

Employment Determinants of the Poor Mental Wellbeing of Student Workers in England¹

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Abstract

Purpose

Research on the increasing phenomenon of student paid work has tended to focus on the impact on studies or employability and reveal less about working conditions and their consequences. Given the rise in reported work-related poor mental wellbeing across England, there is a need to understand how employment affects student wellbeing. As such, this study investigates which aspects of work impact the mental wellbeing of student workers and to what extent.

Design/methodology/approach

Logistic regression analysis was used to examine 271 survey responses from Business School students at a post-1992 English university. The model coefficients were then exponentiated so that they could be interpreted as changes in the odds of experiencing work-related stress, anxiety, or depression.

Findings

The findings reveal several work-related variables to have a statistically significant impact on mental wellbeing. More specifically, the logistic regression models pinpoint control, guidance, work hours and job security, along with the demographic variables of ethnicity and age, as making significant contributions to the odds of experiencing work-related poor mental wellbeing.

Originality

This study contributes to the literature by improving understanding of student working conditions and work-related wellbeing. In bringing together these topics, the findings underscore the importance of examining how the organisation and conditions of student work impact mental wellbeing.

Recommendations are made for how employers and universities can address factors affecting student workers' mental wellbeing.

Key words: Anxiety; Depression; Mental Wellbeing; Stress; Student Workers; Working Conditions

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Introduction

Reports of poor mental wellbeing have grown significantly in England since the early 1990s (Matthews, 2019; McManus et al., 2016), and the wellbeing levels of university students are considerably below those of the general population (Neves et al., 2025). Workers under the age of 25 are the most likely to report that work adversely impacts their mental health (Parry et al., 2022), while, more generally, work-related ill health has increased from pre-pandemic levels (Health and Safety Executive, 2023). Interest in the wellbeing of university students is such that a policy dialogue has begun to take shape, driven by a concern for the quantity and quality of paid work undertaken in the context of the cost-of-living crisis (All-Party Parliamentary Group for Students, 2023; Black Bullion, 2025; Moss and Neves, 2025). Against a backdrop of universities' pursuit of income via competition for student numbers following a series of neoliberal education reforms since the mid-1990s, there has been a surge in student numbers from non-traditional backgrounds and overseas (Cunningham and Samson, 2021). Taken together with the introduction and growth in tuition fees, reduction in maintenance grants and increased cost-of-living, this means that students increasingly need rather than choose to work (Moreau and Leathwood, 2006; Neves et al., 2025). This need has left students more vulnerable to employment practices such as low pay, long and/or unsociable hours, zero hours contracts and gig work (Black Bullion, 2025; Skopeliti, 2023).

Nevertheless, there has, to date, been a lack of studies focussed on the effects of students' paid work on their mental wellbeing. To the extent that research has considered the paid work of students, it has done so from the perspective of the impact on their studies (Callender, 2008; Lessky and Unger, 2023; Neves et al., 2025), or employability (Gbadamosi et al., 2015; Smith et al., 2000). The education impact literature is effective at identifying the negative effects of paid work on student engagement, academic performance and completion rates, particularly for disadvantaged students (Callender, 2008; Lessky and Unger, 2023). However, the nature of the study-employment

relationship has changed, and study is now secondary for some (Robotham, 2012). As such, there is a need to examine the paid work of students beyond its effects on study. The employability literature, despite its value in understanding future employment and unequal access to opportunities (Gbadamosi et al., 2015; Smith et al., 2000), also tends to overlook the significance of paid work for students in the here and now. As such, there is a need to better recognise and improve the quality of student work (Mirchandani and Shan, 2024; Nyland et al., 2009).

There is an emerging literature that examines the working conditions of student workers (Rydzik and Kissoon, 2022; Summer et al., 2023; Taylor, 2022; Zhong et al., 2025). This literature highlights key aspects of student work in terms of commodification and precarity, and points towards the impact on mental wellbeing, in terms of anxiety and stress. Still, there is an absence of studies that have the effects of students' work on wellbeing as the focus, and that seek to interrogate the effects of working conditions on mental wellbeing in a systematic way, as has been done with other groups of workers (Kopasker et al., 2019; Milner et al., 2019; Rivero et al., 2021). This is significant, as while student workers share many commonalities with other groups of workers, they tend to be characterised by their flexibility and low pay, and may be easier to control (Curtis and Lucas, 2001). Indeed, it has been suggested that the effects of student employment on mental health represents an area where research is needed (Robotham, 2012). Addressing this need is essential for developing more ethical and supportive employment practices across sectors that rely on student labour.

The present study seeks to contribute to the literature by picking apart which working conditions can explain work-related stress, anxiety and depression (hereafter SAD) through a logistic regression analysis, which addresses the research question 'Which aspects of student employment are most strongly associated with SAD?' A Business School at a post-1992 university in North West England is a suitable site for investigation due to the extensive roll-out of neoliberal education reforms compared to Scotland and Wales where they have been resisted by the devolved governments with responsibility for higher education (Shattock and Horvarth, 2020). More specifically, the university is a large, multi-campus, urban institution with a diverse student population. As with post-1992 universities more generally, it enrolls many non-traditional students: typically older, first-

generation entrants from lower socio-economic backgrounds, often entering via vocational qualifications or progressing through access courses or foundation years (Hoskins, 2022). Students at these institutions are more likely to be in paid employment and work longer hours (Neves and Stephenson, 2023b). Taken together, these factors suggest an environment suited to examining the effects of working conditions on mental wellbeing.

