

## Analysis of initial EDA for Draft project Report

### Datasets Analysis

To analyse the datasets, a structured data preparation and analysis workflow was implemented. The methodological approach followed a systematic process, including data collection, cleaning, and visualization using Google Collab.

### Data Collection

The datasets were sourced from official government repositories, containing records on asylum seekers receiving support in the UK and deprivation across the UK

### Data Cleaning

The collected datasets underwent preprocessing to ensure consistency, accuracy, and usability. Key cleaning steps included:

- **Handling Missing Values:** The datasets were examined for missing values in critical columns such as date, nationality, and support type etc. Rows with substantial missing data were removed, while minor gaps were imputed where necessary.
- **Data Type Conversion:** Any 'Date' columns were converted to a standardized datetime format to allow for time-based analysis.
- **Categorical Data Standardization:** Inconsistent spellings and variations in categorical were corrected to ensure uniformity.
- **Duplicate Removal:** Duplicate records were identified and eliminated to prevent redundancy in analysis.
- **Numerical Data Cleaning:** columns were checked for anomalies, such as non-numeric values, and were converted to an appropriate format for aggregation and statistical calculations.
- **Encoding** - categorical data within the resole data set was encoded to numerical for analysis

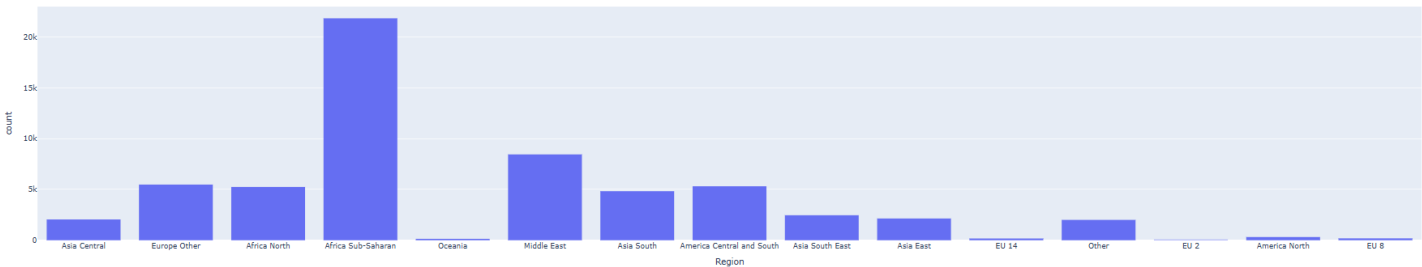
## Data visualizations, Results & Key takeaways

### 1. Regional Distribution of Asylum Seekers

A histogram was generated to visualize the distribution of asylum seekers across different regions. The results indicate that certain regions have a significantly higher concentration of asylum seekers, suggesting a potential link between regional policies, available infrastructure, or government support programs.

#### Key Insight:

- Some regions have a disproportionately higher number of asylum seekers compared to others, which may be influenced by housing availability or local government policies.

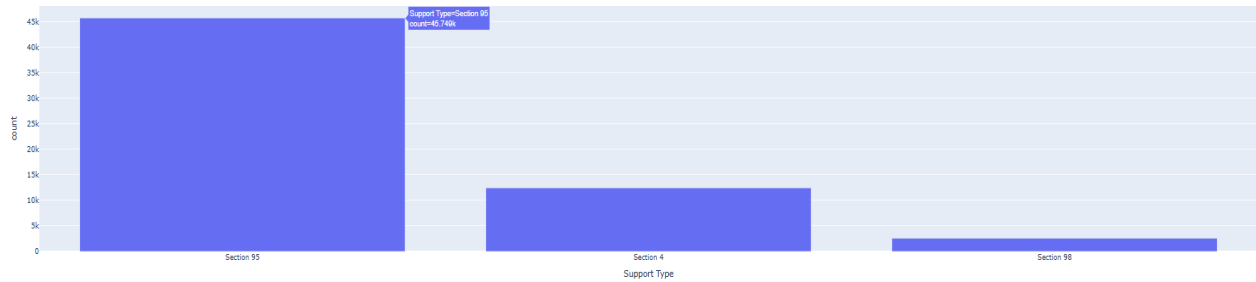


### 2. Distribution of Support Types

The histogram illustrating different **support types** highlights the variation in the type of assistance provided. Certain support types appear more frequently, indicating that some forms of assistance (e.g., dispersed accommodation) are more widely utilized than others.

#### Key Insight:

- The dominance of certain support types suggests a standard approach in providing assistance, possibly due to government funding allocation or policy preferences.

