# Appendix A: Details of manual thematic analysis of free text responses

We manually reviewed responses to identify the individual themes respondents raised. Responses were reviewed until topic saturation. This process yielded a total of 18 individual themes which were used as the basis of our coding scheme. Fourteen of these themes were designated as ‘sub-themes’ under three higher-order themes (***blame/control***, ***need***, ***claimant characteristics***). Table A1 below describes all 18 codes and gives example responses:

TABLE A1. *Manual thematic analysis coding scheme*.

|  |  |  |
| --- | --- | --- |
| **Code name** | **Code description** | **Example responses** |
| ***Blame/Control*** | | |
| COVID claimants: Less control | Responses suggesting that COVID claimants had no or less control over their situation. Includes responses which:   * Claim that COVID claimants lost jobs/hours *due to* COVID (e.g. due to illness, lockdowns, business closure) * Imply lack of control by mentioning mention business closures, job shortages etc. * Imply lack of control by noting that COVID claimants were “made redundant” or “laid off” (compare to *‘COVID claimants lost jobs’ below*) * Note that COVID claimants are more ‘deserving’ or ‘genuine’ in generic terms | “A lot of businesses failed during the COVID 19 time. A lot of uncertainty exists.”;  “More competition for jobs now”;  “During covid many people lost their jobs/income or had reduced hours due to lockdown”;  “Many people claiming benefits during COVID were previously employed and made redundant due to the pandemic”  “COVID was a terrible disaster and so many people lost their jobs. It’s obviously not their fault.” |
| COVID claimants: Want to work | Responses which explicitly mention that COVID claimants ‘want to work’ or are motivated to work or find work. | “People who lost their jobs during the pandemic will look for another job”;  “These people need to work, the majority want to work, but benefits is their only option.”  “Probably more people claiming benefits who wanted to work but couldn’t during COVID rather than before”. |
| Pre-pandemic claimants: To blame | Responses which imply or explicitly state that pre-pandemic claimants were at fault for their situation: for example that they were lazy, did not try hard enough to find work, or wanted to live on benefits.  Includes responses which:   * Claim that work was easy to find before the pandemic (implies blame for unemployment). * Make an implicit comparison with COVID claimants – e.g. suggestion that COVID claimants were ‘more genuine’ implies that pre-COVID claimants were less genuine. * Claim that pre-pandemic claimants were provided with no incentive to work (e.g. that they could ‘earn more on benefits’). | “Many people before the pandemic were claiming benefits because they were choosing not to work”;  “People claiming before are used to getting their benefits and there is no incentive for them to get a job.”;  “It was easier to get a job before covid”. |
| COVID claimants: To blame | Responses which imply or explicitly state that COVID claimants were at fault for their situation.  Includes responses which:   * Argue COVID claimants chose to claim benefits when they could have continued to work or relied on savings. * Suggest that COVID claimants may be intentionally ‘scamming’ or claiming benefits to which they should not be entitled (these responses would also receive the ‘COVID claimants: Fraud code - see below) | “Some people decided not to work when they could have remained with a job as the government scheme promised a holiday with pay!”;  “Not saved fir a rainy day”;  “more people are claiming benefits now that can actually work meaning that they can get paid for relaxing at home, having a lie in, doing their gardening or exercising”;  “People are claiming lots more grants since covid 19 who aren’t necessarily entitled” |