The study aims to contribute to the literature in two main ways. First, it examines student working conditions. As most extant research focuses on education or employability to the neglect of employment factors, there is a need to deepen understanding of working conditions and their consequences. Second, it integrates two complementary theoretical frameworks, Labour Process Theory (LPT) and the Job Demands-Resources (JD-R) model, to explore how structural features of work and job-level characteristics interact to shape mental wellbeing. Whereas previous studies have typically applied these frameworks in isolation, this study combines them to offer both a critical lens on the positioning of student workers within systems of managerial control and strong links between student experiences of these systems and work-related SAD (Bakker and de Vries, 2021; Chillias and Baluch, 2019; Thompson and Smith, 2024). Logistic regression analysis can facilitate this in a systematic way by examining exactly which aspects of student employment are most strongly associated with the mental wellbeing of student workers.

Labour Processes, Job Demands, and Mental Wellbeing in Student Employment

This section outlines how working students navigate the labour process and the demands of paid employment. By combining LPT with the JD-R model, a framework is established for examining how the organisation and conditions of student work interact to shape mental wellbeing. This framework provides a basis for later situating student workers within broader structural and managerial dynamics of control, autonomy, and deskilling, while also providing a lens for understanding and how these dynamics manifest as job demands and resources that affect wellbeing.

LPT offers a foundational framework for understanding the structural organisation of work. The labour process is one moment in the wider capitalist production process, coming after

reproduction and hiring of labour, and before circulation and exchange of the outcome of the labour (Smith, 2016). Braverman (1974) reignited debates in this area with his arguments that managerial control strategies were resulting in continued deskilling at the workplace due to the ongoing influence of Taylorism. LPT is valuable as it shifts focus from the individual agency of ‘bad employers’ to the structural nature of the labour process under capitalism, which involves the exploitation of labour and thus supports a more comprehensive understanding of workplace experiences.

There can, of course, still be variation in employment strategies. Thompson (1990) offered an influential argument of how capitalist competition could result in different outcomes depending upon the specific conditions, and the mechanisms used by the employers. Friedman (1977; 1990) drew a distinction between direct control and responsible autonomy, with managers choosing strategies depending on labour market conditions and worker resistance. Under the former, tasks are broken down into the smallest units possible, and closely supervised, while under the latter, management attempt to gain worker loyalty via minimal supervision, responsibility, and favourable working conditions more generally. Still, both seek to maximise managerial authority over the labour process to exploit workers’ labour power. LPT debates could thus be seen to focus on managerial control, deskilling and worker autonomy, but have relevance for issues such as working hours, intensity, and job security through a lens of capitalist accumulation and surplus value creation.

Though not an explicit focus of LPT, there are links to the mental wellbeing of workers, with Marx’s (2002) use of alienation highlighting the mental impact arising from the lack of self-determination that workers experience under the capitalist division of labour, and the distance this creates between the worker, the product of their activity and other humans. This was a theme picked up by Baran and Sweezy (1966), who, much less convinced of the possibility of working-class revolution than Marx, argued that severe psychic disorders are instead the likely outcome of the tensions between capitalist production and the inner meaning of work for humans. Although LPT has long highlighted worker frustrations, feelings of alienation, and uncertainty within the labour process, its explicit engagement with mental wellbeing remains underdeveloped in much of the literature (Murphy and MacMahon, 2022; Thompson and Smith, 2024).

To explicate the links between working conditions and mental wellbeing, this study draws on the JD-R model, which can be used to complement LPT by offering a framework for understanding how specific job characteristics affect wellbeing. Developed by Demerouti et al. (2001), the JD-R model is a flexible and widely applied framework that categorises work characteristics into two broad dimensions: job demands and job resources. It is particularly useful in diverse occupational contexts, including precarious or part-time work (Bakker & Demerouti, 2014), making it well-suited to analysing student employment. JD-R theory conceptualises work conditions as demands such as long hours, high work intensity, and poor skills match, or resources such as job control, guidance, and employment security that interact to shape wellbeing and performance (Bakker and de Vries, 2021; Demerouti et al., 2001). High demands can lead to strain, while adequate resources buffer stress and promote engagement. While LPT focuses on structural imperatives and control, JD-R theory is particularly effective in illustrating how specific job demands and resources contribute to mental wellbeing. Understanding how workers experience control, autonomy, and deskilling requires attention to both structural dynamics and job-level conditions. LPT and JD-R together offer a complementary lens. LPT situates workers within broader systems of exploitation and control, while JD-R is useful to highlight the links between demands and resources on the one hand, and wellbeing on the other.

Hypotheses

Control and guidance. Control is at the centre of LPT (Thompson, 1990), with Braverman (1974) noting how it was through this mechanism that scientific management sought to turn labour into a commodity to extract its surplus value. This involves reducing the independence or autonomy of the worker to ensure that labour is available on demand and substitutable (i.e., divorced from the skills and knowledge of the worker). As noted above, it is through this process that workers become disconnected from their work. It has been suggested that students may be less willing to challenge managers, when compared to other workers, and are thereby easier to control (Curtis and Lucas, 2001). The JD-R model helps to explicate the link to wellbeing. More specifically, autonomy (i.e. self-control over work tasks) is a key job resource that buffers against strain and promotes wellbeing

by enabling self-regulation and engagement (Bakker and Demerouti, 2007; Bakker and de Vries, 2021). Empirically, high control at work has been found to be a predictor of higher levels of wellbeing (Stansfeld et al., 2013) while low job control has been found to be associated with depression in young workers (Shields et al., 2021). As such, it is hypothesised that:

H1. Student workers who desire more independence and control over their job will have higher rates of work-related SAD.

