

RESEARCH ARTICLE

The interactive effect of job skill level and citizenship status on job depression, work engagement and turnover intentions: A moderated mediation model in the context of macro-level turbulence (of 'Brexit')

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Abstract

This study examines the role that citizenship plays in moderating the relationship between job-skill level, work-related depression, engagement, and turnover-intentions for UK based employees across 6 months in the year following the Brexit referendum. In two waves of data collection, citizenship moderated the relationship between job-skill level and depressive states; among EU citizens, those in low skilled jobs experienced greater depressive states than employees in high skilled jobs, this difference was not found among UK citizens. Furthermore, depressive states were subsequently related with low work engagement and high turnover intentions and citizenship moderated the indirect-effect of job skill on engagement and turnover intentions via depressive states. This study shows that during the turbulent times following the Brexit referendum, EU citizens in the UK with low-skilled jobs were most affected by depressive states,

Abbreviations: Brexit, withdrawal of the United Kingdom from the European Union; COR, conservation of resources; et al., and others; EU, European Union; i.e., which is; UK, United Kingdom; vs., versus.

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were subsequently less engaged and showed higher levels of intent to quit.

KEYWORDS

Brexit, citizenship, depression, job skill level, turnover intentions, work engagement

Practitioner notes

What is currently known?

- Migrant workers and people in low skilled jobs are more prone to challenges faced with macro-level uncertainty.
- Job related uncertainty can have negative effects on employee mental health and work outcomes.
- Continuing uncertainty can drain employees' psychological resources and have a detrimental impact their ability to respond to these challenges in a positive way.

What this paper adds?

- We show that following the Brexit referendum vote, EU citizens in the UK with low skilled jobs were the group most affected by depressive states and subsequently, less engaged and more likely to consider leaving their job.

The implications for practitioners

- In the context of Brexit and other turbulent socio-political contexts that may raise questions around the work status of migrant workers, policymakers and organizations need to recognize the vulnerable position certain parts of the work force (in this case EU citizens in the UK with low skilled jobs) face.
- Managers of organizations in the UK should devise tailored support programs to address the needs of EU citizens in low skilled jobs, who are vulnerable in this context, in order to retain them in their jobs and keep them engaged at work.

1 | INTRODUCTION

The withdrawal of the United Kingdom (UK) from the European Union (EU), colloquially known as Brexit, is a large-scale political process that began in 2016, when a small majority of voters (52%) indicated their preference to leave the EU. This political process has been characterized by considerable social and economic uncertainty. Organizations faced difficulties in long term planning, due to absence of clear regulations and legislation in vital areas like labor or taxation. As it often happens in such turbulent economic contexts (Psychogios & Prouska, 2019), Brexit has been directly linked to country wide job losses in the UK, due to businesses relocating abroad or closing down before the end of negotiations, with over 420.000 jobs lost until September 2019 (Small Business Prices, 2019).

In a macro context of political, social, and economic uncertainty many employees face job losses, pay cuts, reduction of their working hours, or higher demands from employers who need to make adjustments to their workforce in order to survive (Teague & Roche, 2013). These unplanned changes may be perceived by employees as violating their psychological contract (Conway et al., 2014), and make them feel insecure about their jobs. Common reactions to job insecurity are lower work effort, higher propensity to leave, resistance to change (Greenhalgh & Rosenblatt, 1984) or reduced voice behaviors (Prouska & Psychogios, 2016). Previous research shows that job insecurity is stressful because employees perceive they lack control over their fate, which leads to impaired functioning and depression (Price et al., 2002; Turner et al., 1999). Evidence from a systematic review shows that in economically

unstable environments, people suffer from mental health and particularly depression due to experienced challenges (Frasquilho et al., 2016). Furthermore, employees' depressive states may lead to low work engagement and intentions to leave and search better work alternatives elsewhere in order to cope with challenges (Hobfoll, 1989).

Thus, in turbulent socio-economic contexts such as Brexit, employees are likely to experience mental health challenges fostered by the turmoil (Psychogios & Prouska, 2019), and these could affect key work outcomes, such as engagement and turnover intention. Work engagement is a 'positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption' (Schaufeli & Bakker, 2010, p. 13). Turnover intention is defined as a conscious desire to leave one's organization, usually with the intention of finding another job (Schwepker, 2001). Having disengaged employees, who consider leaving is costly for organizations, affecting the performance and vitality of the organization (Singh & Loncar, 2010; Sverke et al., 2002).

Importantly, the looming Brexit threat would be unlikely to have a universal impact on all employees in the UK; some might have experienced Brexit as a threatening context more than others and subsequently manifest poorer mental health and work outcomes. During economically turbulent times, low-skilled employees are more at risk of losing their jobs, because organizations tend to treat them as an easily disposable and replaceable part of the workforce (Hallberg, 2011). Furthermore, migrant workers in the UK are a salient group in the intergroup context of Brexit, where 'us' versus 'them' categorization is likely (Tajfel & Turner, 1979). As such, the Brexit context may have broader negative socio-economic implications for EU citizens without UK citizenship¹ than for UK citizens. Specifically, EU workers may face greater uncertainty in maintaining or regaining employment, because they are vulnerable to changes in immigration regulations that may follow on from Brexit, based on their citizenship. Therefore, this study investigates how employees in low-skilled versus high-skilled jobs may differ in their depressive states and subsequently engagement and turnover intentions, and whether these differences are contingent on their status as EU or UK citizens.

