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Seasonality and regional disparity in attention to homelessness in UK newspapers between 2001 and 2020

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ABSTRACT

This research examined the amount of media attention to homelessness in 11 UK newspapers with two main research questions: (1) Does the media coverage exhibit seasonal cyclical patterns in their attention to homelessness? (2) Do England's nine regions differ in the attention they receive after adjusting for their relative homelessness levels? Time series of all 4105 news reports with the keyword "homeless*" in their headline between 2001 and 2020 were tested for meteorological and monthly seasonal effects, revealing significantly greater attention in winter but decreased coverage in spring and summer. Contrary to expectation, further analysis suggested that the increased winter coverage was not related to the colder months but to the Christmas period. Regarding regional differences, London received the highest mentions in the news but after adjusting for the relative burden of homelessness, the North West emerged as receiving the most relative coverage. The East Midlands and East of England had the lowest adjusted attention scores. As suggested by the public arenas model, the findings of this research suggest that media focus on social problems like homelessness be culturally patterned with key events like Christmas shaping issue-prominence. Similarly, regional imbalances in attention may reflect a systemic bias in news reporting.

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Introduction

Mass media play a crucial role in bringing societal issues to the forefront of public attention. McCombs and Shaw (1972) consider this to be the agenda-setting function of mass media as it informs the public of the important social issues of the day and the action needed on them. The scientific study of the coverage of social problems in the media takes two broad approaches. In the first approach, the focus is on examining the content of the coverage to understand how the media constructs the issue and frames the problem. These studies are generally qualitative in nature and there is a healthy research tradition of examining the framing of homelessness in the media. Research taking this approach has noted that the media tends to stigmatize, criminalize, and even dehumanize people experiencing homelessness. Parnell's (2023) analysis of the UK digital news provider

MailOnline revealed highly negative representations of people experiencing homelessness with stigmatizing ideas like "mentally ill criminals" (p. 17), creating a moral panic around the social problem. Research conducted beyond the UK has also found similar themes. For example, Lyons and Smedley (2021) adopted a gender lens to examine the portrayal of homelessness in five Australian news outlets and found that while the coverage was generally sympathetic, there was a tendency to reinforce the notion of deservingness in homelessness. Usually, these themes result in the media emphasizing the need to exercise control over people experiencing homelessness, while also framing them as separate from other people in the society (Schneider et al., 2010; Zufferey, 2014).

A second way of studying the diffusion of social problems in the public sphere involves examining the regularity and volume of attention they receive

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in the mass media. Both media space and public attention are scarce resources, limiting the number of social issues that occupy the public consciousness at any given point in time (Hilgartner & Bosk, 1988). Mass media play a crucial role in shaping which social issues enter and remain active in public consciousness. The issues that are more frequently covered in the media are more likely to be perceived as important (Coleman et al., 2008), and repeated and sustained coverage makes it easier for them to move from media to public agenda. In other words, the quality and nature of attention that is investigated in the first approach helps us understand *the ways in which* the public may begin to think about social issues. On the other hand, the quantity and regularity of attention has an impact on *which* social problems manage to enter and sustain their presence in public consciousness. This is critical for social problems like homelessness because changes in opinions, attitudes and public behavior are likely to follow only when a problem become salient in the public consciousness.

Taking the second approach, this research examined the attention given to homelessness in the British media. The two goals of this work were guided by the issues of seasonality in media attention to homelessness and fair representation of the regions of England in the attention they receive.

Investigating seasonal patterns in media attention

The prominence of social issues in public consciousness remains in a constant state of flux – public attention, interest, and engagement rise and decay with time, creating issue-attention cycles (Downs, 1991). Previous research has demonstrated that these cycles follow different patterns depending on the issues at hand, the nature of the public space, and the time period considered (Jünger & Gärtner, 2021). Previous works have demonstrated that the significance afforded to a social issue is seldom objective and the same issue receives different amounts of attention in different societies. For example, Schäfer et al. (2014) found that long term temperature developments had an impact on attention given to climate change in German newspapers but not in other countries in the study. Attention also changes when certain social events act as catalysts for a sudden rise or fall in the amount coverage given to an issue, as demonstrated in Gladun's (2020) work on changes in media coverage of protests in Ukraine.

Seasonality refers to time-dependent cyclical variations in the levels of the variable being observed and is routinely observed both in nature and in social

worlds. For example, the prevalence of influenza in the general population (Lofgren et al., 2007), and mental health queries on the internet (Ayers et al., 2013) both show a seasonal pattern in temperate climates, peaking during the winter months each year. There is also evidence for seasonality in media coverage of social issues such as sustainability and climate change (Barke-meyer et al., 2018). When it comes to media attention on homelessness, the presence of a seasonal pattern has often been implied by researchers. In their seminal work *Down on their luck: A study of homeless street people*, Snow and Anderson (1993) argued that American public interest in homelessness heightens during the Christmas. Seasonality in media attention to homelessness has been formally investigated only in a relatively small number of studies and mostly within the American context. For example, Penner and Penner (1994) looked at quarterly attention to homelessness in an American newspaper's cartoons between 1975 and 1989 and found it to be highest in the last quarter (October and December). Buck et al. (2004) examined American newspapers within a 30-year period (1974–2003) for differences in the amount of newspaper coverage between spring, summer, autumn, and winter seasons. Using a chi-square analysis, they reported greater coverage during autumn and winter.