In LPT, guidance may function as a mechanism of control, but it can also reflect responsible autonomy, where workers retain some independence within a structured labour process (Friedman, 1977; 1990). In the JD-R model, guidance is viewed as a job resource that supports wellbeing through supervision, feedback, and task clarity (Bakker and Demerouti, 2007; 2014). While LPT situates guidance within broader power relations, JD-R draws a more direct link to psychological outcomes. Thus, while guidance should be interpreted with caution given its dual role, it generally functions as a positive job resource with beneficial effects on wellbeing.

H2. Guidance from the employer decreases the prevalence of work-related SAD.

Working hours. From a LPT perspective, the extension of the working day serves as a mechanism for intensifying exploitation and extracting surplus value by commodifying workers' time and subordinating it to production needs, undermining work-life balance in the process (Thompson and Smith, 2024). Within the JD-R model, long working hours are conceptualized as a job demand that contributes to fatigue, strain, and burnout (Bakker and Demerouti, 2007; Demerouti et al., 2001), highlighting the psychological consequences of extended working time. Indeed, research on young workers more generally has found increased working hours to be associated with greater job stress and to negatively affect young workers' mental health (CIPHR, 2021; Milner et al., 2019).

H3. The likelihood of experiencing work-related SAD increases with longer working hours.

Intensity. LPT identifies work intensity as a central mechanism through which employers extract surplus value, famously by controlling the speed of the conveyer belt, but also through targets, and more recently, algorithmic allocation and digital tracking of workers (Joyce and Stuart, 2021;

Thompson, 1990). This is made possible as workers usually sell their time rather than a specific quantity of labour (Smith, 2016), allowing employers to increase expectations within the same temporal boundaries. JD-R helps to explicate the psychological consequences of these practices. More specifically, intensity is conceptualised as a job demand that contributes to emotional exhaustion and burnout, particularly when not offset by adequate resources (Bakker & Demerouti, 2021; Demerouti et al., 2001). Previous studies have found higher levels of work intensity or workload to be related to greater job stress (Burke et al., 2010; CIPHR, 2021).

H4. Students in high-intensity employment are more likely to experience work-related SAD.

Skills match. Both frameworks imply that a divergence between worker capabilities and job design can harm wellbeing by reducing opportunities for meaningful work (Braverman, 1974; Demerouti et al., 2001). In LPT, such mismatches often result from deskilling strategies that prioritise managerial control and cost-efficiency, leaving workers unable to apply their skills and potentially feeling frustrated or disconnected (Braverman, 1974; Thompson and Smith, 2009). The JD-R model views a good skills match as a key job resource that enhances motivation, engagement, and overall wellbeing (Bakker and Demerouti, 2007; Mazzetti et al., 2023). While student workers may accept this underutilisation in the short term due to financial pressures, repetitive tasks and limited development prospects can still undermine their sense of purpose (CIPHR, 2021; Milner et al., 2019).

H5. Workers who cannot utilise their experience, training and skills are more likely to experience work-related SAD.

Job security. Both LPT and the JD-R model recognise job insecurity as a key factor affecting worker wellbeing, albeit with different emphases. LPT locates insecurity within the structural dynamics of capitalist labour relations, where workers are treated as interchangeable to maximise control and reduce costs (Braverman, 1994). This systemic precarity reinforces the commodification of labour and contributes to chronic uncertainty and diminished wellbeing (Dor & Runciman, 2022; Gandini, 2019). JD-R adds a psychological lens, viewing job security as a resource that fosters stability and buffers against strain (Bakker and Demerouti, 2007; Cao, Liu and Wong, 2024). Empirical research also

shows that younger workers report higher perceived levels of precarious employment, which has a negative effect on their work-related wellbeing (Hult et al., 2023).

H6. Workers who feel insecure in their jobs are more likely to experience work-related SAD.

Control variables.

There is also a need to discuss other variables which may impact upon student workers' mental wellbeing. This study controls for fair pay, class hours, study hours, and the demographic variables of age, gender, domicile and ethnicity. While LPT highlights a range of processes which seek to maximise surplus value and thereby not pay workers the full value of their labour, JD-R theory similarly recognises that low pay constrains access to the key resource of financial security and often goes hand in hand with a lack of other job resources, such as autonomy and support, thereby heightening vulnerability to strain (Bakker & Demerouti, 2007). Research has identified both a pay penalty, whereby students receive lower pay than non-students of the same age (Zhong et al., 2025), and a link between low pay and anxiety (Richardson, 2022). As such, it is important to control for pay. Class hours (i.e., the number of hours spent in class on campus each week) is included as a control variable alongside study hours (i.e., the number of independent study hours each week), as in previous studies academic workload has been identified as adding to stress and wellbeing issues (Neves and Stephenson, 2023a). In JD-R terms, these academic demands may interact with job demands, intensifying strain if not offset by adequate resources (Demerouti et al., 2001).

Demographic characteristics also shape how workers experience control, intensity, and insecurity. LPT has long recognised that managerial strategies interact with social distinctions (Bagnardi & Maccarrone, 2023; Friedman, 1977), and JD-R research similarly shows that personal and contextual factors influence access to job resources and exposure to demands (Bakker & Demerouti, 2021). For example, young workers are often more flexible and compliant (Lucas, 1997), yet report higher work demands and lower control due to limited experience and access to resources (Mazzetti et al., 2023). Female workers are more likely to experience coercive forms of control, such as direct supervision (Crowley, 2013), and be perceived as less skilled (Cockburn, 1983; Pollert,

1981), which may reduce access to support and autonomy. Studies have reported higher rates of work-related stress, anxiety and depression among ethnic minorities (Smith et al., 2005; Wadsworth et al., 2007), while immigrant workers face additional challenges such as discrimination, isolation, and limited access to institutional support (Chatrath, 2022; Doki et al., 2018). For international students, more specifically, legal restrictions such as limits on working hours and prohibitions on permanent contracts may further constrain autonomy and financial stability (UKCISA, 2025). It is therefore important to control for these demographic variables in assessing the relationship between working conditions and mental wellbeing, as they shape both the distribution of job demands and resources and the structural positioning of student workers within the labour process.