2 | THEORETICAL FOUNDATIONS

Brexit has brought many challenges to the UK economy and working population; in this economically turbulent and unpredictable context many people have lost their jobs, and many may lose their jobs in the future (Small Business Prices, 2019). Potential job loss is a major cause for concern and a mental health challenge (Sverke et al., 2002), since for most people their work provides vital financial resources, as well as meaning and life satisfaction.

We draw on conservation of resources theory (COR, Hobfoll, 1989) to better understand how different categories of employees based in the UK experience mental health (depressive states) and how these affect their work outcomes (engagement and turnover intentions) during the macro context of (pre) Brexit negotiations. Resources are aspects that help individuals attain their goals and sustain effort (Bakker & Demerouti, 2017). A crucial type of resources are psychological resources, representing individual strengths that help individuals function optimally in their environment (Bakker & Demerouti, 2008), such as self-efficacy, optimism, and emotional stability. These are distinct from job resources (e.g. autonomy, feedback, task identity) and organizational resources (leadership, learning and development opportunities, rewards, climate and culture; Lee et al., 2020). Psychological resources are particularly important in determining employee well-being and positive work outcomes (Luthans & Youssef-Morgan, 2017), because the ability to cope with stressors is crucially dependent these resources. As such, a loss of resources is associated with stress, and experiencing stress motivates individuals to protect their remaining resources in order to cope with difficulties (Halbesleben & Wheeler, 2015; Hobfoll et al., 2018).

Low psychological resources can manifest through depressive states (Halbesleben & Bowler, 2007; Halbesleben & Wheeler, 2015; Kessler et al., 1988). Depression is a mood disorder characterized by negative states, anxiety, guilt, feelings of hopelessness and worthlessness, inability to concentrate and make decisions, and decreased interest in pleasurable stimuli (Nestler et al., 2002). An important factor in the onset of depression is chronic stress (Bartolomucci & Leopardi, 2009; Hammen, 2005), which is likely widespread in turbulent contexts like Brexit, where

job losses and pay cuts are high (Prouska & Psychogios, 2016). Therefore, during Brexit many employees may experience having low psychological resources.

2.1 | Job skill level

In economically uncertain contexts like Brexit, employees in low-skilled jobs are more likely to face redundancy than employees in high skilled jobs, who are more valued by organizations and are considered a fixed part of the workforce (Hallberg, 2011). For example, previous research shows that employees in manufacturing jobs, which require lower skills, are more affected by downsizing than other employees (Datta et al., 2010). Similarly, higher educated employees, who tend to occupy high-skilled jobs, are less likely to be made redundant and regain employment faster than lower educated workers, because they have skills that are in higher demand on the job market (Wolbers, 2000). Thus, employees in high-skilled jobs are likely to be less exposed to potential negative effects of Brexit, compared to employees in low-skilled jobs. As such, people with low-skilled jobs have an increased risk of becoming unemployed because there is lower demand for low-skilled work during times of economic recession (Publications Office of the European Union, 2014).

Based on COR, we expect that in turbulent macro-economic contexts like Brexit, employees holding lower-skilled jobs would feel socially and economically vulnerable because they may easily become unemployed. Review and meta-analytical studies indicate that fear of job loss has a detrimental impact on mental health (Frasquilho et al., 2016; Sverke et al., 2002; Wanberg, 2012). Unemployment threat is related to symptoms of psychological distress, including depression and low subjective well-being (Paul & Moser, 2009). As such, people in lower-skilled jobs are likely to experience depressive states more acutely because they are more likely to lose their job and can anticipate more difficulties in regaining employment in case of job loss. As discussed below, we qualify this statement by suggesting that in the context of Brexit, the relationship between job skill level (JSL) and depression depends on the UK or EU citizenship status of these employees.

2.2 | The moderating role of EU/UK citizenship status

EU citizens based in the UK are likely to perceive that they are more directly affected by Brexit than UK citizens. A main topic on the public agenda during Brexit was the threat posed by immigration for the UK workforce and the economic prosperity of the country. A key feature of Brexit involves restricting migration and EU migrants' work rights in the UK. Until the introduction of the settled status scheme testing phase in late 2018 (Home Office, 2020) it was unknown whether EU citizens would be allowed to continue to live and work in the UK after Brexit.

As context, EU born population living in the UK more than doubled from 1.5 million in 2004 to 3.7 million in 2017 (Migration Watch UK, 2019). A survey on the day of the Brexit referendum revealed that 33% of those in favour of leaving the EU were primarily concerned about immigration (Lord Ashcroft Polls, 2016). People who voted "leave" in the referendum perceived higher realistic threat (i.e. concerns about loss of safety, power and resources) from EU immigrants (Rzepnikowska, 2019; Van de Vyver et al., 2018). As such, immigration played a central role in political and social debate during the Brexit process. As a salient migrant group, EU citizens were treated with higher caution and portrayed as economic threats, and are directly affected by political decisions concerning their right to continue working in the country post-Brexit. As such, they are likely to experience decreased acceptance in the UK based on their EU citizenship status (Rzepnikowska, 2019).