This research is the first study that attempts to systematically quantify attention received by the social issue of homelessness in the British press and investigate seasonal attention cycles. In doing so, it also extends the methodologies used previously and uses a time series approach to capture the nature of media attention more accurately. This is crucial because if attention to a social issue follows a cycle (monthly, quarterly, or seasonal), the changes in attention over different cycles are also likely to be influenced by the overall trend. For example, if attention to homelessness showed a monthly increase in a particular period, more articles appearing in December as compared to June may not necessarily reflect a seasonal pattern – it may merely be the result of a general trend in the data. For this reason, the grouping of observations from multiple years into months or seasons is unsuitable for examining seasonal variations. A time-series modeling allows for the estimation and removal of trend components and supports a more precise estimation of the seasonal dependence of news attention. Therefore, this research uses a time-series approach to investigate two related questions about seasonality in media attention to homelessness. First, it explores if British media provide more attention to homelessness during autumn and winter as compared to spring and summer

seasons. Second, it examines whether the seasonal patterns in issue attention cycle are more closely related to the calendar months. The two null hypotheses of no difference are stated below:

H₀1: Meteorological seasons in the UK (spring, summer, autumn, and winter) do not have an impact on the attention homelessness receives in newspapers.

H₀2: Calendar months (January–December) do not have an impact on the media attention to homelessness.

Investigating disparity between English regions in media attention

There is a historic perception of a divide between the North and the South in receiving media attention. A survey examining fairness of coverage given to regions of the UK revealed that participants from Midlands, North of England, Wales, and Scotland considered their respective regions to be less fairly covered as compared to London and the South East (Newman et al., 2021). Extant empirical works support these perceptions. Examining a ten-day corpus of eight most widely read national dailies, The New Statesman reported that London and the South-East accounted for nearly half (49.1%) of news stories despite having just over a quarter of the population.¹ The North-West of England also received more than its proportional share of attention while all other regions were underrepresented. Similarly, audience reports have noted a perception that BBC news and current affairs content reflected a “middle-class, white and London-centric” perspective (Ofcom, 2019, p. 34). Therefore, the second area of inquiry pertaining to the amount of attention to homelessness in the newspapers was around the differences between different regions of England. This was done in two ways. First, the research examined the relative attention each region of England received after adjustment were made for the respective rates of homelessness. Second, it explored the relationship between the rate of homelessness and media attention in each of the nine regions of England.

To summarize, this research presents a quantitative examination of attention paid to the social problem of homelessness in the British media. Using 20 years of homelessness news coverage in 11 national newspapers, seasonal patterns in issue attention cycle, and regional variations in attention are systematically examined.

Methods and analysis

Corpus creation: Access to newspaper database was provided by [anonymised University] through

ProQuest European News Stream database. Eleven national newspapers whose archives for the 20-year period (2001–2020) were available became the source of the data for the research. The database was searched with a wildcard keyword <homeless* > appearing anywhere in the report. This allowed the selection of any article that containing words like “homeless”, “homelessness”, and hyphenated words with the word stem. The resulting corpus was cleaned for duplicates and repetition in different regional editions of the paper. The final corpus contained 58,181 news articles. Given the size of the dataset it was difficult to undertake a human identification of articles where homelessness was the focus of the news report. Therefore, focus stories on homelessness were identified using the proxy of the keyword appearing in the headline of articles. If the keyword only appeared in the body of the report, homelessness was regarded as an incidental theme in the article. The population of 4105 focus stories across all newspapers over the 20-year period became the basis of this study. Table 1 provides the details of the corpus.

Testing for seasonality: Using the number of focus news stories published in the 20 year period between 2001 and 2020, two time series of newspaper articles were created. The first series (X_{st}) was of the number of articles published during meteorological seasonal cycles. In Equation (1), X is the number of headline stories, s_i is the meteorological season (spring, summer, autumn, winter), and y_j is the year. This series had a frequency of 4 (four seasons) and contained 79 data points beginning in spring 2001 and ending in autumn 2020.

Table 1. Dataset of news articles on homelessness, 2001–2020.

Newspaper	Category	Focus stories	Newspaper	Category	Focus stories
The Daily Mirror	Left leaning; Daily	1199	The Sunday Times	Right leaning; Sunday paper	169
The Times	Right leaning; Daily	647	The Sunday Mirror	Left leaning; Sunday paper	163
The Sun	Right leaning; Daily	601	The Mail on Sunday	Right leaning; Sunday paper	73
The Daily Mail	Right leaning; Daily	595	The Observer	Left leaning; Sunday paper	53
The Daily Telegraph	Right leaning; Daily	309	The Sunday Telegraph	Right leaning; Sunday paper	39
The Guardian	Left leaning; Daily	257	TOTAL		4105

The second series (X_{my} , Equation (2)), had a frequency of 12 (monthly) and was repeated for 20 cycles to contain 240 data points. In Equation (2), m_i represents the month (January, February, ..., December), and y_j represents the year (2001, 2002, ..., 2020).

$$X_{sy} = X_{s_i y_j} \quad (1)$$

$$X_{my} = X_{m_i y_j} \quad (2)$$

Both the series were decomposed into trend, seasonal, and error components and showed prominent trends. In order to accurately test the hypothesis of seasonality, trend components were removed from both the series prior to the main analysis. The seasonal components in both the series were modeled as per Equation (3) and (4) to test hypothesis 1 and 2 respectively.

$$X_{my} = \gamma + \beta_0 + \beta_2 P2 + \beta_3 P3 + \beta_4 P4 + \varepsilon_t \quad (3)$$

$$X_{my} = \gamma + \beta_0 + \beta_2 P2 + \beta_3 P3 + \dots + \beta_{12} P12 + \varepsilon_t \quad (4)$$

To test the seasonal impact of each meteorological season in Equation (3), spring was used as the baseline and three dummy variables were created for the other seasons. Similarly, in Equation (4), January was used as the baseline and 11 dummy variables were created for the remaining months. In both Equations (3) and (4), β_0 represents the coefficient of the baseline period (spring in 3, and January in 4). Rest of the β s are coefficients for dummy variables of time periods (summer, autumn, and winter in 3 and months February through to December in 4), and ε_t is the error component. γ represents the trend component which was removed prior to the modeling but was retained in the model for estimation purposes.

