor of the Exchequer ("there were fewer potential redundancies notified in August than at any point since the start of last year") and one stated that the ONS said government data suggested there was little evidence to suggest there would be a sharp rise in redundancies when the furlough scheme ends. The remaining sources referred to specific numbers of redundancies, with one source referencing an analysis by the Centre for Ageing Better about the number of redundancies among older employees, and another source referencing the lower number of redundancies in Northern Ireland compared to the previous three months.
October 2021	15 sources. Five of these were through a quote from the Chancellor of the Exchequer ("the number of expected redundancies remained very low in September"). Three sources referred to a specific number of redundancies or to the figure for the rate, including the overall UK figure of 99,000 redundancies for the past three months, the fact that there was "3.6 redundancies per 1,000 employees", and a source that referenced the number of redundancies in Northern Ireland compared to the previous month. Similar to September, most sources cited the figures in the context of the furlough scheme winding down to a close.
December 2021	4 sources. They all used narrative descriptions rather than figures. They focused on the fact that redundancy levels were now lower than before the pandemic, similar to the ONS release (e.g., "redundancy levels are lower than before the pandemic", "redundancies have remained low", "data showed redundancies below pre-pandemic levels").

A.6. Economic inactivity rate

Table A.11: How did the ONS report the economic inactivity rate?

August 2021	**Main points:** "The economic inactivity rate is down 0.2 percentage points on the previous quarter, to 21.1%. **Employment in the UK:** "Since comparable records began in 1971, the economic inactivity rate has generally been falling; however, it has increased during the coronavirus (COVID-19) pandemic. In terms of reasons for economic inactivity, the increase since the start of the coronavirus (COVID-19) pandemic (December 2019 to February 2020) was largely driven by: a) those who are economically inactive because they are students, although this has decreased slightly in the latest period; b) those who are economically inactive because of "other" reasons, although this has decreased slightly since early 2021. This increase was offset somewhat by the large decrease in people who were economically inactive because they were looking after family or home."
September 2021	**Main points:** "The economic inactivity rate is down 0.3 percentage points on the previous quarter, to 21.1%." **Main points:** "Young people (those aged 16 to 24 years) have been particularly affected by the pandemic, with the employment rate decreasing and the unemployment and economic inactivity rates increasing by more than seen for those aged 25 years and over. Over the last quarter, however, there was a strong increase in the employment rate and decrease in the unemployment and inactivity rates for young people." **Employment in the UK:** "Since comparable records began in 1971, the economic inactivity rate has generally been falling; however, it has increased during the coronavirus (COVID-19) pandemic. In terms of reasons for economic inactivity, the increase since the start of the coronavirus (COVID-19) pandemic (December 2019 to February 2020) was largely driven by those who are economically inactive because they are students or for "other" reasons. Both of these categories are now decreasing. The number of economically inactive who stated that they wanted a job increased right at the start of the pandemic but has fallen since to a record low."
October 2021	**Main points:** "The economic inactivity rate is down 0.2 percentage points on the previous quarter, to 21.1%." **Employment in the UK:** "Since comparable records began in 1971, the economic inactivity rate has generally been falling; however, it has increased during the coronavirus (COVID-19) pandemic. In terms of reasons for economic inactivity, the increase since the start of the coronavirus (COVID-19) pandemic (December 2019 to February 2020) was largely driven by those who are economically

	inactive because they are students or for "other" reasons. Both categories are now decreasing. The number of economically inactive who stated that they wanted a job increased right at the start of the pandemic but has fallen since to a record low."
December 2021	**Main points:** "…while the <u>inactivity rate</u> increased by 0.1 percentage points to 21.2%." Main points: "Young people (those aged 16 to 24 years) have been particularly affected by the pandemic, with the employment rate decreasing and the unemployment and <u>economic inactivity rates</u> increasing by more than for those aged 25 years and over." **Employment in the UK:** "Since comparable records began in 1971, the economic inactivity rate has generally been falling; however, it increased during the coronavirus (COVID-19) pandemic. The increase in economic inactivity since the start of the coronavirus (COVID-19) pandemic (December 2019 to February 2020) was largely driven by those who are economically inactive because they are students or for "other" reasons. While those who are inactive because they are students continued to decrease on the quarter, the quarterly increase in inactivity was driven by those who are inactive because of long-term sickness, those inactive for "other" reasons, those looking after the family or home, and those who are temporarily sick. The number of economically inactive people who stated that they wanted a job increased in the early stages of the pandemic but has fallen since to a record low."

Table A.12: How did the media report the economic inactivity figures?