Thus, due to the anti-immigration ethos that characterized Brexit, and the potential tightening of UK-EU migration and freedom of movement post-Brexit, employees with EU citizenship were likely to experience a heightened risk of job loss (Jiang et al., 2020). Furthermore, EU citizens working in the UK may have felt particularly vulnerable because they could anticipate that, should they lose their job in the near future (post Brexit), they may not find

opportunities for reemployment. Job insecurity is experienced more strongly when individuals face severe threats and feel powerless, therefore when they are more vulnerable (Greenhalgh & Rosenblatt, 1984; Jiang et al., 2020). Subsequently, such conditions are likely to lead to negative well-being outcomes in the context of macro-economic threats to employment (Shoss, 2017). As such, employees' vulnerability on the job market during Brexit likely depend on both their JSL and citizenship status, and these factors will have an interactive effect on employees' mental health state. Specifically, we argue that employees who hold lower skilled-jobs likely experienced higher resource loss if were EU citizens; for them, depressive states were likely to be particularly strong. Specifically, we argue that citizenship moderates the relationship between JSL and depressive states.

Hypothesis 1 *The expected negative relationship between employees' job skill level and depressive states are stronger for EU citizens compared to employees with UK citizenship.*

2.3 | Depressed states, work engagement, and turnover intentions

Depressed states represent a manifestation of low personal resourcefulness (Halbesleben & Wheeler, 2015; Kessler et al., 1988). The withdrawal that characterizes depression may be an adaptive response in an unpredictable or hostile environment, where waiting for the stressor to pass helps individuals conserve energy and survive through difficult times (Halbesleben & Bowler, 2007; Halbesleben & Wheeler, 2011, 2015). Investing their dwindling psychological resources in a job they could easily lose in a context like Brexit, for reasons beyond their control, may leave individuals with even more severely impaired resources in case of actual job loss. For example, people who are overly optimistic relative to their current situation are likely to experience disappointment or regret (Shepperd et al., 2015), which may impair future engagement in goal achievement (Wieczerkowski & Prado, 1993).

According to COR, people with low resources are more vulnerable to further resource loss and are less capable of gaining resources in the future (Hobfoll et al., 2018). Thus, employees experiencing depressive states, are less capable of 'investing' in their current work. An indicator of whether employees are fully involved in their jobs is level of work engagement (Kahn, 1992).

Work engagement describes the experience of work as a stimulating and energetic activity, to which people happily devote time and effort, and see as a personally meaningful pursuit, during which employees are highly concentrated and may experience flow. Employees can draw upon psychological resources like self-efficacy, emotional stability, or optimism in coping with daily challenges and stressors, remaining engaged in their work (Korunka et al., 2009; Schaufeli & Bakker, 2004). However, employees with lowered resources, who experience depressive states and adopt a defensive stance (Hobfoll et al., 2018), may become disengaged at work. Furthermore, employees experiencing depression are likely to have high turnover intentions because they experience high strain in their current situation (Frese, 1985; Sverke, 2002). These individuals may fare better if they accept the possibility of imminent job loss and consider leaving their organization before being made redundant.

Thus, because individuals strive to conserve their resources when these are low (Hobfoll et al., 2018), we predict that depressive states, which are markers of low psychological resourcefulness, mediate the relationship between job-skill level and employee outcomes; furthermore, this mediation depends on employees' citizenship status (see Figure 1). Specifically:

Hypothesis 2 *Citizenship status moderates the indirect relationship between job skills and (a) work engagement and (b) turnover intentions via depressive states. Thus, EU citizens (compared to UK citizens) show a more positive indirect relationship between job skill level and work engagement and a more negative indirect relationship between job skill level and turnover intentions (mediated by depressive states).*



FIGURE 1 Conceptual model: Moderated Mediation model

3 | METHOD

3.1 | Participants and procedure

Our study draws participants from Prolific, an online panel survey provider that recruits paid participants through advertisements and snowball sampling. Two waves of surveys were collected; we invited full-time working individuals who were living and working in the UK; participants had to be between 20 and 65 years of age. At time 1 (T1, March 2018) we invited 350 UK and 350 EU origin individuals to participate. We received 610 completed responses in total; we received 365 usable responses from UK citizens and 245 from EU citizens who were living and employed in the UK. At time 2 (T2, December 2018) we invited those who completed the survey at T1 to participate in a second survey. We aimed to measure the dependent variables after the mediator (rather than instantaneously) because such designs are a stronger test of the expected nomological mediation sequence. In the context of Brexit uncertainty (which lasted many months), we expected the ongoing impact of skill level and citizenship status through depression to also occur over a period of months. Including a temporal gap between the mediator and dependent variables also helps reduce the likelihood of common method bias. In total 323 participants (227 UK citizens and 96 EU citizens) fully-completed both surveys, and their responses were used in testing the hypotheses. Respondents were geographically spread across 253 different towns and cities in the UK.