Identifying bias in news coverage on homelessness in regions of England: The size of the corpus also prevented a human inspection of the data for identifying attention to each of the nine regions of England. A machine count of the names of major towns and cities in each region was undertaken using an automated process. The Office for National Statistics (ONS) list of major towns and cities² in each of the nine English regions was used and counts of regional mentions were generated. Multiple mentions of a particular town in the same article were ignored but the mention of multiple towns from the same region enhanced the score for the region. To illustrate, multiple mentions of Brighton and Hove in the same news article only contributed one point to the attention metric for the South East. However, if the article mentioned Brighton and Hove and Southampton, the

score for the South East gained two points. Assuming that the attention received may reflect the levels of homelessness in the region, the attention metric was adjusted for levels of street homelessness. This restricted the estimation of attention to a yearly level as street homelessness figures in England are reported annually through a snapshot measurement. Further still, a change in ONS methodology on counting street homelessness in 2010 limited this part of the project to the 2010–2020 period. The adjusted attention metric for each region – attention score – were calculated for each year by dividing the number of focus articles with the rate of street homelessness (per million) in that region. The small study period of ten years was insufficient for running an Analysis of Variance (ANOVA) as the number of observations (10) was only one more than the number of groups (9 regions of England). Therefore, following the one in ten rule (Freedman, 1983), regression equations were run for each region where the rate of homelessness predicted the amount of coverage each year.

Results

Preliminary observations

The data corpus spanned the first two decades of the twenty-first century and showed that attention to homelessness increased in the 2010s. Figure 1 provides the yearly trend of focus stories and incidental mentions and shows that the mentions of homelessness in the news have steadily increased over the 20-year period. On the other hand, the number of focus stories remained relatively stable between 2001 and 2010 before rising sharply between 2011 and 2018.

Amongst the daily newspapers, *The Daily Mirror* published the highest number of focus stories (1199), followed by *The Times* (647), *The Sun* (601), *The Daily Mail* (595), and *The Daily Telegraph* (309). *The Guardian* (257) published the lowest number of headlines on homelessness and *The Daily Mirror* published the highest in 17 out of 20 years. This accounted for a third of all stories published by the six daily newspapers. Amongst Sunday newspapers, *The Sunday Times* (169), and *The Sunday Mirror* (163) provided more attention to homelessness as compared to *The Mail on Sunday* (73), *The Observer* (53), and *The Sunday Telegraph* (39). Once again, the Mirror group's *The Sunday Mirror* published more focus stories on homelessness than other Sunday newspapers in 11 out of 20 years. Three Sunday newspapers went full calendar years without running any

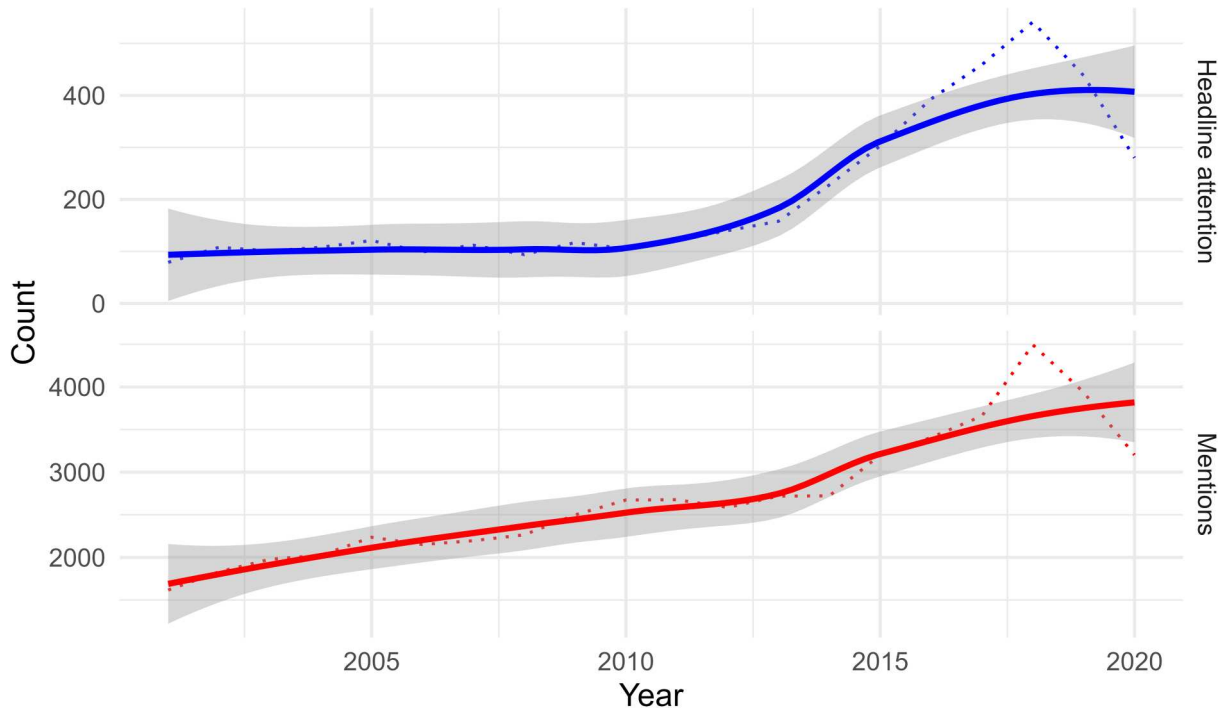


Figure 1. Headline stories and mentions of homelessness (all papers, 2001–2020).

headline story on homelessness: *The Mail on Sunday* (in 2011), *The Sunday Telegraph* (in 2006, 2012, and 2018), and *The Observer* (in 2005, 2007, 2009, 2013, and 2014). Full details of year-wise attention from each newspaper are available in the linked dataset.