August 2021	2 sources. One source simply reported the figures as part of a larger story about the ONS labour market figures ("economic inactivity was 21.2%"). The other source reported that there was "high rates of economic inactivity" causing the "supply for labour to shrink". It also explained that "high levels of economic inactivity help to keep unemployment down as workers are not in the labour market so they cannot be counted as unemployed".
September 2021	8 sources. Four sources simply reported the quarterly fall in economic inactivity, either with or without reference to specific figures (e.g., "a decrease in inactivity rates", "economic inactivity was 21.1%". Only one source covered the change in the past three months, through some explanation of the figures: *'Economic inactivity fell partly because of a sharp rise in the number of students working or job hunting, while fewer people said they were looking after family.'* The remaining three sources covered economic inactivity as part of a more detailed analysis, in which they covered the longer-term trend of rising economic inactivity during the pandemic. These provided some explanations of the term: *'The additional workers in the workforce have come from the category of people who are not working but are not available to work, the economically inactive as economists call them. In July, compared with April there were 16,000 additional workers in Wales, and 16,000 fewer "economically inactive".'* *'He said two-thirds of that contraction [in the pool of labour] was caused by "economic inactivity" - people removing themselves from the jobs market, such as students, those suffering from ill health, or workers with family responsibilities.'* One of these did not use the term "economic inactivity", but cited and explained the figures: *'The latest data shows that there are 8.7 million people, or 21.1 per cent of the workforce, not on anyone's payrolls. Nor are they actively looking for work.'*
October 2021	13 sources. There seemed to be somewhat more focus on this category compared to previous months. In the majority of the articles, the concept was defined and used as an explanation for why there were less people available in the workforce than before the pandemic. Most of these articles did not cite the actual inactivity figure but described the broader trend that there had been a reduction in the number of people available to work compared to pre-pandemic. Some examples were: *'The main explanation is that since the pandemic began a larger proportion of the workforce has become economically inactive. There are in other words fewer people who could work, in that they are of working age, who are actually working.'* *'Levels of economic inactivity remain high. Britain has a million fewer people either in work or seeking work than it had before the crisis. A third of this can be attributed to falling numbers of*

	migrant workers. The remaining two thirds can be attributed to economic inactivity, with older workers and students checking out of the labour market altogether.' *'…a lot more young people are choosing higher education, and in the jargon have become "economically inactive"'.* In two cases, this was explained without directly mentioning that this was called "economic inactivity": *'Hundreds of thousands more people have stopped looking for work altogether; having either chosen to stay in education until more opportunities arise or drifting into early retirement.'* *'The difference is partly explained by the reversal in migrant labour, higher numbers of students, and a big rise in those taking early retirement. But the biggest factor is a big drop in self-employment. For reasons unknown, many of those who used to be self-employed have taken themselves out of the workforce.'*
December 2021	2 sources. One source simply stated the percentage figure ("economic inactivity is 21.2%"), while the other was part of an expert quote mentioning "a rise in economic inactivity among people of working age, apparently driven by more long-term sickness."

A.7. Hours worked

Table A.13: How did the ONS report the number of hours worked?

August 2021	**Main points:** "With the relaxation of many coronavirus restrictions, total hours worked increased on the quarter, however, it is still below pre-pandemic levels." **Employment in the UK:** "Total actual weekly hours worked in the UK increased by 50.9 million hours from the previous quarter, to 1.00 billion hours in April to June 2021. This coincided with the relaxing of coronavirus lockdown measures, which had stalled the recent recovery in total hours. However, this is still 4.8% below pre-pandemic levels (December 2019 to February 2020)."
September 2021	**Main points:** Not covered. **Employment in the UK:** "Total actual weekly hours worked in the UK increased by 43.2 million hours from the previous quarter, to 1.01 billion hours in May to July 2021. This coincided with the relaxing of coronavirus lockdown measures, which had stalled the recent recovery in total hours. However, this is still 45.4 million below pre-pandemic levels (December 2019 to February 2020)."
October 2021	**Main points:** Not covered. **Employment in the UK:** "Total actual weekly hours worked in the UK increased by 39.9 million hours from the previous quarter, to 1.02 billion hours in June to August 2021. This coincided with the relaxing of coronavirus lockdown measures, which had stalled the recent recovery in total hours. However, this is still 30.9 million below pre-pandemic levels (December 2019 to February 2020)."
December 2021	**Main points:** Not covered. **Employment in the UK:** "Total actual weekly hours worked in the UK have been increasing since the relaxation of coronavirus lockdown measures. Total actual weekly hours worked increased by 17.6 million hours on the quarter, to 1.02 billion hours in August to October 2021. However, this is a smaller increase than in previous periods and is still 27.8 million below pre-coronavirus levels (December 2019 to February 2020)."

Table A.14: How did the media report the number of hours worked?

August 2021	9 sources. Five of these mentioned the billion hours figure (e.g., "the number of hours worked per week – while still below their pre-crisis levels – passed 1bn for the first time since early 2020", "hours worked in a week surpassed the one billion mark for the first time since the start of the pandemic"). This included two sources that cited an ONS quote: "The number of hours worked went past one billion a week for the first time since the onset of the pandemic." Two sources focused on the fact that hours were still below pre-crisis levels ("the number of hours worked remained almost 5% below pre-pandemic levels", "employment and hours worked is still below pre-pandemic levels"). One claimed that total hours worked was higher than before the pandemic ("while total hours worked were 30 per cent higher than before the pandemic…") while one focused on the quarterly percentage increase in hours ("this was because there was a bigger surge in hours worked, 5.4 per cent."