3.2 | Measures

3.2.1 | High versus low-skilled jobs

Respondents indicated their current job title. These answers were used to create an indicator of low versus high-skilled jobs. To define high and low-skilled jobs we used the latest Standard Occupational Classification (SOC) of the UK Office of National Statistics (2010). This classification takes into account typical wage levels, education levels, and job characteristics. Low-skill jobs require competencies acquired during compulsory education (typically by age 16) and short job training. High-skill jobs require post-compulsory education (e.g. vocational degree for IT technician, paramedic) or an advanced degree (e.g. accountancy, engineering), and may involve high level managerial positions. We reviewed participants' job titles and coded them into '1 = high-skilled' if they were high-skilled according to the SOC, and/or if the job involved a senior leadership role or business ownership. The remaining jobs we coded as '0 = low-skilled'.

Seventy-two participants reported generic job titles (e.g. 'manager', 'officer', 'adviser', 'consultant'). To check our categorization of these we sent a follow-up survey to the 72 individuals, with questions about main job activities, required education level and number of direct reports, if any. Of these, 38 provided additional information, which was used to confirm or update the classification. For the remaining 34 participants the researchers used their judgment in

categorizing jobs (e.g. 'consultant' and 'manager' were coded as high-skilled jobs). We ran the main analyses excluding these participants. As this did not change the results substantively, we included these 34 participants in the analyses.

3.2.2 | Citizenship

Participants were asked to report their nationality, citizenship and country of origin. We also asked about UK citizenship status and three options were presented: 'UK citizen', 'Dual citizenship - UK citizen + another,' and: 'Not UK citizen. Other'. We combined the UK citizen and dual citizenship categories as UK citizenship and coded this variable as 0 = 'EU citizenship' and 1 = 'UK citizenship'.

3.2.3 | Depressed states (T1)

We used Warr's (1990) three-item measure of depression by asking participants to report how much of the time in the past weeks their job has made them feel: 'depressed', 'gloomy', 'miserable'. The response scale had a 1-6 format (never-all of the time, as per Warr's 1990 measure).

3.2.4 | Work engagement (T2)

We used the nine item Utrecht Work Engagement measure (Schaufeli & Bakker, 2004). Employees were asked to report how they feel in their current role on a 1-7 scale (never-always), for example, 'At work I am bursting with energy'.

3.2.5 | Turnover intentions (T2)

Four items measured turnover intentions (based on Price & Mueller, 1986), for example, 'I often think about leaving the organization in which I am employed'. The response scale had a 1-5 format (strongly disagree-strongly agree).

3.2.6 | Control variables

Some key controls were included in the analysis: age, gender and job insecurity (T1) because they may affect depression levels. Women and younger adults may experience higher depression (Turner et al., 1999). Furthermore, participants with low skilled-jobs might feel higher job insecurity and consequently experience higher depressed states (Jiang et al., 2020). Four items measured participants' job insecurity (De Witte, 1999); for example, 'Chances are, I will soon lose my job'. The response scale had a 1-5 format (strongly disagree-strongly agree).

4 | RESULTS

4.1 | Measurement model testing

We conducted a four-factor CFA of T1 job insecurity, T1 depressive states, T2 engagement and T2 turnover intentions. This model showed a good fit to the data ($\chi^2 = 510.85$, $df = 164$; $\chi^2/df = 3.12$, RMSEA = 0.08; CFI = 0.93;

TABLE 1 Means, standard deviations, reliability and correlations of study variables

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | Mean (SD) |
|---------------------------------|----------|--------|---------|-------|---------|----------|----------|--------|--------------|
| 1. Age | - | | | | | | | | 37.76 (9.93) |
| 2. Gender | -0.07 | - | | | | | | | 1.62 (0.48) |
| 3. Job insecurity | 0.01 | 0.09 | (0.85) | | | | | | 2.68 (0.99) |
| 4. Job skill level ^a | 0.05 | -0.12* | -0.10 | - | | | | | 0.60 (0.49) |
| 5. Citizenship ^b | 0.16** | -0.07 | -0.15** | 0.04 | - | | | | 0.70 (0.46) |
| 6. Depressive states T1 | -0.03 | 0.09 | 0.26*** | -0.10 | 0.03 | (0.94) | | | 2.18 (1.22) |
| 7. Work engagement T2 | 0.11* | 0.00 | -0.09 | 0.14* | -0.08 | -0.41*** | (0.94) | | 4.68 (1.19) |
| 8. Turnover intention T2 | -0.20*** | 0.05 | 0.22*** | -0.04 | -0.18** | 0.37*** | -0.50*** | (0.86) | 2.63 (1.14) |

Note: $N = 323$.

^aJob skill level: 0 = low, 1 = high.