Seasonality and trends in attention to homelessness

X_{sy} and X_{my} were decomposed to separate trend and seasonal components. The paper only presents one figure (Figure 2), given X_{sy} aggregated X_{my} in three-

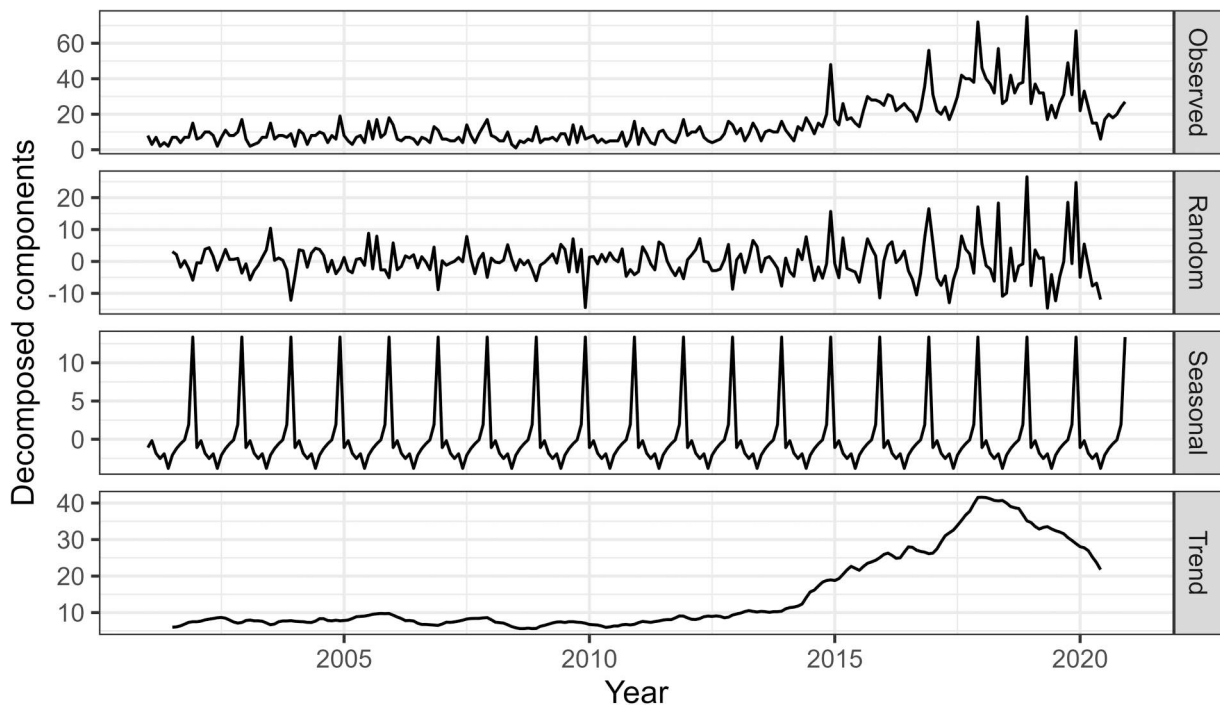


Figure 2. Decomposed time series for months (frequency = 12).

Table 2. Test for seasonal effects (meteorological seasons).

Effect	Mean stories per season	Coefficient (β)	SE	t	p
Spring (baseline)	43.40	-8.26	3.47	-2.38	.02*
Summer	43.50	-8.25	3.47	-2.37	.02*
Autumn	54.70	1.83	3.34	0.53	.60
Winter	64.80	12.16	3.43	3.54	<.001**

* $p < .01$; ** $p < .001$.

month durations. Figure 2 shows decomposed X_{my} and shows the yearly trend in media attention.

Hypothesis 1 was tested as per Equation (3) to examine if meteorological seasons in the UK contributed to attention to homelessness. The results of the model are presented in Table 2.

Results showed that apart from autumn (September–November), the other three seasons had a statistically significant relationship with attention to homelessness. The negative coefficients for spring and summer indicated a reduction in attention to homelessness during these seasons. On the other hand, the positive coefficients for autumn and winter indicated an increase in seasonal attention. The winter season has the largest coefficient, indicating the biggest relationship with the amount of attention. Therefore, null hypothesis 1 was rejected – an examination of attention to homelessness in 11 British newspapers provided evidence for spring, summer, and winter seasonality.

The rejection of hypothesis 1 revealed the seasonality in media attention in line with meteorological seasons. The raw data on the share of newspaper headlines on homelessness show a clear increase during the winter months and decrease during the summer. 15% ($n = 643$) of all headline stories on homelessness between 2001 and 2020 were published in December and the lowest number were published in June (250). Yet, it remains unknown if the effect observed owed more to specific months within the summer, autumn, and winter seasons. Testing hypothesis 2 as per the model outlined in Equation (4) provided a more nuanced examination of the monthly seasonal effects. Table 2 presents the results.

The trend component of the model is insignificant with a zero co-efficient, reflecting the detrending of the data undertaken prior to modeling. In terms of seasonal components, June has a significant negative coefficient ($p < .01$), and December has a highly significant positive coefficient ($p < .001$) providing evidence that these two calendar months contribute to a seasonal impact on media attention to homelessness. Interestingly, none of the spring (March, April, May) and autumn (September, October, November) months show any seasonal impact. Similarly, not all the months in winter and summer months contribute to

the seasonal effect observed in meteorological quarters. Null hypothesis 2 was rejected as June and December exercised statistically significant seasonal influence on the media coverage on homelessness (Table 3).

Regional disparities in newspaper attention to homelessness

In the period between 2001 and 2020, newspapers ran 4105 focus stories, out of which 1588 stories mentioned at least one major town or city in England. London was the most frequently mentioned region of England, featuring in nearly half of focus stories ($n = 708$), followed by towns and cities in the North West ($n = 342$), the South East ($n = 287$), the South West ($n = 220$), the West Midlands ($n = 203$), Yorkshire and the Humber (165), the East of England ($n = 143$), the East Midlands ($n = 85$), and the North East ($n = 75$). The North East, and the East Midlands stand out for their relatively lower share of press attention. Major towns and cities in the North East received no mentions in four full calendar years (2002, 2006, 2007, 2008) and no major town or city from the East Midlands featured in any of the stories in 2005. Figure 3 provides the details.