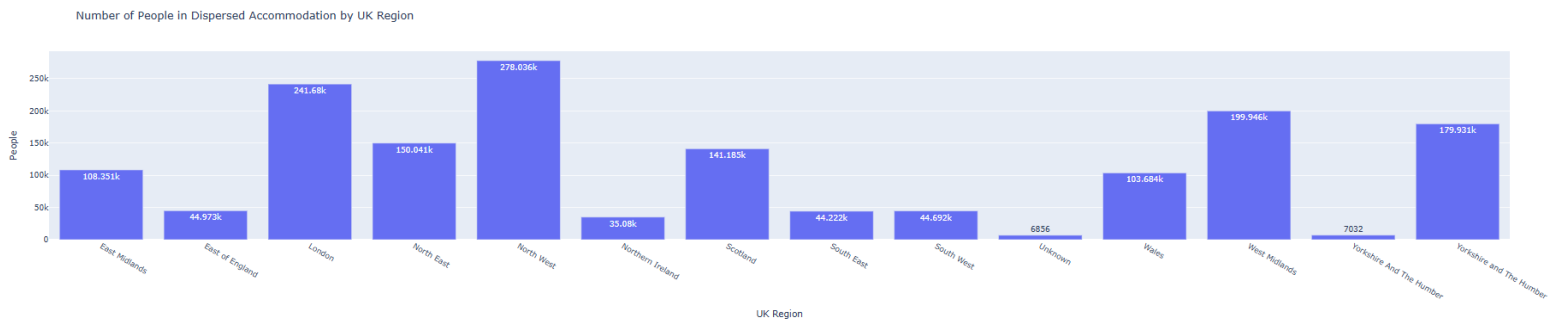


### 3. Number of People in Dispersed Accommodation by UK Region

A bar chart was created to showcase the number of individuals in dispersed accommodation across various UK regions. The data shows that certain regions accommodate significantly more asylum seekers than others.

#### Key Insight:

- The uneven distribution suggests that asylum dispersal policies are not uniform across the UK. Regions with higher numbers might have more available housing or specific policies favoring asylum placements.



### 4. Trend of Top 5 Nationalities Seeking Support Over Time

A line chart was used to analyze trends in the number of asylum seekers from the top five nationalities over time. The visualization reveals fluctuations in asylum applications, with certain nationalities experiencing sharp increases or decreases in specific years.

#### Key Insight:

- The variations in nationality trends might be linked to geopolitical events, conflicts, or policy changes affecting migration patterns.

- A steady increase in certain nationalities may indicate a long-term shift in asylum-seeking demographics.

Trend of Top 5 Nationalities Seeking Support Over Time



## Exploratory Data Analysis (EDA) of Resole Data: UoW Data 2024-25\_CLEANED

The initial EDA for these datasets was conducted using visualizations in PowerBI

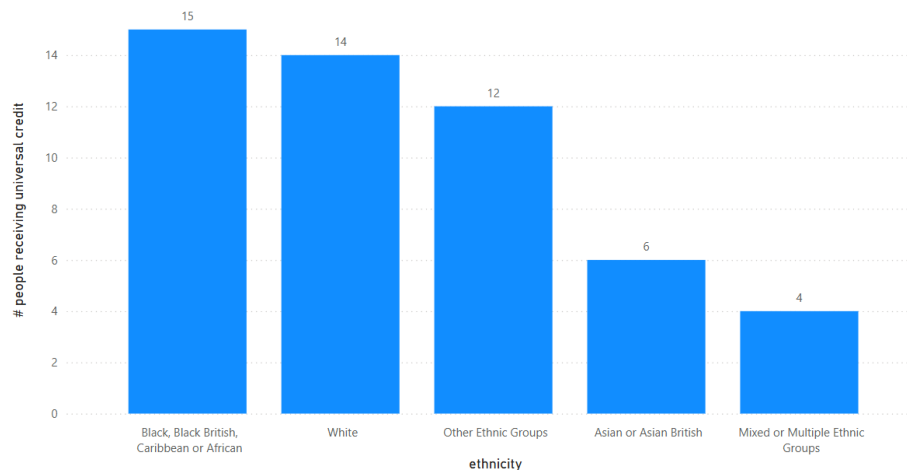
### 1. Universal Credit Recipients by Ethnicity

A bar chart illustrates the number of individuals receiving universal credit, categorized by ethnicity.

#### Key Insight:

- The majority of recipients are Black, Black British, Caribbean, or African. However, the difference compared to other ethnic groups is not substantial, suggesting that ethnicity may not significantly impact universal credit eligibility.