^bCitizenship: 0 = =EU, 1 = UK; Gender: 1 = male; 2 = female. Reliability coefficients on diagonal.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

TLI = 0.91, SRMR = 0.05) with all factor loadings at 0.65 or above. Thus the multi-items scales fit the data well; we created average composites for these variables (following Anderson & Gerbing, 1988 two stage approach). Table 1 presents correlations, reliability, means, and standard deviations.

4.2 | Hypotheses testing

We ran two moderated mediation path models using Mplus 8.7 (Muthén & Muthén, 2017) with 5000 (bias-corrected) bootstrap draws for estimating the moderated indirect effects, using Stride and colleagues' (2015) procedure. We included age, gender, and job insecurity as controls (excluding these yielded essentially the same conclusions). We followed the procedures outlined by Preacher and Kelley (2011) to produce standardized indirect effects (using Mplus model constraint commands, syntax available from the corresponding author). Note 95% confidence intervals are reported on indirect effects.

4.2.1 | T1 depressed states

The first stage of the moderated mediation models, predicting T1 levels of depression, was significant ($F(6,316) = 6.80$, $p < 0.001$, $R^2 = 0.114$), see Table 2 for full results. There was a significant interaction between JSL and citizenship status ($\beta = 0.370$, $p < 0.001$). Simple slopes indicate that the negative relationship between JSL and T1 depressed states was negative and significant for EU citizens ($\beta = -0.320 [-0.522; -0.134]$, $p < .001$, but this was not the case for UK citizens ($\beta = 0.045 [-0.081; 0.163]$, ns. Using Acock's (2014) indication of effect size descriptions with standardized coefficients, the impact of skill level on depressive states for EU employees was of moderate magnitude. A one unit increase in skill level (being in a low-skilled vs. high-skilled job) reduced depression for EU workers by 0.32 standard deviations on a scale of 1–5, which translates to a drop of approximately one measurement unit in depression (see Figure 2). For UK workers, depression did not differ across the two skill levels, however EU workers with low versus high skill levels showed a marked difference in depression. This key effect on EU workers is comparable in size to other key predictors of depression. For example, autonomy and job strain had very small effects on depression, but bullying and social exclusion had higher effect sizes (Theorell et al., 2015), which came closer to the effect size of job-skill level with EU citizens in our study. In summary, results supported Hypothesis 1 (see Table 2): being in low-skilled jobs was related to higher depression than being in high-skilled jobs only among EU citizens, but not UK citizens.

TABLE 2 Moderated mediation models: Citizenship moderating the indirect effects of job skill level (JSL) on work engagement and turnover intentions through T1 depression

| | Depressive states | Work engagement | Turnover intentions |
|--|----------------------------------|-----------------------------------|-----------------------------------|
| Mediator T1 | DV T2 | DV T2 | DV T2 |
| β (SE) <i>p</i> | β (SE) <i>p</i> | β (SE) <i>p</i> | β (SE) <i>p</i> |
| Age | -0.037 (0.052) | 0.094 (0.048) | -0.189 (0.046)*** |
| Gender | 0.056 (0.053) | 0.058 (0.052) | -0.001 (0.052) |
| Job insecurity T1 | 0.247 (0.063)*** | 0.027 (0.057) | 0.131 (0.054)* |
| Job skill level (JSL) | -0.320 (0.095)** | 0.110 (0.051)* | 0.011 (0.052) |
| Citizenship | -0.117 (.093) | | |
| JSL*Citizenship | 0.370 (0.115)** | | |
| Depression T1 | | -0.408 (0.051)*** | 0.330 (0.055)*** |
| R square | 0.114 (0.042)*** | 0.191 (0.042)*** | 0.187 (0.040)*** |
| Conditional effects | β (LLCI: ULCI) <i>p</i> | | |
| EU citizenship | -0.320 [-0.522: -0.134]** | | |
| UK citizenship | 0.045 [-0.081: 0.163] | | |
| Indirect effects: JS → Depression → DV | | | |
| EU citizenship | | 0.239 [0.096: 0.419]*** | -0.105 [-0.188: -0.046]*** |
| UK citizenship | | -0.034 [-0.128: 0.058] | 0.015 [-0.026: 0.055] |
| Index of moderated mediation | | -0.273 [-0.487: -0.099]*** | 0.120 [0.047: 0.214]*** |

Note: Coefficients in boldface are for hypothesized paths. $N = 323$; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Job skill level: 0 = low, 1 = high; Citizenship: 0 = EU, 1 = UK; Gender: 1 = male; 2 = female.

4.2.2 | T2 work engagement

In the second stage regression predicting work engagement ($F(5,317) = 14.94$, $p < 0.001$, $R^2 = 0.191$), T1 depressed state negatively predicted T2 work engagement ($\beta = -0.408$, $p < 0.001$). As predicted by Hypothesis 2a, the indirect effect of JSL on T2 work engagement (via T1 depressed state) was positive and significant for those with EU citizenship status ($\beta = 0.239$ [0.096: 0.504], $p < 0.001$); this was not the case for those with UK citizenship status ($\beta = -0.034$ [-0.128: 0.058], ns); index of moderated mediation = -0.273 [-0.487: -0.099], $p < 0.001$). Therefore, EU citizens with low-skilled jobs experienced lower work engagement than those with high-skilled jobs subsequent to feeling more depressed, whereas this was not the case for UK citizens. The direct and indirect effects on work engagement reported above for EU citizens are similar in size (i.e. moderate strength) to those found in other research investigating antecedents of work engagement (Peccei, 2013): job resources such as work-role fit and task significance, and psychological resources such as self-efficacy, proactivity, and optimism.