While in terms of absolute numbers London received a very high share of attention in the press, it is important to recognize that the volume of attention may be tied to the burden of homelessness relative to the region's population. Street homelessness data with the new methodology are available from year

Table 3. Test for seasonal effects (calendar months).

Effect	Mean stories per year	Coefficient (β)	SE	t	p
January (baseline)	15.70	-1.11	1.69	-0.66	.51
February	15.80	-0.91	1.69	-0.53	.59
March	15	-1.93	1.70	-1.13	.25
April	13.80	-2.95	1.70	-1.73	.08
May	14.60	-2.44	1.70	-1.43	.15
June	12.50	-4.51	1.67	-2.64	.008**
July	14.80	-2.29	1.68	-1.37	.17
August	16.20	-1.09	1.68	-0.65	.51
September	17.40	0.21	1.68	0.12	.90
October	17.50	0.12	1.68	0.07	.94
November	19.80	2.33	1.68	1.38	.16
December	32.20	15.14	1.68	8.97	<.001***

** $p < .01$; *** $p < .001$.

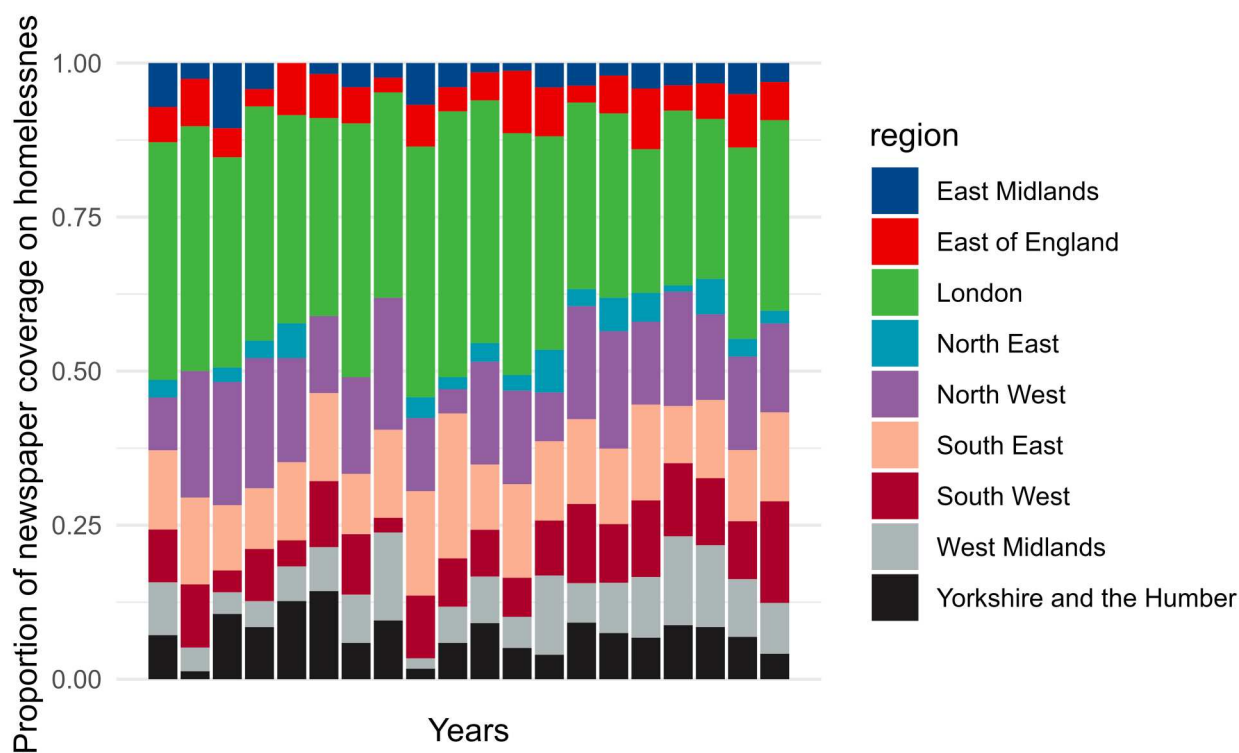


Figure 3. Regional share of newspaper attention on homelessness (2001–2020).

2010 onwards and show that London had the highest rate of street homelessness between 2010 and 2020. During the decade, the average rate of street homelessness in London ($\bar{x}_{SH\ London} = 92.8$ per million) too was more than two times the rest of England ($\bar{x}_{SH\ RoE} = 48.7$ per million). The attention score developed in the project (see methods) adjusted for this discrepancy and provided a more appropriate measure of examining these regional inequalities. A score of 1 on the index indicated that for each case of street homelessness per million, one focus story discussing homelessness in the region was published. Higher scores on the index represent higher attention to the region, adjusted for the rate of street homelessness. As it uses MHCLG data, the index covers the period between 2010 and 2020 only.

Figure 4 shows how each of the nine regions fared in relation to each other throughout the decade on the attention score metric. The East Midlands emerged as the region with the lowest amount of attention, closely followed by the East of England. London had a higher attention score than most regions throughout the decade but 2012 onwards the North West received the highest share of attention relative to its burden of homelessness. Not surprisingly, the only outliers on the attention index were observations from the North West in 2015 and 2019 with values of 0.91 and 0.88 respectively.

Finally, in order to understand the relationship between the rate of homelessness with the amount of media attention received by each region, a regression analysis was conducted. For each region, the rate of street homelessness per million was used to predict the number of focus articles. Table 4 provides the results and shows that the rate of homelessness was a predictor for all the regions except for the North East of England.

Discussion

This research aimed to examine the volume and frequency of media attention to homelessness in the UK, with particular attention to the questions of seasonality and regional differences. Several interesting findings emerged from this work and this section will discuss their implications.