Methods

Data

The survey questions were devised based on previous questionnaires, primarily the *Work in Lancashire* survey (Wright et al., 2022) and the *Student Academic Experience Survey* (Neves and Stephenson, 2023a). The survey was web-based, using the Typeform platform, and was conducted in August and September 2023 following approval from the University's Ethics Panel. Links to the survey were cascaded through the School's careers coaches and course leaders and shared with students online via careers and programme related sites. The survey thus used a convenience sampling strategy, with students self-selecting whether to participate. The only conditions for inclusion were that they were Business School students who were working alongside their studies or had done so in the last 12 months. The survey link was not sent to students on apprenticeship programmes or professional doctorate students, due to the work being necessary for their studies and them being in established careers prior to beginning their studies, respectively. Students were compensated for their time, with a £5 shopping voucher being given to all who completed the survey. From an initial 341 responses, five students declined to participate after reading the Participant Information Sheet. A further 65 students were excluded due to not working alongside their studies, leaving a total of 271 responses for analysis. As all questions were mandatory for completion of the survey, there were no missing data. Power dynamics between students and academic staff have to some extent been

reframed following the introduction of student fees (Symonds, 2020), but there remains the possibility that the survey coming from academic staff within the School may have attracted some participants but deterred others. The risk being that engaged students were more likely to participate, rather than hard to reach students who may be experiencing more challenging conditions. Similarly, while evidence of social desirability response bias among students is mixed (Ferrari et al., 2009; Miller, 2011), the possibility that this might have influenced responses cannot be ruled out.

Measures

The outcome variable of poor mental wellbeing, captured by work-related SAD, was measured through positive responses to the questions ‘Over the past 12 months, have you experienced: Stress, anxiety or depression caused by work’ and ‘Over the past 12 months, have you experienced: Stress, anxiety or depression made worse by work’. Responses to these questions were combined to capture all participants who have experiences stress, anxiety or depression caused or exacerbated by work in the last year (0=not experienced; 1=experienced). Combining these responses allowed for greater analytical power as it helped to avoid small cell values when examining relationships between outcome and explanatory variables, which can be a limitation of survey research.

The main explanatory variables were measured using single items as follows: *Independence and control* ‘How much independence and control would you like to have over how you do your job’ (Much less; Somewhat less; About the same as now; Somewhat more; Much more); *Guidance* ‘Is your manager good at providing direction and guidance for the work you do?’ (1=Strongly disagree; 2=Disagree; 3=Neither Agree nor Disagree; 4=Agree; 5=Strongly Agree); *Skills match* ‘My current job requirements and responsibilities match my experience, training and skills’ (Yes; No); *Intensity* ‘My current job requirements and responsibilities can be achieved within contracted working hours’ (Yes; No; reverse coded); *Working hours* ‘In an average week during term-time, roughly how many hours have you been asked to do in paid employment, unrelated to your course?’ (0-59); *Job security* ‘How secure do you feel in your job?’ (Very insecure; Quite insecure; Neither secure nor insecure; Quite secure; Very secure).

The control variables were measured through the following items: *Fair pay* ‘Which of the following would describe how you experience your current job: Fairly paid/rewarded’ (Yes; No); *Class hours* ‘How many hours do you normally attend per week during term-time?’ (0-39); *Study hours* ‘In an average week during term-time, roughly how many hours have you spent on independent study (including studying with friends?’ (0-59). The other controls were comprised of demographic characteristics and measured as follows: *Gender* (Male; Female; Non-binary; Prefer not to say); *Ethnicity* (Asian or Asian British; Black, Black British, Caribbean or African; Mixed or multiple ethnic groups; White; Other ethnic group); *Domicile* (Home; International; Prefer not to say); *Age group* (18-25; 26-35; 36 and over).

Sample characteristics

Students with particular characteristics were not targeted, which means that the sample is more representative of some groups than others. As displayed in Table 1, the gender breakdown of participants is evenly split between female (45.76%) and male (45.02%) participants, with 5.17 percent of participants identifying as non-binary and 4.06 percent preferring not to reveal their gender. At 63.10 percent, Asian or Asian British students make up the largest ethnic group, followed by White (19.56%); Black, Black, British, Caribbean or African (7.01%); Other ethnic group (5.54%) and Mixed or multiple ethnic groups (4.80%). International students (63.10%) outnumber home domiciled students (29.89%) and those who prefer not to say (7.01%). With 62.36% of participants, 18–25-year-olds are the largest age group. While these figures are broadly representative of students in the School, they may be seen to over-represent ethnic minority and international students when compared to national figures (HESA, 2023). The number of international students, in particular, is important, given the legal constraints on their working hours and permanent contracts (UKCISA, 2025). It should be noted, however, that this study does not seek to generalise nationally, but rather examine whether working conditions can facilitate understanding of student’s work-related SAD. Moreover, the over-representation of some groups does not affect the internal validity of the analysis, as when measuring the changes in the odds of experiencing SAD for a particular predictor, other variables are held constant (Mehmetoglu and Mittner, 2022).