| COVID: Fraud | Responses which raised the issue of potential fraud among COVID claimants committing.  Includes responses which:   * Suggest that COVID claimants may be claiming furlough and/or benefits but still working * Suggest that COVID claimants are ‘jumping on the bandwagon’ to claim benefits, despite not needing them * Suggest that claiming benefits and or furlough was too easy during COVID   *Note: All responses which suggested that COVID may be committing fraud would also receive the ‘COVID claimants: To blame’ code. However, we considered it useful to separate this code in order to track how often the specific issue of fraud was raised by respondents.* | “Some people claimed as a scam because it was made easier”;  “During covid I9 people were just jumping on the band wagon”;  “Too easy to claim benefits/grants/furlough without checks” |
| Both to blame | Responses which imply or state that both claimant types were at fault for their situation. | “People claiming benefits during covid seemed to think it was their right to claim benefits/furlough rather than trying to change their business to make a success of it. People claiming benefits before covid just always thought it was their right to claim benefits instead of trying to look after themselves”;  “Some people will always try to get benefits they don't actually need”;  “Before Covid many people claiming benefits were lazy or could not be bothered to do work. During covid there were more genuine cases where people lost jobs and struggled to find new ones. However, i believe that it is always possible to find job when people really wants to work.” |
| Neither to blame | Responses which imply or state that neither claimant type are at fault for their situation. | “None. All are equally deserving.”;  “The main difference will be number of jobs available, as millions were furloughed or made redundant during lockdowns…Before Covid more jobs were available, however long term unemployment has always existed & too many jobs, particularly in sectors such as retail, are zero hour or part time contracts”;  “Claiming benefits during Covid19 was a result of government decisions and citizens were entitled to seek support through no fault of their own. Before Covid19 people can be down on their luck and need a helping hand” |
| ***Need*** | | |
| COVID claimants: More need | Responses suggesting that COVID claimants had higher level of need – e.g. due to sudden loss of income, fixed outgoings, or the mental/physical health consequences of COVID | “Additional expenses. More widespread economic destruction so family support systems are likely to be lower”;  “Those claiming benefits during covid have the added stress of worrying about the effects of the pandemic.”; |
| COVID claimants: Less need | Responses suggesting that COVID claimants had lower levels of need – e.g. due to pre-existing resources – or were getting too high a level of support | “People claiming during Covid are probably in need of more acute help but may have more reserves than those who were claiming before Covid”;  “Furlough payments too high” |
| Pre-pandemic claimants: More need | Responses suggesting that pre-pandemic claimants had higher levels of need – e.g. due to fewer pre-existing resources.  *Note: there is no code for ‘Pre-pandemic claimants: Less need’ because there were no responses fitting that code.* | “those who already were [claiming] are probably worse off”;  “Those that are on legacy benefits have been ignored and these are the ones who need more help” |
| Both have same level of need | Responses suggesting that both groups of claimants had same levels of need or required/should receive the same level of support. | “If you lost your job then you should claim benefits. Doesn’t matter if there was a pandemic or not.”;  “We're all equals should get the same”;  “It got harder for everyone!”;  “People claiming benefits need help before, during and after the pandemic. People should not need to rely on things such as food banks in the UK today.”; |
| ***Claimant characteristics*** | | |
| COVID claimants: Working people | Responses suggesting that COVID claimants were ‘working people’ had ‘steady’ jobs, or had never before claimed / expected to claim benefits.  Includes responses which:   * Specifically refer to the nature of the claimant themselves (e.g. describing them as ‘working people’ or ‘hardworking people’). * Specifically describe the nature of the jobs previously held by claimants as e.g. ‘steady’ or ‘established’, or ‘solid’. | “whereas people claiming during covid probably lost their jobs due to the pandemic and have worked most of their lives.”;  “More people needed help for the first time during covid”;  “Before - more likely to have a spotty work history, during - less likely”;  “Some people have lost otherwise secure jobs as a result of the pandemic” |