Looking at the changes in the amount of media attention to homelessness provides some important insights into the waxing and waning of social issues in the public sphere. In 2001, a total of 79 focus stories were published across all 11 newspapers and homelessness was mentioned in a further 1617 stories. In 2020, these numbers were 280 and 3202 – respectively, a 254% and 98% increase over a 20-year period. Attention to homelessness peaked in 2018 when a total of 541 focus stories were published across the 11

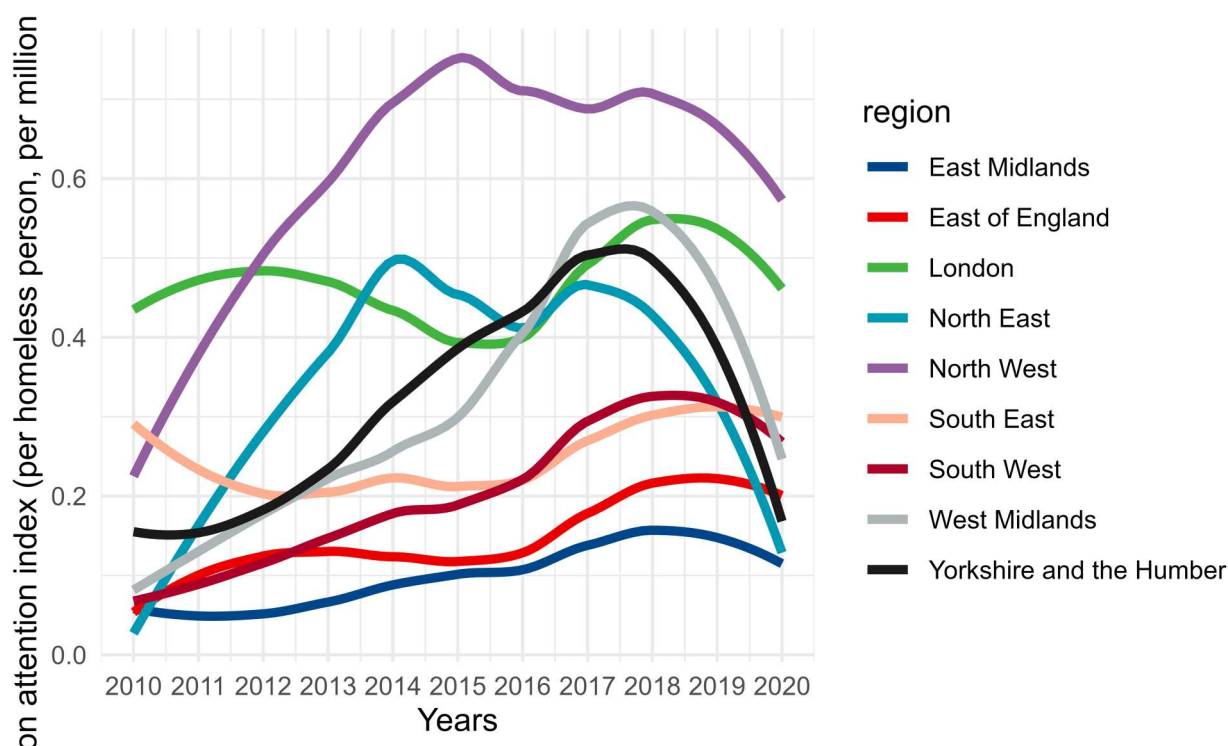


Figure 4. Attention score for each of the nine regions of England (2010–2020).

newspapers in this study. The steady increase in attention on homelessness until 2018 reflects the year-on-year increase in street homelessness in England from 34 to 85 persons per million between 2010 and 2017.³ In terms of issue-attention cycles, the stability of attention between 2001 and 2010 forms a baseline against which the subsequent increase in attention can be compared. Street homelessness is not the most prevalent form of homelessness but is more noticeable and talked about than other, less visible, forms such as sofa surfing. Poverty, destitution, and homelessness have a well-established history of association with otherness, danger, and fear (Borden, 2021; Chauhan & Foster, 2014; Parnell, 2023). It is likely that an increase in the number of people experiencing street homelessness can be understood to have resulted in its increased prominence in the public agenda.

In addition to the long-term trends, attention to social problems may also show a repeating cyclical pattern. Media research from other countries has shown seasonal patterns in the issue-attention cycle on homelessness with a general consensus that that extreme weather conditions contribute to an increase in media reporting (Meert et al., 2006; Radley et al., 2005). Partially, this reflects a general social tendency to think about homelessness largely in terms of rough sleeping and street homelessness which is a problematic in its own right. This research is the first systematic examination of the seasonal patterning of attention to social problems in the British media and in line with previous studies, found that interest in homelessness significantly increased during the winter and dropped during spring and summer. The winter season – comprising of December, January, and February – had a statistically significant seasonal impact of pushing up the volume of

Table 4. Regression coefficients for rate of homelessness in each region of England.

Region	F	Intercept	Slope (rate of homelessness)	R ²	p
East Midlands	25.33	-6.33	0.24	0.74	<.001***
East of England	7.09	-3.47	0.22	0.44	.03**
London	33.44	-12.18	0.61	0.79	<.001***
North East	0.28	2.77	0.16	0.03	.61
North West	53.06	-6.57	0.85	0.85	<.001***
South East	8.78	-0.37	0.26	0.49	.02**
South West	9.24	-13.38	0.39	0.51	.02*
West Midlands	95.18	-31.74	1.07	0.91	<.001***
Yorkshire and the Humber	23.23	-16.61	0.87	0.72	<.001***

* $p < .05$, ** $p < .01$, *** $p < .001$

attention to homelessness. Whereas spring (March, April, and May) and summer (June, July, August) had the opposite relationship which was also statistically significant. Juxtaposing the average number of stories published in each season (Table 2) with those published each month of the year through the 20-year period (Table 3) problematizes a simplistic interpretation that homelessness receives greater attention during the colder months. The month of December aside, the average number of stories published in the two other winter months is very comparable to the spring and summer months – see Table 3. What is more, despite turning out to be the only insignificant meteorological season, more stories on homelessness were published in each of the three autumn months (September, October, and November) than January and February.