4.2.3 | T2 turnover intentions

In the second stage regression predicting T2 turnover intentions ($F(5,317) = 14.59$, $p < 0.001$, $R^2 = 0.187$), T1 depressed states positively predicted T2 turnover intentions ($\beta = 0.330$, $p < 0.001$). As predicted by Hypothesis 2b, the indirect effect of job skills level on turnover intentions (via depressed state) was negative and significant for EU citizens ($\beta = -0.105$, [-0.188: -0.046] $p < 0.001$) but this was not the case for those with UK citizenship ($\beta = 0.015$ [-0.026: 0.055], ns), index of moderated mediation = 0.120 [0.047: 0.214], $p < 0.001$). Figure 3 presents path coefficients and conditional indirect effects. Therefore, EU citizens with low-skilled jobs experienced higher turnover

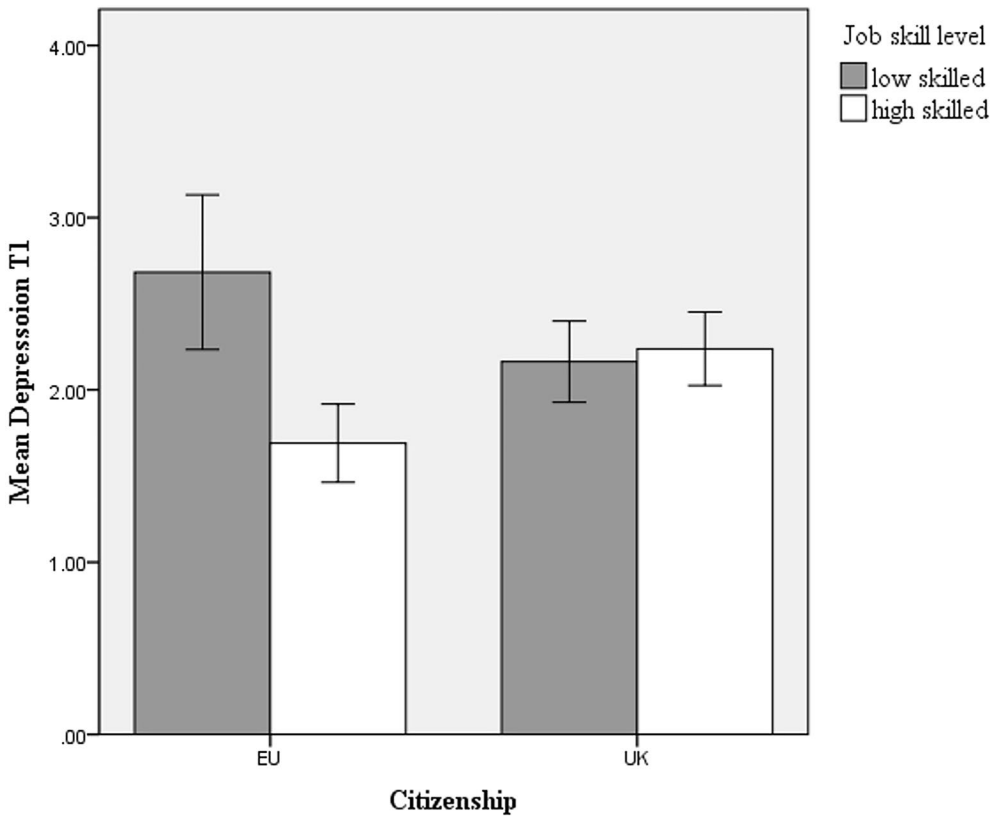


FIGURE 2 Depression (T1) as a function of job skill level (JSL) and citizenship. Error bars represent 95% confidence intervals.

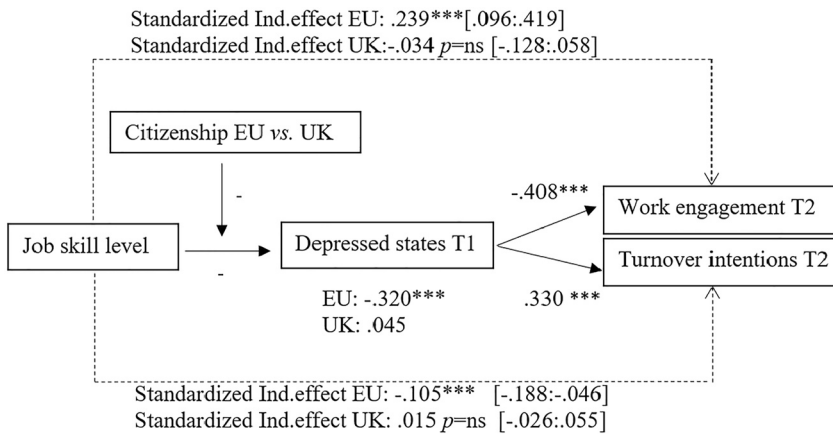


FIGURE 3 Path coefficients and conditional indirect effects

intentions than those with high-skilled jobs subsequent to feeling more depressed, whereas this was not the case for UK citizens. The effect sizes on turnover intentions for EU citizens are moderate, similar to effects of turnover antecedents identified in a meta-analysis: stress/exhaustion, pay, routinization, age (Rubenstein et al., 2018).