September 2021	4 sources. Three referred to a percentage decrease compared to pre-pandemic or in the last year (e.g., "hours worked in the economy are more than 4 per cent lower than before the virus struck", "total number of hours worked in the most recent quarter increased by 14% over the year. However, that is still 6% below the pre-pandemic levels",). The last source described these changes in terms of actual number of hours citing the figures on the Employment in the UK page ("while total hours worked picked up after restrictions were eased going into the summer, they remained 45.4 million below pre-pandemic levels at just over a billion hours in May to July 2021").
October 2021	1 source. This was an article from the BBC news website on Northern Ireland, which referenced national percentage changes for the last quarter and since before the pandemic.
December 2021	1 source. Similar to October, this was a BBC news website piece on Northern Ireland, this time citing the national percentage change compared to pre-pandemic levels.

Appendix B: Small-scale online experiment

## B.1. Methodology & experiment design

Implementation

The experiment was built on Predictiv, BIT's in-house online experimentation platform. The experiment ran from 21 January to 14 February 2022.

As we were looking for a targeted sample, we were unable to recruit participants via panel providers, and instead looked to recruit journalists and journalism students via several channels including newsletters, e.g., from the National Union of Journalists, and by directly contacting journalists via a PR platform to request their participation.

An incentive for participation was offered with participants being entered into a prize-draw to win a £50 gift card or charity donation for participating. Despite this, recruitment into the experiment proved to be very difficult. While 48 people clicked the link to start the experiment from the various recruitment channels, only 24 completed the survey. More details on the sample and drop out through the process is provided in Section 1.2.

The participant journey is outlined in Figure B.1. Once a participant opened the webpage via a link, they were randomised into a treatment arm, and then received an explanation of the experiment. Participants were shown one of two versions of the labour market summary: the Control, a revised version of the current labour market release and the Methodology prototype. Both of these were the same as the versions used in the General Population experiment (Cathro et al., 2022). Participants were then asked some questions about the material before finishing the survey. While answering questions, participants were allowed to view the material and there was no time limit; this set-up was chosen to better simulate how users would use the site in the real world.

Figure B.1: Participant journey
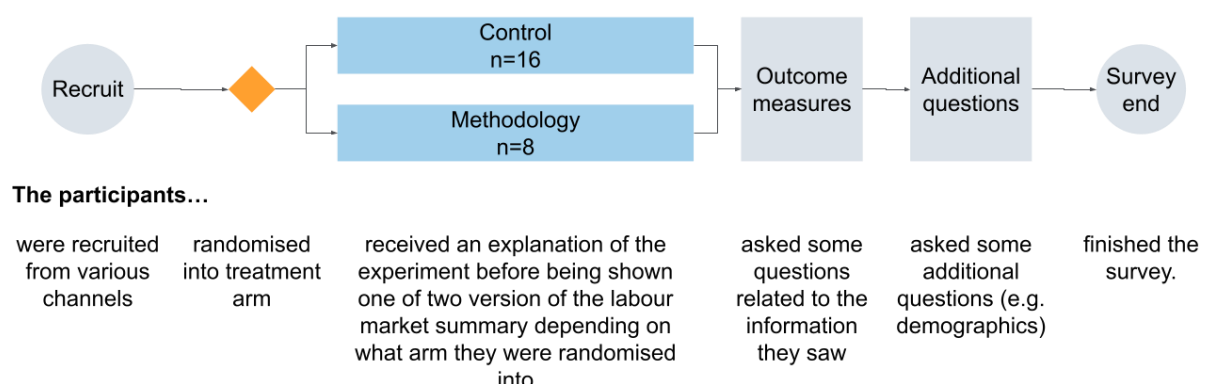
Sample and attrition

We registered 48 unique participants, with 31 in the Control arm and 17 in the Methodology arm. We excluded 4 participants who indicated they were younger than 18 or were not based in the UK. These participants were excluded without seeing any material or further questions. By chance, these ineligible participants were all in the Control arm. A further 11 participants from the Control arm (41%) withdrew from the study, and 9 participants from the Methodology arm (53%). This overall dropout rate (45%) was high, but not unexpected considering this was an online experiment and the task required a high level of attention. Therefore, we removed this data without any imputation.

Our final sample included 24 people. Basic demographics of those in the final sample are provided in Table B.1. Compared to the general population sample, the journalist population appears to contain people who have higher income, have more education, are more engaged with business and economics news, and are from London, though we have not tested whether these differences are statistically significant.

17 people in our sample reported they were working as journalists, and 2 reported being journalism students. Another 5 selected "other", including a blogger, an activist, a political communication scholar, and a public relations consultant. Note that while our sample comprises journalists, journalism students, and others working in media more generally, for ease, in this report, we refer to all these individuals as journalists.