Having said that, it is extremely important to exercise caution in assigning a weather-based shifting in media attention to homelessness – when the meteorological seasons were disaggregated into months, only December and June showed a significant relationship with the seasonal pattern. Homelessness received a lot of mention in the newspapers in December but in the subsequent winter months of January and February, the average number of stories is lower than the autumn months. Therefore, the statistically significant relationship between the winter season and increased attention to homelessness must be considered as a likely result of the unusual spike in December. This work makes a very strong case that a winter spike in attention is better understood in terms of the Christmas festive period. This falls in line with previous research that show increased sympathy towards people experiencing homelessness in the USA during Thanksgiving and Christmas periods (Bunis et al., 1996; Penner & Penner, 1994). The Christmas period brings a social and cultural tradition of thinking about the poor and the needy and there is a clear evidence of increase in charitable acts during this period (Clarke, 2007; Ekström, 2018). At this point, a return to the public arenas model provides further insights. As Hilgartner and Bosk (1988, p. 53) have noted, instead of being objective conditions, things that attain the status of social problems are “projections of collective sentiments” and the process of selection is often filtered through cultural concerns. During the Christmas period, homelessness does not become an objectively more pressing social problem, it simply becomes more newsworthy as Gans (1979) would argue. Several factors likely play a role in this transition – religious, social, and political groups become more interested in people experiencing homelessness during this period. As already noted, sympathy for

the needy is generally greater too and not surprisingly, this is also the period of highest fundraising activity within the charity sector. From a sociological standpoint, this research provides evidence that attention to homelessness is likely influenced by social and cultural traditions, and institutionalized practices and opens up the possibility of examining cultural patterning of interest in other social problems.

This work also examined variations in attention to different regions of England in homelessness news reporting and found that overall, when rates of homelessness are taken into account, the North West received the most attention amongst the nine regions. This is potentially related to the higher than national average death rate amongst people experiencing homelessness. Between 2013 and 2017, it had the second highest homeless death rate after London and exceeded that of London in 2017, 2019, and 2020 (Office for National Statistics, 2022). Also interesting was a lack of any major town or city from the North East appearing in homelessness news in four years, three of which were consecutive (2002, 2006, 2007, 2008). However, caution must be exercised when interpreting these results to argue for a systematic regional bias as the number of towns and cities differed between regions. The ONS list of major towns and cities contained 6 from the East Midlands, 14 from the East of England, 9 from the North East, 20 from the South East, 10 from the South West, and 15 each from the North West, West Midlands and Yorkshire & the Humber. The use of an automated strategy of looking for place names is crude – for example, it is blind to the mentions of villages, however, it may not have necessarily biased the dataset. Neither the region with the most towns and cities (the South East), nor the one with the least (East Midlands) had the highest or lowest absolute counts of mentions. Future studies can examine these patterns more accurately by drawing random snapshot samples of news reports and undertaking a human examination of the text to look for differences in regional attention to homelessness.

Finally, it is important to emphasize that news is a discursive product, not an objective mirror to the society. As Caple and Bednarek (2016) note, the worthiness of a subject of news depends not only on whether the issue is important but also on the objectives of writing and the selection factors. Newsworthiness is not a property of the social problem but is generally created and regulated by news organizations (Bednarek & Caple, 2017). This study can only provide a speculative explanation for the significant reduction in attention to homelessness in June – the advent of summer and an increased competition with summer

social events may mean that other stories become more newsworthy. For these reasons, future qualitative research needs to examine the content of homelessness stories and examine the differences in the nature of attention to homelessness between different months. The cultural shaping of sympathy towards the needy reported in this work suggests the need for future works to explore if this is also observed in the context of other social problems such as interest in race around the Black History Month. While this study is not directly related to a policy theme, it does highlight the need to reflect on *when* and *why* we talk about social problems in the news.

Notes

1. The London newspaper bias: half of “national” news is about the south east (newstatesman.com).
2. https://geoportal.statistics.gov.uk/search?collection=Dataset&sort=name&tags=NAC_TCITY.
3. Data is from the Rough sleeping snapshot in England, Ministry of Housing, Communities and Local Government. <https://www.gov.uk/government/statistics/rough-sleeping-snapshot-in-england-autumn-2020>.

Contribution statement

AC: conceptualization, funding acquisition, data analysis, and writing of manuscript. **HS:** data cleaning and structuring. **HT, ART, and NE:** research assistance. **JF:** conceptualization.

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References

- Ayers, J. W., Althouse, B. M., Allem, J.-P., Rosenquist, J. N., & Ford, D. E. (2013). Seasonality in seeking mental health information on Google. *American Journal of Preventive Medicine*, 44(5), 520–525. <https://doi.org/10.1016/j.amepre.2013.01.012>
- Barkemeyer, R., Givry, P., & Figge, F. (2018). Trends and patterns in sustainability-related media coverage: A classification of issue-level attention. *Environment and Planning C: Politics and Space*, 36(5), 937–962. <https://doi.org/10.1177/2399654417732337>
- Bednarek, M., & Caple, H. (2017). *The discourse of news values: How news organizations create newsworthiness*. Oxford University Press.
- Borden, S. L. (2021). Introduction: The problem of poverty in the news media. In S. L. Borden (Ed.), *The Routledge companion to media and poverty* (pp. 1–10). Routledge.
- Buck, P. O., Toro, P. A., & Ramos, M. A. (2004). Media and professional interest in homelessness over 30 years (1974–2003). *Analyses of Social Issues and Public Policy*, 4(1), 151–171. <https://doi.org/10.1111/j.1530-2415.2004.00039.x>
- Bunis, W. K., Yancik, A., & Snow, D. A. (1996). The cultural patterning of sympathy toward the homeless and other victims of misfortune. *Social Problems*, 43(4), 387–402. <https://doi.org/10.2307/3096951>
- Caple, H., & Bednarek, M. (2016). Rethinking news values: What a discursive approach can tell us about the construction of news discourse and news photography. *Journalism*, 17(4), 435–455. <https://doi.org/10.1177/1464884914568078>
- Chauhan, A., & Foster, J. (2014). Representations of poverty in British newspapers: A case of ‘othering’ the threat?