5 | DISCUSSION

A looming Brexit context is a macro-level turbulent environment where job insecurity is likely to be high (Psychogios & Prouska, 2019; Small Business Prices, 2019). Our study shows that employees in low-skilled jobs reported work-related depressed states to a greater degree than employees in high-skilled jobs, and this relationship was found for EU but not UK citizens. Furthermore, depressed states were negatively related to subsequent work engagement, and positively related to turnover intentions. Thus, the relationships between JSL and both work engagement and turnover intentions, via depressive states, were stronger for EU citizens than for UK citizens.

5.1 | Theoretical implications

This article helps illuminate how a turbulent macro level socio-economic and political context such as Brexit translates into individual employee experiences and outcomes in the workplace. In the context of a looming Brexit employees' JSL and citizenship status were highly salient, given country-wide job losses and the uncertainties regarding EU migrants' rights of working in the UK post-Brexit. The highest psychological pressures leading to depressed states and more negative work outcomes were experienced by the employees most vulnerable to job loss—namely EU citizens with low-skilled jobs. This is a novel contribution, as most research on employee health, well-being, and work outcomes does not consider the broader macro level socio-economic environment, with few exceptions (e.g. Chatrakul Na Ayudhya, Prouska & Beauregard, 2019; Jiang et al., 2020).

Therefore, our research clarifies how wider socio-political changes and uncertainties about job loss during Brexit have impacted different groups of employees. EU migrants in low-skilled jobs compared to those in high-skilled jobs experienced stronger depressive states, whereas for the local UK population (including migrants with UK citizenship) depression was not related to their level of job skill, suggesting that UK citizens in low and high skilled jobs perceive similar levels of threat in this context. This could mean for example, that UK citizens in high-skilled jobs are aware of downsides of Brexit for their job security, but may be confident about finding another job in case of job loss, based on their experience in a high-skilled job (Wolbers, 2000), whereas UK citizens in low-skilled jobs may find comfort in the idea that competition on the job market will be lower post-Brexit (Van de Vyver et al., 2018). However, EU employees in low skilled jobs, who faced salient threats of job loss, experienced high depression, low engagement, and high turnover intentions compared to EU employees in high skilled jobs. This finding is particularly interesting as it indicates that being an EU citizen in the UK in the context of Brexit did not in itself lead to lower well-being for employees; EU citizens in higher skilled jobs in fact showed relatively low levels of depressive states. It is the combination of being in a low-skill (and therefore vulnerable) job where workers have high uncertainty about their work rights based on EU citizenship that was associated with higher depressed states leading to decreased capacity to engage in work, and increased turnover intentions. Overall, this study shows which specific workers are likely to suffer most in the context of macro-level socio-political turbulence during Brexit, and how they respond to these challenges to conserve resources (Halbesleben & Bowler, 2007).

Furthermore, the hypothesized effect of job skill and citizenship on depressed states was observed when including job insecurity, a meaningful covariate. Therefore, although EU migrants in low-skilled jobs might experience high job insecurity (Greenhalgh & Rosenblatt, 1984; Jiang et al., 2020), they also feel more depressed. This suggests that indeed migrants in low-skilled jobs experience low resourcefulness in a turbulent context, which manifests through depressive states, above and beyond potential effects of these antecedents on job insecurity. As such, this study provides a robust test of COR theory (e.g. Hobfoll et al., 2018), showing that individuals' resources are influenced heavily by the context, and low resourcefulness has negative implications for employees' work outcomes.

Lastly, our research has implications for understanding the impact of macro-level turbulence on employees and their employers. A country's working population is heterogeneous and different macro events will be more salient for some (and less for others). In the context of Brexit, although hundreds of thousands of jobs have been lost across the

country (Small Business Prices, 2019), our findings showed that the group in the population experiencing the highest psychological burden was that of EU citizens who were low skilled, in effect potentially the most vulnerable population for this particular macro event; and the impact took the form of depression, engagement and intention to leave.

Our research demonstrates that macro level turbulence is likely to impact the micro employee sphere by having a disproportionate impact on some groups in the labor market more than others, and some groups are more vulnerable to particular turbulent events more than others. As such, this research helps identify that the potential mechanism of impact of macro-level turbulence on employees and organizations is likely to be dependent on the nature of the macro event and the make-up of an organizations' workforce. For some macro-level turbulent events, the impact may be more salient for some groups compared to others but the impact that particular events will have on different groups of employees will vary depending upon the nature of the event. For example, in economic recessions employees of small and medium enterprises may be most vulnerable, and the consequences may be stronger for this group (Psychogios & Prouska, 2019). Similarly, the coronavirus pandemic has preponderantly led to income loss among young and low educated employees (Kartseva & Kuznetsova, 2020). Integrating our insights with previous work on the impact of macro-level turbulence on employee experiences, leads to the idea that the impact of macro-level turbulence on employees and organizations will be contingent on who is likely to be affected the most by particular events. Therefore, this knowledge helps us identify a useful framework for understanding the impact of macro events and mitigating their effects.