The most common field that journalists reported they worked in was News and Current Affairs (n=11) and we had a further 6 journalists in the sample that specialise in business and economics. 50% of journalists in our sample had more than 10 years of experience. Roughly 70% worked either in print and/or online.

Table B.1: Sample demographics compared to the general population

Variable	Journalist sample (n=24)	General population sample (n=3,849)
Gender		
Female (n=13)	54%	52%
Male (n=11)	46%	46%
Other (n=0)	0%	1%
Age		
18-24 (n=5)	21%	13%
25-54 (n=11)	46%	54%
55+ (n=8)	33%	33%
Household income		
Less than £30,000 (n=6)	25%	50%
More than £30,000 (n=18)	75%	50%
Location		
London (n=8)	33%	13%
Midlands (n=1)	4%	16%
North (n=6)	25%	23%
South & East (n=7)	29%	29%
Wales, Scotland & N.Ireland (n=2)	8%	19%
Race		

White (n=20)	**83%**	**83%**
Black (n=0)	**0%**	**9%**
Asian (n=4)	**17%**	**4%**
Other ethnic minority (n=0)	**0%**	**4%**
Education Level		
No degree (n=5)	**21%**	**70%**
Degree or higher (n=19)	**79%**	**29%**
Prefer not to say (n=0)	**0%**	**2%**
Engagement with economics and business news		
Once a week or more (n=21)	**87%**	**47%**
Less than once a week (n=3)	**13%**	**53%**
Previous study of economics (or similar)		
Yes (n=8)	**33%**	**28%**
No (n=16)	**67%**	**72%**
Field of journalism (could choose more than one)		
News and Current Affairs (n=11)	**46%**	N/A
Investigative (n=7)	**29%**	
Social affairs (n=6)	**25%**	
Business and economics (n=6)	**25%**	
Sector specialists (n=4)	**17%**	
Opinion pieces (n=3)	**13%**	
Arts and culture (n=3)	**13%**	
International (n=3)	**13%**	
Sports (n=2)	**8%**	
Science (n=1)	**4%**	
Occupation		
Journalist (n=17)	**71%**	N/A
Journalism student (n=2)	**8%**	
Other (n=5)	**21%**	
Media		
Online (n=12)	**71%**	N/A
Print (n=12)	**71%**	
TV (n=2)	**12%**	
Years of experience as a journalist		
0-3 years (n=6)	**25%**	N/A
4-6 years (n=2)	**8%**	
7-10 years (n=4)	**17%**	
10+ years (n=12)	**50%**	

Analysis strategy

To understand how journalists understood the labour market summary and how they would use similar releases in their work, we break up our analysis to look at several outcome measures or topics. **Due to the very low sample size and subsequent lack of power, we do not use statistical testing, and instead present only descriptive statistics. We supplement these with qualitative data from free text fields.** We also broadly compare

results for the journalist population to those from our companion general population study (Cathro et al., 2022).

Comprehension of labour market information

Participants completed 14 comprehension questions which tested their understanding of the data provided in the ONS release:

- five questions tested whether participants could **identify** key statistics from the text (e.g., "*Based on number or job vacancies, which 3 industries would it be easiest to find a job in?*")
- nine questions tested understanding of definitions of key labour market statistics, and whether they could be **applied** to classify fictional people into whether they were considered employed, unemployed, or inactive (e.g., *"Based on what you read, which group do the following people belong to? (employed, inactive, unemployed)..."Peggy, who is 63 and retired."*)

Our main outcome is the percent of correct answers across the 14 items. We looked at comprehension as we anticipated that improving comprehension, particularly on commonly misunderstood topics, would improve quality of reporting on the labour market.

To provide additional detail on comprehension, we also asked participants how easy it was to understand the information, and we report on the percentage of participants who thought it was 'moderately' or 'very' easy to understand. We also look at the time spent looking at the web page and completing comprehension questions, recorded in seconds on Predictiv.

Intention to report on material

Our main outcome measure for this topic is the percentage of participants answering 'Yes, probably' or 'Yes, definitely' in response to: "*Imagine you have been sent the latest ONS labour market statistics. Would you want to write a story or produce a feature about it?*"

We also look at which facts from the labour market release they would use if asked to report on the labour market, i.e., a count of selections for eight data series given in the briefing (unemployment rate, vacancies etc.). This will help identify the information journalists feel is most useful for their work. Additionally, we will provide a breakdown of the percentage of participants who report thinking the release contains all or most of the information they'd need to write the story. Free text responses also provide data on why participants would or would not want to report on the labour market statistics, what participants think the public wants to know about labour market data, and what additional information journalists want the releases to include.

Sentiment

Finally, we look at the sentiment of participants towards the labour market release. We asked questions to capture how interesting they found it, whether they thought the information in the release was important to understand the country, and whether they thought the statistics were accurate, and free from political influence. We also asked if participants had any other feedback on the labour market summary and will present the feedback here as part of the sentiment section.