It is important to note that this study did not test the effects of employment sector on SAD, as LPT and JD-R point to cross-sectoral patterns in how working conditions shape wellbeing (Bakker and Demerouti, 2014; Chillias and Baluch, 2019). Still, the sample is broadly similar to other studies of student work in terms of employment sector (Gbadamosi et al., 2015; Lucas, 1997; Robotham, 2012). More specifically, most students were employed in health and social care (32.10%), followed by retail (25.46%), hospitality (15.13%), manufacturing (10.33%), food processing (4.43%) and logistics and warehousing (4.43%). A greater proportion of students were employed in health and social care in the present study, but this reflects the dramatic growth of the sector (Yang, 2023).

Analytical strategy

The analysis involved three steps, conducted in R. The first step was to produce descriptive statistics to examine association between the independent variables and the dependent variable of SAD. The second step was to fit the logistic regression models to predict student workers' work-related SAD. Model 1 estimates the impact of control and guidance on SAD. Subsequent models increase in complexity by adding the explanatory variables of work hours and intensity (Model 2), skills match (Model 3), job security (Model 4) and control variables (Model 5).

The model is shown below:

$$\text{SAD}_i = \beta_0 + \beta_1 * \text{CONTROL} + \beta_2 * \text{GUIDANCE} + \beta_3 * \text{WORK HOURS} + \beta_4 * \text{INTENSITY} + \beta_5 * \text{SKILLS MATCH} + \beta_6 * \text{JOB SECURITY} + \beta_7 * \text{FAIR PAY} + \beta_8 * \text{CLASS HOURS} + \beta_9 * \text{STUDY HOURS} + \beta_{10} * \text{AGE} + \beta_{11} * \text{GENDER} + \beta_{12} * \text{DOMICILE} + \beta_{13} * \text{ETHNICITY} + \epsilon_i$$

where ϵ is normally distributed (Liao, 1994).

The third step was to exponentiate the model coefficients from step two, so that they can be interpreted as change in odds, which is more intuitive to understand (Mehmetoglu and Mittner, 2022).

Results

Descriptive statistics and association with work-related SAD

As shown in Table 1, 28.04 percent of participants selected ‘Yes’ (i.e., that they had experienced SAD that was caused or made worse by their work in the last year). ‘About the same as now’ was the most frequent response regarding control (47.97%) and ‘Neither secure nor insecure’ was the most common response regarding job security (29.52%), suggesting that most participants felt content with their level of control and job security. The mean score for guidance was 3.9 out of 5, indicating that participants were, overall, relatively positive about the guidance provided by their managers. The mean number of working hours per week in term-time was 18.58. Most participants responded ‘Yes’ when asked whether their job was intense (73.80%) and ‘No’ when asked whether their job matched their skills (68.63%) and was fairly paid (54.98%).

Among the responses to the question of control, 47.62% of workers who want somewhat less control have experienced SAD, meaning that they have a greater propensity to SAD than participants who chose other response options. Guidance scores were lower for participants reporting SAD (3.42) than the overall mean, suggesting an association between less effective guidance and SAD. The degree of intensity does not appear to contribute to a difference in reporting SAD, with both intensity responses showing a 28 percent prevalence of SAD. In terms of skills match, those who feel their skills do not match their job displayed a greater tendency to report SAD (29.57%). For job security, participants who feel quite insecure showed the greatest propensity to experience SAD (50.00%). Among the control variables, responses appearing to have a strong association with SAD were non-binary gender (71.43%) and Black, Black British, Caribbean or African ethnicity (52.63%), while older participants (aged 36 and over) have a lower propensity to experience SAD (16.67%).

Before running the logistic regression, correlations were examined between all variables. As displayed in Appendix Table 1, most of the correlations were weak (<0.4), with only the relationship between job security and guidance showing a moderate correlation (0.588, $p<0.001$). None of the correlation coefficients were greater than 0.8, the point at which Berry and Feldman (1985) identified as indicating the likelihood of collinearity.

Table 1 to Feature Here

Logistic regression models

The results of the logistic regression models are displayed in Table 2 in hierarchical order. The addition of each explanatory variable improved model fit, as indicated by the reduction in -2 loglikelihood and increase in Pseudo R² measures. Ultimately, Model 5 had a McFadden's Pseudo R² of 0.248, which indicates excellent model fit (McFadden, 1974), and explains 25 percent of the variation in work-related SAD. The largest proportion of variation was attributable to control and guidance (McFadden's Pseudo R²=0.114), with working hours and job security also making statistically significant differences. The control variables are important to the model, accounting for variations of 6.7% in SAD (McFadden's Pseudo R²=0.066), with the coefficients for Asian or Asian British ethnicity, Mixed or multiple ethnic groups and age 18-25 being statistically significant.

Table 2 to Feature Here

To understand the change in odds of experiencing work-related SAD that the explanatory variables make, the next step was to exponentiate model coefficients. As displayed in Table 3, when controlling for other variables, the desire for much more control at work had the strongest positive effect ($\text{Exp}(\beta)=5.477$, $p<0.001$), which means that the odds of experiencing work-related SAD are more than five times the odds of someone who selected the reference category ('About the same as now'). Participants who want somewhat more control over their work have odds 3.052 times greater than those who selected 'About the same as now' of experiencing work-related SAD. The coefficient for guidance can be interpreted as meaning that for every additional point on the 5-point scale, the odds of experiencing work-related SAD decrease by 2.358 times ($\text{Exp}(\beta)=0.424$, $p<0.001$, $1/0.424$). Number of work hours ($\text{Exp}(\beta)=1.055$, $p<0.01$) can be seen to increase the odds of experiencing work-related SAD by 1.055 for every extra hour worked each week. The effects of job security were polarised to some extent. Quite insecure ($\text{Exp}(\beta)=4.360$, $p<0.05$) had a positive effect on the odds of experiencing work-related SAD, with the odds for participants who chose this category experiencing work-related SAD being more than four times the odds of someone who chose the reference category ('Very secure'). On the other hand, those who reported being quite secure ($\text{Exp}(\beta)=2.747$, $p<0.05$) had 2.747 times greater odds of experiencing work-related SAD compared to those who selected

‘Very secure’. The results of the other main predictor variables were not statistically significant, meaning that the possibility that they do not have a relationship with SAD cannot be ruled out.