| Pre-pandemic claimants: long term / COVID claimants: short-term | Responses which suggested that pre-pandemic claimants were (or were more likely to be) long-term claimants *and*/*or* that COVID claimants were more likely to be claiming only temporarily/for a short time. | “I think a lot of those claiming during COVID-19 were claiming for the first time due to hardships caused by the pandemic, and would expect to stop claiming once they have been able to get things back on track post-pandemic, whilst I would expect a lot of those who were claiming benefits before the pandemic are likely to continue doing so.”;  “Lot of people who have never had to claim before and also probably won't be long term claimants as will regain employment when we return to normal.”;  “I think that some COVID-era claimants may have a more temporary mindset towards claiming benefits than pre-COVID claimants, many of whom would be claiming benefits for disability or other enduring situations.” |
| Other differences | Responses suggesting that that COVID claimants and pre-pandemic claimants differed in other characteristics not covered by the other codes.  Includes responses commenting on potential differences in class, skill-level, employment sector, or ‘normality’ (e.g. that COVID claimants were ‘normal people’). | “during covid claimants may be from different background, financial history”;  “Previously employed in different sectors and likely with different skills eg manufacturing vs hospitality”;  “more middle class tory voters are seeing what it's like on the poorer side of life”;  “I suspect the people claiming before COVID were majority long term unemployed and possibly had lower educational achievement or work experience” |
| ***Other codes*** | | |
| COVID claimants: Lost jobs | Responses which noted that COVID claimants were more likely to have lost jobs, or that a large number of job losses occurred during COVID.  *Note: This code captures responses which did not attribute jobs losses directly to COVID (which would be coded under ‘COVID claimants: Less control’) or make any claims about the nature of the lost jobs (references to ‘secure’ jobs would be coded under ‘COVID claimants: Working people’)* | “people lost jobs”;  “People claiming during the COVID-19 may have lost their job”;  “Job losses were more commen during covid” |
| No differences | Responses which explicitly state that there are no differences between the claimant types. (May be combined with other themes – e.g. ‘neither blame’ or ‘both blame’) | “no differences”;  “There are none”;  “N/A”;  “Nothing”;  “Nothing all are too lazy to seek work”;  “Nothing. They are all equally impoverished through no fault of their own” |
| Bad behaviour by employers | Responses suggesting that employers had behaved unethically during the pandemic e.g. by abusing the furlough system or by laying off workers unnecessarily. | “Those claiming before were let go for a specific reason. Those during the pandemic were victims, in some cases, of ruthless employers who could have used the furlough scheme”;  “The job market was flooded with people being laid off, oftentimes without financial security because the government decided to pay the employers rather than than directly to the citizens. This created the opportunity for corruption.” |
| Change in attitudes | Responses which indicated that the pandemic had changed beliefs or attitudes either in the respondent themselves or among claimants or society at large | “Many of those forced to take 'benefits' due to covid, were possibly fiercely anti benefit 'scroungers', and thought 'scroungers' payments too generous a burden on their personal taxation..... but they soon learnt there is no way a person can live on £93, let alone £73! AND pay food/bills+ plus fares to the jobcentre each week to confirm their not cheating”;  “It is probably more socially acceptable to claim benefits due to covid”;  “I think people's attitudes to them are different, because the numbers are so larger and because the media coverage is more sympathetic.” |