The following caveats are worth bearing in mind about the robustness of the research:

Small sample size

We were only able to recruit a very small number of journalists into the sample, meaning we are underpowered to conduct statistical hypothesis tests or to detect statistically significant differences between the treatment arms. For this reason, we present only descriptive statistics, and caution should be exercised when interpreting the differences between treatment arms.

Sample validity and representativeness

We recruited using industry newsletters, posts on social media, and targeted emails. While we chose the channels of recruitment carefully to target journalists, students or those working in media, we're not able to confirm that everyone who entered the student was in fact part of our target population, and we rely on self-reported data about occupation which could be inaccurate.

As far as we're aware, there are no data sources on the population of journalists in the UK against which we could compare how similar our sample is on demographic characteristics or areas of focus. Given the recruitment method used, our sample is unlikely to be representative of the performance of journalists in the UK as a whole.

B.2. Results

In this section, we sequentially document the results of our experiment described above. We first discuss comprehension of the material, including ability to identify key information in the text and applied understanding of definitions. We then look at whether participants say they would write a story or produce a feature about the material, and what they would write about. Finally, we look at sentiment, including trust.

Comprehension

Comprehension overall

Our comprehension metric is a combined score across 14 outcomes in total (5 identification outcomes and 9 applied questions). 5 of these 14 questions were identifying numbers from the text and the remaining 9 were more applied understanding questions (as specified in section 1.2.3). Mean comprehension across all questions was 90% (Table B.2).

Comprehension in this sample is substantially higher than in the general population, where average comprehension across all questions was 67%. In that sample, overall comprehension was 65% in the Control arm and 69% in the Methodology arm, compared to the 90 and 89% we see for each arm respectively here.

The difference in comprehension likely may reflect the fact that the journalists in our sample report more education and more frequently engaging with business and economic news, so

they may have been more familiar with the subjects of the summaries than those in the general population sample.

Table B.2: Summary of comprehension outcome

	Total (n=24)	Control (n=16)	Methodology (n=8)
Overall comprehension score	**90%**	**90%**	**89%**
Average of **identification questions**	86%	85%	88%
Average of **applied** questions	92%	93%	90%

Identification vs. applied comprehension questions

Table B.3 contains a breakdown of our comprehension into individual identification questions and applied questions.

Identification questions asked participants to identify key statistics from the text, like the current unemployment rate. The average score on identification outcomes was 86% across all participants in this sample. This was substantially higher than in the general population sample, where the average score among participants who saw the same material was 58%. The questions that fewest people got right within this category were about the industries with the most vacancies and how the number of people in work compared to before the pandemic.

Applied questions asked participants about definitions of concepts and to apply them to categorise fictional people. The average score on applied questions was 92%. Similar to above, this was substantially higher than in the general population sample where the average score was 72%. 92% of people in our journalist sample (22 of 24) were able to correctly identify the definition of the unemployment rate; fewer than half of the participants in the general population sample were able to do so, suggesting a much higher degree of familiarity with this concept in the journalist sample.

Table B.3: Breakdown of all comprehension outcomes

	Total (n=24)	Control (n=16)	Methodology (n=8)
Overall comprehension score	**90%**	**90%**	**89%**
Average comprehension of **recall** outcomes	**86%**	**85%**	**88%**
Knew there are fewer people in work now than before the pandemic	79%	81%	75%
Knew that 75% of working age adults are employed	88%	81%	100%
Knew the number of job vacancies in the UK were higher now than before the pandemic	96%	94%	100%
Knew the 3 industries with the most job vacancies	79%	81%	75%
Knew the unemployment rate was 4.3%	88%	88%	88%
Average understanding of **applied** outcomes	**92%**	**93%**	**90%**
Knew what unemployment meant	92%	88%	100%
Knew someone who had quit their job and was looking for a new one was unemployed	92%	94%	88%
Knew someone who had been made redundant and is	92%	88%	100%

looking for a job was unemployed			
Knew some who is disabled and not looking for work is economically inactive	96%	100%	88%
Knew a full-time carer is economically inactive	92%	94%	88%
Knew a full-time student is economically inactive	83%	88%	75%
Knew someone who is 63 years old and retired is economically inactive	92%	94%	88%
Knew someone who is working part-time is employed	100%	100%	100%
Knew someone who works 10 hours per week is employed	92%	94%	88%

Perceived ease of understanding

92% of journalists in the sample felt the report was moderately or very easy to understand (Table B.4), compared to 66% of participants in the general population sample who saw the same material and thought the same. This aligns with there being higher scores on the comprehension questions above for journalists than the general population. Perceived ease of understanding was 12 percentage points higher in the Methodology arm than in the Control arm, though we do not test if this difference is statistically significant due to small sample sizes.