Table 3 to Feature Here

Turning to the control variables, the odds of Asian or Asian British participants experiencing work-related SAD are 3.636 times less than for the reference group of White participants ($\text{Exp}(\beta)=0.275$, $p<0.05$, $1/0.275$), while for participants from Mixed or multiple ethnic groups, the odds are 11.628 times less than for their White counterparts ($\text{Exp}(\beta)=0.086$, $p<0.05$, $1/0.086$). Participants aged 18-25 years have odds of 3.626 ($p<0.1$) times those of student workers aged 36 and over of experiencing work-related SAD. The results of the other control variables were not statistically significant. As such, fair pay, class hours, study hours, gender and domicile were not seen to contribute to explaining the odds of experiencing SAD.

Discussion and conclusion

The results reveal several important findings. Firstly, from the descriptive statistics, the students were working 18.58 hours per week during term-time on average. This is considerably more than the 13.5 hours per week reported in the nationwide *Student Academic Experience Survey* (Neves and Stephenson, 2023a). To some extent, this may be explained by our sample, and the students being enrolled at a post-1992 university (Neves & Stephenson, 2023b), but it reinforces the suggestion that work has become a necessity rather than choice for most students (Moreau and Leathwood, 2006; Neves and Stephenson, 2023a). As such, the findings should be interpreted with an awareness that student workers may not always view their roles as stepping stones to long-term careers, but rather as immediate financial solutions, which may shape their perceptions of value and stress.

The descriptive statistics also show that 28.04 percent of students have poor mental wellbeing in the form of SAD caused or exacerbated by work. These figures are higher than for the working-age population across England more generally (CIPHR, 2021; McManus et al., 2016), and support the suggestion that the wellbeing levels of students are below those of the general population (Neves et al., 2025). In the context of increasing student employment and the wider mental health crisis

(Matthews, 2019; Neves et al., 2025), the figures are concerning. Our findings show the role of management strategies in shaping mental wellbeing, and thereby contribute to the call to heed social explanations of mental wellbeing (Matthews, 2019). More specifically, our findings point to the need to improve the quality of work in order to support student workers' mental wellbeing (Mirchandani and Shan, 2024; Nyland et al., 2009).

The findings of the logistic regression models show that the work variables of control, guidance, work hours and job security can be pinpointed as making significant contributions to the odds of experiencing SAD, and that the demographic variables of ethnicity and age also contribute to the propensity of SAD. These findings are important, as they contribute to the emerging literature on student working conditions (Rydzik and Kissoon, 2022; Summer et al., 2023; Taylor, 2022; Zhong et al., 2025), an issue which, with notable exceptions (Curtis and Lucas, 2001; Lucas, 1997), less attention has been given by employment studies researchers. The findings explicate the pressures faced by student workers and make a case for their inclusion in broader analyses of work and employment, particularly in relation to precarious labour (Dor and Runciman, 2022; Gandini, 2019). While LPT provides one useful perspective, the findings also resonate with the JD-R model, which helps to conceptualise how work-related pressures and supports shape wellbeing outcomes. Together, these frameworks illuminate the complex interplay between managerial strategies, demographic factors, and SAD, pointing to the need for interdisciplinary inquiry, especially in light of the ongoing mental health crisis (Matthews, 2019). The study contributes to a growing body of research that explores the relationship between employment conditions and mental wellbeing (Baran and Sweezy, 1966; Murphy and MacMahon, 2022).

Wanting more control, receiving less guidance, longer working hours, and insecure employment were found to have the strongest association with poor mental wellbeing. Thus, hypotheses 1, 2, 3 and 6 can be confirmed. However, due to a lack of statistical significance for the intensity and skills match variables, hypotheses 4 and 5 cannot be confirmed. The findings therefore support the continued centrality of control and guidance in understanding experiences of work (Bakker and de Vries, 2021; Thompson and Smith, 2024), and add further evidence that control is

vital for workers' wellbeing (Shields et al., 2021; Stansfeld et al., 2013). Our findings are consistent with studies that have found increased working hours and insecure employment to negatively affect mental wellbeing (Kopasker et al., 2019; Milner et al., 2019). As such, this study supports the inclusion of working hours and job security in analyses of contemporary work, aligning with emerging research on precarious employment and shifting labour dynamics (Dor and Runciman, 2022; Gandini, 2019; Joyce and Stuart, 2021). The control variables of class hours and study hours did not have a significant impact on work-related SAD, which suggest there is a need to focus on student experiences of work beyond work-study balance. While the impact of gender and domicile on work-related SAD cannot be confirmed, the reduced odds for Asian or Asian British and Mixed or multiple ethnic groups in comparison to their White counterparts points to the complexity of the relationship between ethnicity and work (Walby, 2009). The increased odds for 18–25-year-olds are as expected, and in keeping with the literature that shows young people to have more degraded working experiences and poorer mental health (Milner et al., 2019). These findings regarding ethnicity and age highlight the importance of incorporating demographic factors into analyses of work and employment (Durbin and Conley, 2010).