# Appendix B: Details of Structural Topic Model of free text responses

Structural Topic Models (STM) builds from of the broader tradition of probabilistic topic models. Topic models use word counts to establish topics. Each word used in a given document (open text responses to a survey question in our case) is assumed to have a probability of belonging to a particular topic. The topic model uses an inductive process to attempt to discern the appropriate number of topics to cover the documents in the analytical corpus.

There is no single ‘correct’ number of topics for a given corpus. Rather we based our model selection on a combination of model fit statistics and manual inspection of exemplar response within each topic. We examined models with 3, 5, 7, and 10 topics. Model fit statistics are reported in Figure A1, below.

##### Figure A1. STM diagnostic values by number of topics

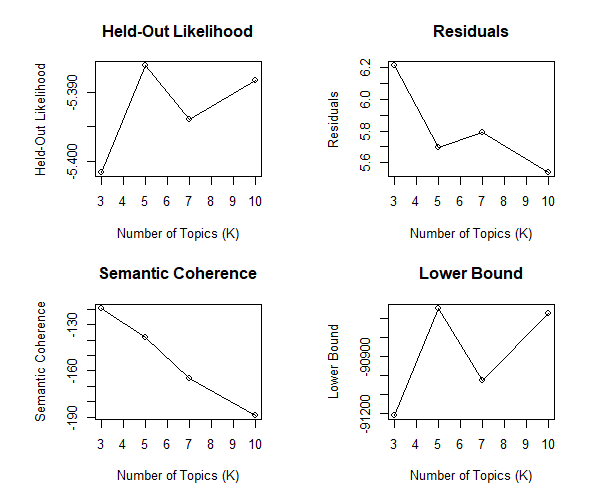


Figure A1 plots four values against the specified number of topics:

* The **held-out likelihood** measures the probability that the words in a given topic would appear in a text allocated to a particular topic. Higher values indicate that the model is doing a better job of predicting what words are going to appear in a particular document.
* **Residuals** measure the amount of overdispersion in the residuals. In other words, it tells us whether the topics are precise or not. Imprecise topics are too general and do not really capture the nuance in each document. Low scores imply less dispersion. Typically more topics will, by construction, lead to lower residuals and so this needs to be offset against the demands of parsimony.
* **Semantic coherence** refers to the degree to which the most probable words in a topic co-occur. This is useful because it tells us whether the most salient words for a particular topic are correlated with each other. Low correlation between highly probable words for a given topic is problematic because it indicates that some words frequently appearing in the same topic often do not often appear in the same document. Higher semantic coherence is therefore one indication of a more informative model. However, this must be balanced against the fact that a small number of topics will often yield high semantic coherence.
* The **lower bound** gives us an indication of the change in fit between iterations of the model. Smaller improvements between iterations implies model convergence.

According to these measures, the three-topic model appears to be the poorest fit to the data, and was therefore discounted. The five-topic model appears to fit the data best by a number of metrics. However, differences between this model and the seven and ten-topic models are very small indeed, and manual inspection of topic exemplars for the seven-topic model indicate a clearer semantic differentiation between topics than for the five-topic model. The 10 topic has a slightly higher held-out likelihood than the seven-topic model. However, it has lower semantic coherence, and only very slightly lower residuals, despite three additional topics. Therefore, on the basis of parsimony, we selected the seven-topic model.

# Appendix C: Perceived deservingness over time – all response categories

**Table C1. Perceived deservingness in each time period (percent choosing each response, with 95% Confidence Intervals)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Pre-pandemic** | **First wave** | **Summer 2020** | **Second wave** | **After second wave** |
| All or almost all people who receive benefits are genuinely in need and deserving of help | 12.0  (0.11 to 0.13) | 12.0  (0.11 to 0.13) | 12.6  (0.11 to 0.14) | 13.6  (0.13 to 0.14) | 13.6  (0.3 to 0.14) |
| The majority of people… | 49.6  (48.4 to 50.9) | 52.7  (50.6 to 54.8) | 47.7  (45.6 to 49.7) | 51.3  (50.0 to 54.8) | 49.8  (48.9 to 50.7) |
| Around half of people… | 27.3  (26.2 to 28.4) | 26.3  (24.5 to 28.2) | 28.5  (26.6 to 30.4) | 25.6  (24.4 to 26.8) | 25.9  (25.1 to 26.6) |
| Only a minority of people… | 9.5  (8.8 to 10.3) | 7.7  (6.6 to 8.9) | 9.4  (8.2 to 10.7) | 8.8  (8.0 to 9.6) | 9.0  (8.5 to 9.6) |
| Hardly anyone… | 1.6  (1.3 to 2.0) | 1.2  (0.8 to 2.0) | 1.8  (1.1 to 2.9) | 0.9  (0.6 to 1.2) | 1.7  (1.4 to 1.9) |

*YouGov Welfare Tracker surveys (total N=40,817)*