Table B.4: Perceived ease of understanding

% of participants who	Total (n=24)	Control (n=16)	Methodology (n=8)
Thought the release was moderately or very easy to understand	92%	88%	100%

Time spent looking at web page and answering comprehension questions (in minutes)

The average time that people spent reading the materials when initially shown was 3 minutes 59 seconds (Table B.5). There was a large difference in mean initial reading time between the Control and the Methodology arm; the average participant in the Methodology arm spent an additional 4 minutes 39 seconds reading. However, this result is overwhelmingly driven by a single participant in the Methodology arm that spent 42 minutes 54 seconds with the materials. The median time spent reading the release was 19 seconds higher in the Methodology arm relative to the Control release. Our general population results found no evidence of differential reading time between the Control and Methodology arms (1 minute 50 seconds). The Methodology release was 33 words longer than the Control, so some mechanical difference is to be expected.

Table B.5: Time spent on reading and answering questions

Time taken	Total (n=24)	Control (n=16)	Methodology (n=8)
Median time spent initially reading the release	1m 56s	1m 56s	2m 15s
Mean time spent initially reading the release	3m 59s	2m 26s	7m 5s
Median time answering comprehension questions	4m 9s	3m 38s	6m 34s
Mean time answering comprehension questions	4m 39s	3m 51s	6m 43s

The average time that people spent answering the comprehension questions was 4 minutes and 39 seconds. In the Methodology release, participants spent approximately 3 minutes longer answering questions than in the Control. As the comprehension scores were roughly equivalent between the stimuli, we find some evidence that the Methodology treatment slowed down journalists from finding the correct information. In the absence of a baseline condition and our small sample size, we have limited confidence in this result.

Intention to report

Overall intention to report on the labour market summary

For overall intent, our main outcome is the proportion of participants who said that they would 'probably' or 'definitely' write a story or produce a feature about the labour market summary. We find that 15 of our 24 journalists (62%) said that they would produce a feature about this summary (Table B.6). This includes 9 of 16 journalists (56%) who saw the Control labour market release and 6 of 8 journalists (75%) who saw the 'Methodology' release. There is likely room for improvement in this measure, as 1 in 3 journalists did not say that they would write a story or produce a feature. The methodology arm offers promise to improve intentions but may require further testing.

Table B.6: Intentions to report on labour market summary

% of participants who	Total (n=24)	Control (n=16)	Methodology (n=8)
Would 'definitely' or 'probably' **write a story or produce a feature** about the labour market summary	62%	56%	75%

Why they would or would not report[6]

Journalists were asked why they would or would not write a story or produce a feature about the labour market release (Table B.7). In both releases, journalists who would write a report tended to think the information would be generally interesting to the public, especially considering the pandemic. Interestingly, of the 6 journalists who said they would produce a feature after seeing the Methodology release, 4 provided specific reasons which were more specific than general interest. For example, they highlighted job vacancies and employment statistics as particularly interesting, while no journalists explicitly mentioned these statistics in the Control arm. While we cannot make any concrete conclusions about these statements, this feedback would suggest that participants engaged more with the technical detail of the report in the 'Methodology' arm.

Table B.7: What made you want to write about the labour market release?

	Because the information about the current state of the economy is generally newsworthy, especially following the pandemic.

Control	Methodology
"It is relevant to society and the economy"	*"It's very topical and affects many people"*
"Public interest in reporting the stats. There have been changes over time - which makes it newsworthy"	*"Covering the UK's employment and wider economic conditions is important, especially post-pandemic"*
"Because people want to know the state of the economy"	
"To examine the speed of the post-pandemic recovery"	

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[6] All icons from www.flaticon.com

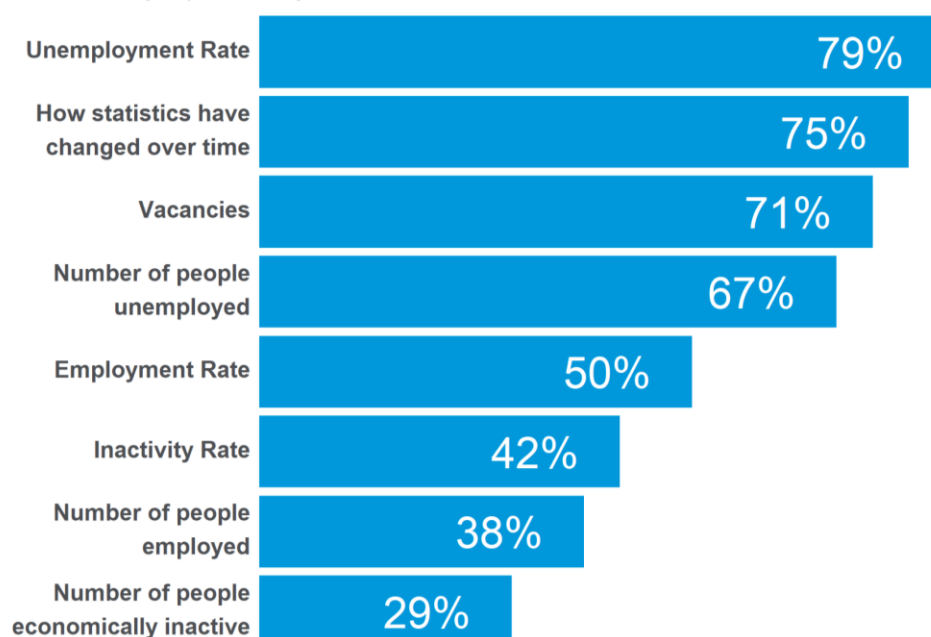| Control	Methodology
"Current information that dispels some myths"	*"Who are the 24% not in work?"*
	"Surprising how many more people not looking for work when so many vacancies"
	"The number of unfilled vacancies has hit a record high"
	"Some facts seem counterintuitive but concern the general public and deserve to be clarified."