Limitations of the study include the relatively small sample size, which has reduced the statistical power to explore variation across demographic groups in greater depth. In addition, this study did not differentiate between students working primarily for financial reasons and those seeking career-aligned experience. These motivations may influence how students perceive their roles and wellbeing, and future research could explore this further. Despite these limitations, the study identifies important links between working conditions, especially control, guidance, working hours, and job security, and SAD. Future research should draw on larger, more diverse samples across multiple institutions. Given the additional constraints faced by international students, such as limits on working hours and restrictions on permanent contracts (UKCISA, 2025), further attention to how legal and institutional frameworks shape wellbeing outcomes is especially warranted.

At a practical level, management's prioritisation of profit levels limits the extent to which they are likely to address factors affecting student workers' mental wellbeing. Nevertheless, there are

areas in which the interests of managers and students could be seen to overlap, not least in reducing the number of sick days due to poor mental wellbeing each year. Increasing managerial guidance and decreasing direct control would significantly reduce the odds of experiencing SAD, as would improving workers' sense of job security. Improving the capacity of line managers to communicate with student workers, cultivate trust and responsibility would help to address each of these areas. As such, a targeted training intervention at the level of line managers represents a specific initiative with broader benefits across the organisation (Lewis et al., 2012). Ideally, students would also have the choice to work fewer hours. Again, to some extent, this could be facilitated by more accommodating management, although not all students would be able to do so without either a rise in their hourly rates of pay or increased maintenance loans and financial support from government. The latter of which is of course problematic for most international students. University partnerships and encouraging employers to sign up to initiatives such as the Good Student Employment Charter (Hospitality Now and University of Lincoln, 2023), which promotes best practices in student employment for visitor economy organisations, may also help to address these areas. More specifically, such initiatives make the business case for improving employment conditions.

In conclusion, this study has examined the factors shaping student wellbeing in the context of paid employment, identifying control, guidance, work hours and job security as significant. These findings highlight: (1) the importance of examining student work not only in terms of academic performance or employability, but also its implications for mental wellbeing; and (2) the value of integrating LPT and the JD-R model to understand how students experience and navigate structural and job-level pressures of contemporary work. While improvements to working conditions may be supported by managers and institutions, such efforts are often shaped by broader economic and structural constraints. This highlights the limits of individual managerial decisions and the need for systemic change. For universities, this underscores the need to consider how employment conditions intersect with student wellbeing, not only as a welfare concern but as part of their broader educational and institutional responsibility. Advocating for more sustainable and supportive working environments requires collaboration with employers, policy actors, and sector-wide initiatives.

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Tables

Table 1. Descriptive statistics, and association with stress, anxiety, and depression (SAD) (N=271)

Variable	Response	Overall N (%)	SAD N (%)
Total		271 (100.00)	76 (28.04)
Control	Much less	14 (5.17)	5 (35.71)
	Somewhat less	21 (7.75)	10 (47.62)
	About the same as now	130 (47.97)	25 (19.23)
	Somewhat more	55 (20.30)	19 (34.55)
	Much more	51 (18.82)	17 (33.33)
Guidance	Mean (SD)	3.93 (1.00)	3.42 (1.17)
Work hours	Mean (SD)	18.58 (9.85)	22.01 (9.97)
Intensity	Yes	200 (73.80)	56 (28.00)
	No	71 (26.20)	20 (28.17)
Skills match	Yes	85 (31.37)	21 (24.71)
	No	186 (68.63)	55 (29.57)
Job security	Very insecure	20 (7.38)	8 (40.00)
	Quite insecure	26 (9.59)	13 (50.00)
	Neither secure nor insecure	80 (29.52)	26 (32.50)
	Quite secure	71 (26.20)	19 (26.76)
	Very secure	74 (27.31)	10 (13.51)
Fair pay	Yes	122 (45.02)	37 (30.33)
	No	149 (54.98)	39 (26.17)
Class hours	Mean (SD)	8.66 (4.84)	8.79 (4.55)
Study hours	Mean (SD)	18.95 (10.66)	19.21 (10.49)
Age	18-25	169 (62.36)	52 (30.77)
	26-35	78 (28.78)	20 (25.64)
	36 and over	24 (8.86)	4 (16.67)
Gender	Male	122 (45.02)	28 (22.95)
	Female	124 (45.76)	37 (29.84)
	Non-binary	14 (5.17)	10 (71.43)
	Prefer not to say	11 (4.06)	1 (9.09)
Domicile	Home	81 (29.89)	23 (28.40)
	International	171 (63.10)	47 (27.49)
	Prefer not to say	19 (7.01)	6 (31.58)
Ethnicity	White	53 (19.56)	18 (33.96)
	Asian or Asian British	171 (63.10)	40 (23.39)
	Black, Black British, Caribbean or African	19 (7.01)	10 (52.63)
	Mixed or multiple ethnic groups	13 (4.80)	3 (23.08)
	Other ethnic group	15 (5.54)	5 (33.33)

