Exploring the relationship between aspects of job quality and wellbeing across demographic groups in Greater Manchester

Mufiyda | BA Criminology

Overview of the Data Fellowship

During my time at the Greater Manchester Combined Authority as a Q-Step Research & Data Analyst Intern, I worked within the Work & Skills sub-team, focusing on job quality and wellbeing across the region. My main project analysed how factors such as pay, contract type, gender and disability affected people's experiences of work using the GM Residents' Survey. I conducted statistical analysis in Excel and SPSS, developed Tableau dashboards, and presented insights to support policy discussions around employment inequality and improving labour market standards.
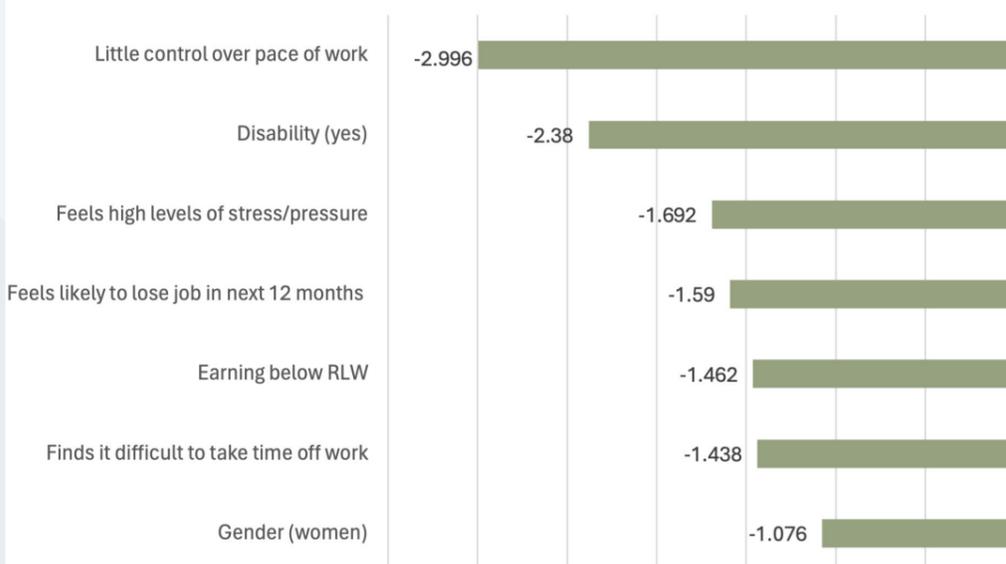
Data Analysis

I led a project analysing the relationship between job quality and wellbeing across demographic groups in Greater Manchester, using the GM Residents' Survey. I began with univariate analysis on Excel to profile key indicators such as stress, job security, pay, and control over work. I then conducted bivariate analysis on Excel, using pivot tables to compare ethnicity and perceptions of unemployment, gender and use of skills and employment industries and stress levels. To deepen this, I ran a multiple regression model to examine how a range of demographic and job quality factors simultaneously influence overall well-being. I explored the relationship between ethnicity and well-being further using crosstabulations in SPSS.
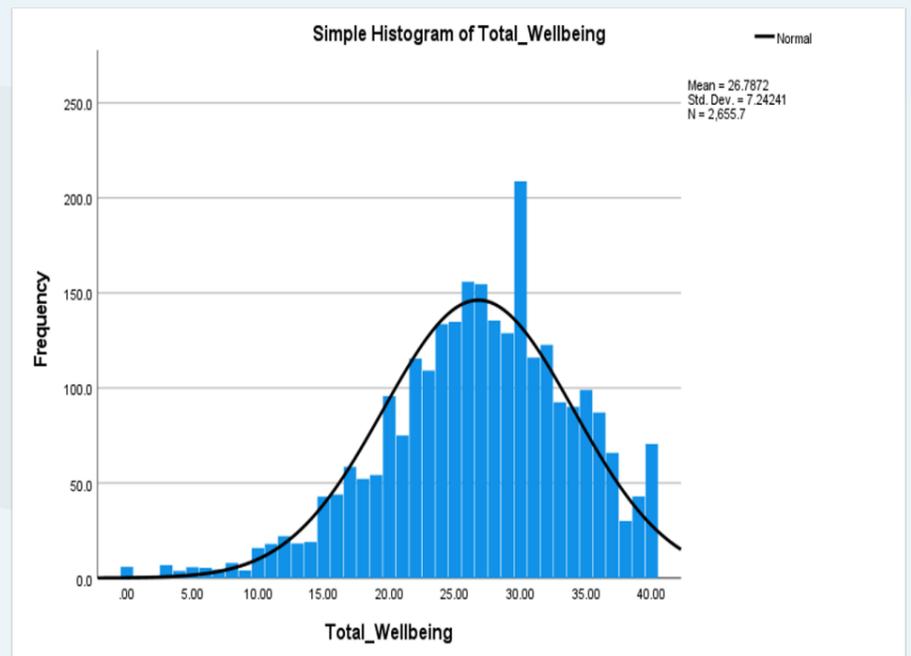
Distribution of total wellbeing scores in sample

- Pay and security inequalities were evident, with 80% earning at or below the Real Living Wage and Mixed/Asian groups reporting the highest risk of job loss.

- Men were more likely than women to feel their skills were fully utilised, highlighting gender differences in job quality perceptions.

- Low control over work pace had the strongest negative impact on wellbeing, while ethnicity showed no direct effect when other factors were controlled, although minority groups still faced significant disadvantages in pay and job security.

Ranked predictors of wellbeing

Key Skills Learnt

Data Analysis: Applied structured statistical techniques, including univariate summaries, cross-tabulations and regression modelling, to explore relationships between job quality and wellbeing across demographic groups.

Excel Proficiency: Used advanced Excel tools for data cleaning, recoding variables, running regression models and generating comparative tables to ensure accuracy and reliability in findings.

Data Visualisation: Designed clear and interactive Tableau dashboards to visually communicate trends in stress, pay, job security and wellbeing, making insights accessible to non-technical audiences.

Insight Communication: Presented findings to the Work & Skills sub-team, translating complex statistical evidence into practical, policy-focused insights to support discussions on employment inequality and fair work.

Findings

- A large proportion of workers in GM face strain, with 40% reporting work-related stress and over a third struggling to take time off.