The 3 journalists in the Control arm who said that they would not write a feature, said so because the release *"doesn't seem to describe a milestone or turning point in the labour market in the aftermath of the pandemic. [It's] progress, but not very exciting.",* the release was *"not presented well enough",* or they did not agree with the statistics and said "*this economically inactive is [expletive]. just be honest and say [the] unemployment rate is 25%!".* Just 1 journalist in the Methodology arm said they would not write a feature. Their reason was that they *"don't have a habit of writing comments about social issues".* Thus, we can see that some journalists were not interested in this information, some did not agree with the statistics and others didn't see this topic as being in their journalism field.

What they would report on

When asked *"Imagine now that you've been asked to write an article or produce a feature on the latest employment figures. What facts would you pull out for your audience?"* Journalists' top 3 topics selected were the unemployment rate (79%), how statistics have changed over time (75%) and vacancies (71%), shown in Figure B.2.

Figure B.2: Statistics journalists would use

"Imagine now that you've been asked to write an article or produce a feature on the latest employment figures. Which facts would you pull out for your audience?"

Statistic	Percentage
Unemployment Rate	79%
How statistics have changed over time	75%
Vacancies	71%
Number of people unemployed	67%
Employment Rate	50%
Inactivity Rate	42%
Number of people employed	38%
Number of people economically inactive	29%

*N=24 journalists sampled between January 21st and February 14th, 2022

In a similar vein, journalists were then asked, *"What do you think readers or viewers want to know most about the labour market?"* (Table B.8). Answers were broadly in line with the previous question with unemployment, trends over time and vacancies being highlighted as most interesting. Additionally, journalists thought that people would want to better understand the reasons why the economy looks like it does and have it better contextualised for the general public. We specifically aimed to do both things in the 'Relatable' and 'Personas' labour market releases that we tested in our General Population experiment; these versions were not tested here.

Table B.8: What do you think readers or viewers want to know most about the labour market?

Further detail on employment, vacancies, and trends over time.	*"Number of vacancies, number of people chasing each vacancy, which sectors offer the best and worst chances to get a job. Unemployment and employment rates as background info"* **- Control** *"availability of other work, better career options, training opportunities"* **- Control** *"How unemployment and employment rates compare with previous periods, particularly pre-Pandemic, and where the vacancies are."* **- Control** *"How has the labour market changed since Covid 19 and what is the outlook for the UK Labour market in the next 10 years."* **- Control** *"how easy or difficult it might be to get a job. whether pay is likely to rise or fall, and where (from labour shortages). what is the trend. how has the pandemic distorted the labour market and are changes long-term"* **- Control** *"The unemployment rate, the number of vacancies and the direction of travel. "* **- Control**

Further explanation of reasons why the economy looks how it does.	*"How many unemployed people there are and why and what the sectors with the most vacancies are and why." - **Methodology*** *"Current data and how that has changed over time. What are the headline figures. Any record figures. And the reasons behind these." - **Control***
Further explanation about what this means for the general public.	*"Whether it's easier or harder to get a job" - **Control*** *"How secure their own income is. Is there work for those who want it." - **Control*** *"Whether their personal or family situation is common or not " - **Control*** *"availability of other work, better career options, training opportunities" - **Control***

Finally, journalists were asked for their own view. *"What other information would you want to see in this ONS summary?"* (Table B.9)*.* Here themes were similar to that of the general population report. Specifically, around including more on demographic breakdowns (on age, region, race and more), more information on vacancies. Journalists were also interested in what the labour market release means for the general public.

Table B.9: What other information would you want to see in this ONS summary?

People in both arms wanted splits of the data by region and demographic characteristics (e.g., age, gender, race, income).