- Journal of Community & Applied Social Psychology*, 24(5), 390–405. <https://doi.org/10.1002/casp.2179>
- Clarke, P. (2007). A measure for Christmas spirit. *Journal of Consumer Marketing*, 24(1), 8–17. <https://doi.org/10.1108/07363760710720948>
- Coleman, R., McCombs, M., Shaw, D., & Weaver, D. (2008). Agenda setting. In K. Wahl-Jorgensen & T. Hanitzsch (Eds.), *The handbook of journalism studies* (pp. 167–180). Routledge.
- Downs, A. (1991). Up and down with ecology: The “issue-attention cycle”. In *Agenda setting: Readings on media, public opinion, and policymaking* (pp. 27–33). Routledge.
- Ekström, M. (2018). Seasonal altruism: How Christmas shapes unsolicited charitable giving. *Journal of Economic Behavior & Organization*, 153, 177–193. <https://doi.org/10.1016/j.jebo.2018.07.004>
- Freedman, D. A. (1983). A note on screening regression equations. *The American Statistician*, 37(2), 152–155. <https://doi.org/10.1080/00031305.1983.10482729>
- Gans, H. (1979). *Deciding what's the news*. Pantheon Books.
- Gladun, A. (2020). Protesting that is fit to be published: issue attention cycle and nationalist bias in coverage of protests in Ukraine after Maidan. *Post-Soviet Affairs*, 36(3), 246–267. <https://doi.org/10.1080/1060586X.2020.1753428>
- Hilgartner, S., & Bosk, C. (1988). The rise and fall of social problems: A public arenas model. *American Journal of Sociology*, 94(1), 53–78. <https://doi.org/10.1086/228951>. <http://www.jstor.org/stable/2781022>
- Jünger, J., & Gärtner, C. (2021). Distilling issue cycles from large databases: A time-series analysis of terrorism and media in Africa. *Social Science Computer Review*, 39(6), 1272–1291. <https://doi.org/10.1177/0894439320979675>
- Lofgren, E., Fefferman, N. H., Naumov, Y. N., Gorski, J., & Naumova, E. N. (2007). Influenza seasonality: underlying causes and modeling theories. *Journal of Virology*, 81(11), 5429–5436. <https://doi.org/10.1128/JVI.01680-06>
- Lyons, G., & Smedley, C. (2021). The new face of homelessness? Examining media representations of women's homelessness in five Australian news sources. *Journal of Social Distress and Homelessness*, 30(1), 28–40. <https://doi.org/10.1080/10530789.2019.1709269>
- McCombs, M. E., & Shaw, D. L. (1972). The agenda setting function of mass media. *Public Opinion Quarterly*, 36(2), 176. <https://doi.org/10.1086/267990>. <http://poq.oxfordjournals.org/content/36/2/176.short>
- Meert, H., Cabrera, P., & Maurel, E. (2006). Homelessness as a socio-spatial phenomenon: A discourse analysis of articles in the European written press. *ENHR Conference 2006-Welfare Policy, Homelessness and Housing Exclusion, Slovenia (Ljubljana)* (pp. 1–23).
- Newman, N., Fletcher, R., Schulz, A., Andi, S., Robertson, C. T., & Nielsen, R. K. (2021). *Reuters Institute digital news report 2021*. <https://doi.org/10.60625/risj-7khr-zj06>
- Ofcom. (2019). *Ofcom's annual report on the BBC*. https://www.ofcom.org.uk/__data/assets/pdf_file/0026/173735/second-bbc-annual-report.pdf
- Office for National Statistics. (2022). Deaths of homeless people in England and Wales 2021. *Office for National Statistics* (pp. 1–12). <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsofhomelesspeopleinenglandandwales/2021registrations>
- Parnell, T. (2023). A tide of homeless, drug-addicted and mentally ill people': Representing homeless people in MailOnline content. *Journal of Corpora and Discourse Studies*, 6, 1–24. <https://doi.org/10.18573/jcads.97>
- Penner, M., & Penner, S. (1994). Publicizing, politicizing, and neutralizing homelessness: Comic strips. *Communication Research*, 21(6), 768–781. <https://doi.org/10.1177/009365094021006006>
- Radley, A., Hodgetts, D., & Cullen, A. (2005). Visualizing homelessness: A study in photography and estrangement. *Journal of Community & Applied Social Psychology*, 15(4), 273–295. <https://doi.org/10.1002/casp.825>
- Schäfer, M. S., Ivanova, A., & Schmidt, A. (2014). What drives media attention for climate change? Explaining issue attention in Australian, German and Indian print media from 1996 to 2010. *International Communication Gazette*, 76(2), 152–176. <https://doi.org/10.1177/1748048513504169>
- Schneider, B., Chamberlain, K., & Hodgetts, D. (2010). Representations of homelessness in four Canadian newspapers: Regulation, control, and social order. *Journal of Sociology & Social Welfare*, 37(4), 147.
- Snow, D. A., & Anderson, L. (1993). *Down on their luck: A study of homeless street people*. Univ of California Press.
- Zufferey, C. (2014). Questioning representations of homelessness in the Australian print media. *Australian Social Work*, 67(4), 525–536. <https://doi.org/10.1080/0312407X.2013.842604>