Universal credit received by ethnicity

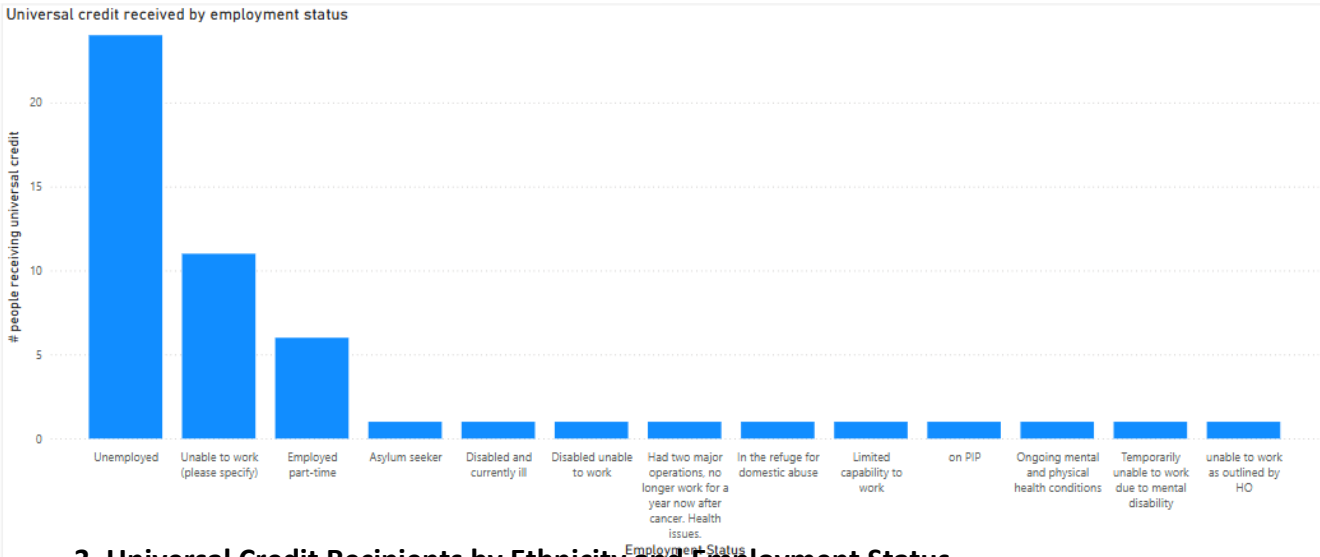


### 2. Universal Credit Recipients by Employment Status

A bar chart shows the distribution of universal credit recipients based on employment status.

#### Key Insight:

- The majority of recipients fall into three primary categories: unemployed, unable to work, or employed part-time. These groups may have a higher need for financial support

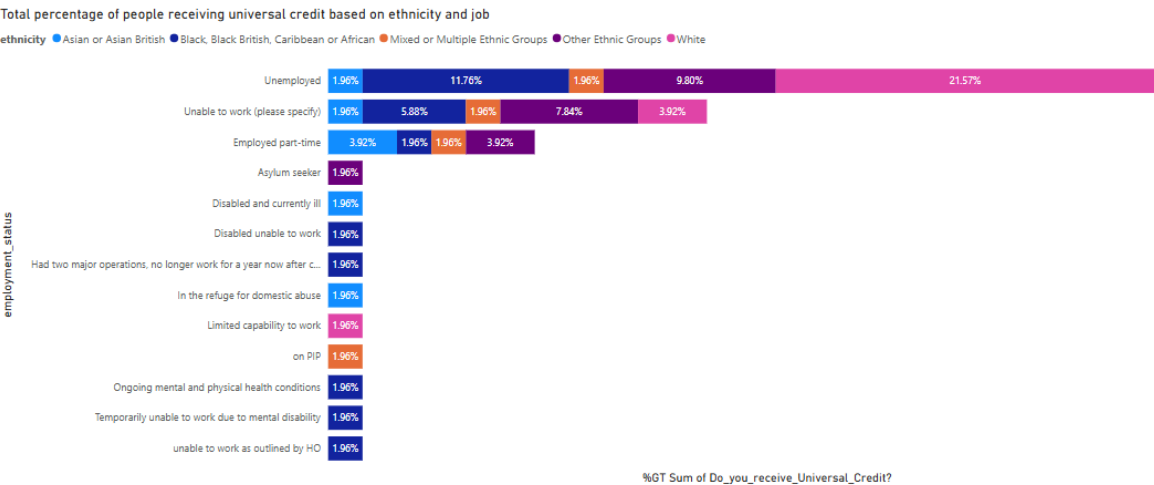


3. Universal Credit Recipients by Ethnicity and Employment Status

A combined chart visualizes the percentage of total universal credit recipients based on both ethnicity and employment status.

Key Insight:

- For instance, 21.57% of universal credit recipients in the datasets are unemployed white individuals.



Reference Dataset:

dataset 1 was obtained from: [ADD SOURCE](#)

dataset 2 was obtained from: [Resole](#)