"Breakdowns by age, region, ethnicity, gender, unemployment levels, employment levels, skills shortages, popular / unpopular work sectors" **- Control**

"Regional breakdown" **– Control**

"County by County figures" **– Methodology**

"Who are these people not in work?" **– Methodology**

People in the Control additionally wanted more detail on job vacancies and availability of jobs.	**People in the Methodology arm wanted real world context, i.e., what the information means for real people.**
"Number of candidates per vacancy in various sectors." *"...Sense of proportion for the vacancies - what size each sector is"* *"What are the fastest growing work sectors and the slowest ? Where are most of the workers based and how has that changed in the last few years…"* *"A figure for those leaving employment hence the increase in vacancies. This in turn might be linked to migration figures"*	*"Maybe quotes I could use or more explanation of why but I would go to other sources for this as well anyway"* *"I want to hear some of the real feelings of ordinary people about the situation, or why this situation happens"*

Perceptions on amount of information

Following these questions, we asked participants whether they felt like the labour market release had all the information they needed to write a report. Table B.10 shows that only 11 of 24 journalists (46%) felt that the labour market release contained most or all the information they would need. 6 of 16 journalists (38%) who saw the Control labour market release felt they had all or most of the information, compared to 5 of 8 journalists (63%) who saw the Methodology release. The large proportion of journalists who felt they didn't have enough information is not surprising considering the in-depth text feedback we received from participants about additional information that both they and their readers would like to see.

Table B.10: Views on the amount of information

% of participants saying that the release…	Total (n=24)	Control (n=16)	Methodology (n=8)
Contains all or most of the information they would need to write a report	46%	38%	63%

This suggests that journalists were more satisfied with the information (or presentation of information) in the Methodology labour market release. Those that saw the Methodology arm were both descriptively more likely to write a story or produce a feature about the information and more likely to say the release had most or all in the information they would need. In text feedback, journalists tended to comment in more detail on the Methodology release, suggesting more engagement. Therefore, in terms of intentions, it appears that the Methodology arm performed better than the Control.

Sentiment

Finally, we discuss how journalists felt towards each labour market summary. Specifically, we were interested in whether journalists felt the statistics were interesting, important to understand the country, as well as whether they thought they were accurate, and free from political influence. The results on these survey questions are summarised in Table B.11.

Table B.11: Journalist sentiment

% of participants who	Total (n=24)	Control (n=16)	Methodology (n=8)
Thought the information was moderately or very interesting	88%	88%	88%
Thought the information was moderately or very important to understand the UK	83%	94%	63%
Thought the information was moderately or very accurate	92%	94%	88%
Is not at all / a little politically influenced	88%	81%	100%

88% of the journalist sample thought the information contained in the labour market release was moderately or very interesting; this was the same for both participants who saw the Control and the Methodology versions. This is more than 20 percentage points higher than in the general population sample, where only 60% of participants who saw the same material thought the same thing.

There was a similar result with the percentage of participants thinking the information was either moderately or very important to understand the country. 83% of journalists thought this was the case overall, including 94% of participants in the Control arm and 63% of participants in the Methodology arm. Due to small sample sizes, we cannot say whether these differences are statistically significant. In the general population sample, approximately 7 in 10 participants thought the information was important to understand the country.

In the general population sample, we also looked at whether participants thought the information in the release was accurate and whether participants perceived it as being not politically influenced. As is the case with other measures discussed here, journalists were more likely to report that they thought the information was very or moderately accurate (92%) and not at all or a little politically influenced (88%). The proportions in the general population on these questions were between 74% and 61% respectively, indicating that trust was higher in this sample than the other.

We gave participants an opportunity to give any further feedback they had on the ONS summary (Table B.12). Overall, most of the feedback was positive for the release. There was criticism that the information was "too dense" from the Control arm, with some mentioning the use of percentages might alienate the public and another suggesting a greater focus on tables and figures would be helpful. The Eurostat reports were mentioned as a reference. Others in the Methodology arm said that the "macro picture doesn't speak of the whole story" and that adding some case studies, or "cultural opinions" might improve the release. In the Control arm, one participant specifically called for more information about how the data is generated.

Table B.12: Other feedback on releases

Control	Methodology
Participants that saw the Control release thought it was too dense, and that greater use of tables, figures and references to other releases may be helpful.	**Participants in the Methodology release wanted context and opinion**

Control

"Like all ONS releases, the information is far too dense. As a reporter I just need some tables with figures and a few sentences of text. Eurostat manages this for 27 countries in a couple of pages and it is much clearer and informative."

"The last of the pages was the easiest to understand. I know what percentage points are but I doubt many of the general public do."

"It lacks context, especially correlation with other surveys, such as on hospitalisations, ongoing disability and social impact of Covid-19 under the present circumstances."

Control participants identified concerns that may have been clarified in the methodology arm

"I am not altogether convinced of the accuracy of the bare stats about employment and unemployment and vacancies, partly because I do not know how they are gathered, except that it by a survey, which can be unreliable."

"... Also the information on employed, unemployed and economically inactive categories lacks clarity on where students, retired people and full-time carers fit."

Methodology

"[The] macro picture doesn't speak of the whole story" - **Methodology**

"It is relatively objective. Sometimes I want to know more about the social and cultural opinions." - **Methodology**