Table 2. Logistic regression results

Variable	Response	Model 1		Model 2		Model 3		Model 4		Model 5	
(Intercept)		1.435*	(0.627)	0.987	(0.749)	0.730	(0.807)	0.175	(1.057)	-0.999	(1.428)
Control	Much less	0.128	(0.639)	0.246	(0.663)	0.275	(0.665)	0.730	(0.707)	0.569	(0.807)
	Somewhat less	0.968†	(0.519)	0.799	(0.575)	0.742	(0.580)	0.703	(0.590)	0.932	(0.672)
	Somewhat more	0.820*	(0.379)	0.831*	(0.389)	0.842*	(0.390)	0.898*	(0.399)	1.116*	(0.449)
	Much more	0.963*	(0.401)	1.078**	(0.418)	1.040*	(0.421)	1.428**	(0.459)	1.701***	(0.510)
Guidance	Mean (SD)	-0.747***	(0.158)	-0.800***	(0.165)	-0.787***	(0.166)	-0.821***	(0.203)	-0.858***	(0.229)
Work hours	Mean (SD)			0.048**	(0.015)	0.051**	(0.016)	0.054***	(0.016)	0.053**	(0.019)
Intensity	Yes			-0.395	(0.350)	-0.465	(0.360)	-0.490	(0.369)	-0.311	(0.416)
Skills match	No					0.308	(0.355)	0.304	(0.371)	0.300	(0.415)
Job security	Very insecure							-0.456	(0.805)	-0.406	(0.868)
	Quite insecure							1.257*	(0.606)	1.473*	(0.657)
	Neither secure nor insecure							0.612	(0.514)	0.710	(0.563)
	Quite secure							0.848†	(0.484)	1.010†	(0.520)
Fair pay	No								-0.255	(0.338)	
Class hours	Mean (SD)								0.019	(0.037)	
Study hours	Mean (SD)								0.003	(0.016)	
Age	18-25									1.2881†	(0.720)
	26-35									0.856	(0.732)
Gender	Female									0.489	(0.354)
	Non-binary									1.527	(1.104)
	Prefer not to say									-0.623	(1.222)
Domicile	International									0.783	(0.529)
	Prefer not to say									0.109	(0.757)
Ethnicity	Asian or Asian British									-1.291*	(0.590)
	Black, Black British, Caribbean or African									0.344	(0.914)
	Mixed or multiple ethnic groups									-2.458†	(1.300)
	Other ethnic group									-1.107	(0.875)
Deviance	-2 loglikelihood	285.045		272.879		272.111		263.394		241.808	
Pseudo R ²	McFadden	0.114		0.152		0.154		0.181		0.248	
	Nagelkerke	0.182		0.237		0.240		0.278		0.367	
	CoxSnell	0.126		0.165		0.167		0.193		0.255	

Notes: 1. Reference categories: About the same as now (Control); Yes (Skills match); No (Intensity); Yes (Fair pay); Very Secure (Job security); Male (Gender); White (Ethnicity); Home (Domicile); 36 and over (Age). 2. Standard errors are shown in parentheses. 3. Guidance is treated as a continuous measure (1=Strongly disagree – 5=Strongly agree). 4. †p<0.10, *p<0.05, ** p<0.01, *** p<0.001.

Table 3. Odds of experiencing SAD

Variable	Response	Exp(β)
(Intercept)		0.368
Control	Much less	1.766
	Somewhat less	2.540
	Somewhat more	3.052*
	Much more	5.477***
Guidance		0.424***
Work hours		1.055**
Intensity	Yes	0.733
Skills match	No	1.349
Job security	Very insecure	0.666
	Quite insecure	4.360*
	Neither secure nor insecure	2.034
	Quite secure	2.747*
Fair pay	No	0.775
Class hours		1.019
Study hours		1.003
Age	18-25	3.626†
	26-35	2.355
Gender	Female	1.631
	Non-binary	4.605
	Prefer not to say	0.536
Domicile	International	2.188
	Prefer not to say	1.116
Ethnicity	Asian or Asian British	0.275*
	Black, Black British, Caribbean or African	1.410
	Mixed or multiple ethnic groups	0.086*
	Other ethnic group	0.330

Notes: 1. Reference categories: About the same as now (Control); Yes (Skills match); No (Intensity); Yes (Fair pay); Very Secure (Job security); Male (Gender); White (Ethnicity); Home (Domicile); 36 and over (Age). 2. Guidance is treated as a continuous measure (1=Strongly disagree – 5=Strongly agree). 3. †p<0.10, *p<0.05, ** p<0.01, *** p<0.001.

Appendix Table 1. Correlation matrix

Variable	SAD	Control	Guidance	Work hours	Intensity	Skills match	Job security	Fair pay	Class hours	Study hours	Age	Gender	Domicile
SAD	1												
Control	0.021	1											
Guidance	-0.318***	0.251***	1										
Work hours	0.218***	-0.040	-0.016	1									
Intensity	-0.002	0.002	-0.126*	-0.043	1								
Skills match	0.050	0.014	-0.103	-0.179**	0.230***	1							
Job security	-0.226***	0.208***	0.588***	0.007	-0.070	-0.200***	1						
Fair pay	-0.046	-0.010	-0.160**	-0.036	0.051	0.028	-0.094	1					
Class hours	0.016	-0.049	-0.013	-0.028	-0.100	-0.006	0.015	-0.052	1				
Study hours	0.015	0.015	0.096	-0.102	-0.008	0.079	0.031	0.001	0.175**	1			
Age	0.012	0.107	0.094	-0.018	0.074	-0.056	0.099	-0.073	-0.008	0.106	1		
Gender	0.089	-0.169**	-0.163**	0.140*	0.028	0.011	-0.158**	0.111	0.048	0.004	0.077	1	
Domicile	0.006	0.017	-0.042	-0.244***	0.086	0.248***	-0.176**	0.041	-0.026	0.108	0.174**	0.143*	1
Ethnicity	0.022	-0.054	-0.124*	-0.087	0.093	0.186**	-0.188**	0.074	0.028	0.044	-0.022	0.288***	0.294***

Note: *p<0.05, ** p<0.01, *** p<0.001.