5.2 | Practical implications

Our study shows that Brexit poses multiple difficulties for companies – not only external ones, for example, by changing policies and trade agreements – but also internal ones, by affecting the mental health, engagement and turnover intentions of employees. Given the importance of employee engagement and commitment to the organization in fostering high work performance (Demerouti & Cropanzano, 2010; Peccei, 2013), having less energetic and dedicated employees, who consider leaving might damage organizational performance, thus putting further strain on organizations across the UK during a turbulent time. Employee engagement is important because it leads to high task performance (e.g. Peccei, 2013), whereas having employees with low turnover intentions can help organizations maintain continuity of tasks and processes and avoid costs of seeking, hiring, and training new staff (Watlington et al., 2010). As discussed above, management should consider the nature of any particular macro event in the work context that an organization may be facing and identify what group is likely to be impacted most profoundly and why; an intervention can be planned to support these employees through the turmoil. As such, according to our findings, managers should pay particular attention to low-skilled non-citizens when work status of particular migrant work groups is under threat. Ultimately, the outcome of the macro-turbulence of Brexit on low-skilled EU employees was that they were more likely to leave their jobs. Thus, for employers, if the skills and workforce participation of these people is still needed for the functioning of their business, the loss of an important part of the workforce is likely to be costly (Singh & Loncar, 2010). By identifying low-skilled EU employees as a vulnerable category, our work may help managers direct efforts towards supporting these employees, for example, by increasing organizational resources available to them (Lee et al., 2020). According to previous research (Jiang et al., 2020), employees with low psychological resources may benefit from other types of resources such as job and organizational resources. Therefore, particularly EU employees in low-skilled jobs could benefit from clear communication, mentorship and support groups, training opportunities for higher skilled roles, or offering permanent contracts to high performers. Companies could devise tailored strategies to address specifically the needs of this vulnerable group of workers in order to retain them and keep them engaged at work.

Our work could also inform policymakers and organizations designing laws, policies, and labor market interventions. An important issue is that midway between our two data collection points (March and December 2018) the UK government announced plans for a 'settled status' scheme. This policy proposed to grant EU employees already living

and working in the UK the rights to live and work in the UK after Brexit. Such a policy following Brexit should help EU citizens experience more positive states. However, despite this policy, EU citizens in low-skilled jobs exhibited high depression, low engagement, and high turnover intentions compared to those in high-skilled jobs. This suggests that the anti-immigration ethos dominating the Brexit context had stronger influence over mental health states and work outcomes among EU citizens than formal government measures. Therefore, policy agencies should design long term strategies to manage and mitigate the effects of low engagement and turnover intentions of workers during periods where macro-level socio-political policies (impacting migrant workers) are being considered.

5.3 | Limitations and future research

A first limitation worth raising is that utilizing an online panel (convenience sample) may cause concerns about the validity and representativeness of responses. Recent debates highlight both the advantages and disadvantages of using such recruitment methods (Porter et al., 2019; Walter et al., 2019). The essential advantage is that we could readily access a respondent pool of UK and EU participants working full-time in the UK, employed in a wide range of jobs across the country. Such a participant pool is ideal for exploring the study's core research questions, and it enabled us access to a sizable UK based EU sample. Whilst this sample was not randomly drawn from the UK working population (and we cannot claim it represents this population), Porter et al. (2019) and Walter et al. (2019) both argue that online panel samples can be considered adequate for relationship testing and such samples have considerable cost-efficiency benefits. These reviews also suggest that the validity of online panel samples are substantively similar (yielding similar effect sizes) to conventionally sourced samples. Whilst non-random sampling means that these samples are not strictly representative of wider populations, they are often found to be as or more representative than convenience samples generally found in applied research.

Second, although we collected data at two time points following the Brexit referendum and we found robust support for our model, we have no data from our sample prior to the Brexit referendum. This would have offered higher validity to conclusions about the tested relationships from a resources perspective. In general, work engagement is lower for lower-skilled employees (Kanten & Sadullah, 2012), because the intrinsic characteristics of their work offer lower potential for engagement—monotonous, fragmented work, with low autonomy and feedback from the job (Hackman & Oldham, 1980). However, in our study lower-skilled workers were more depressed, less engaged, and had higher turnover intentions, which in the context of Brexit, can be interpreted as coping with the threat of resource loss.

Third, the study has a cross-sectional design, which does not permit drawing causal inferences about the relationships tested, which should be interpreted with caution. Although causality can be best assessed in experimental designs, experiments are not suitable in examining the current research question. However, as recommended by Wang et al. (2013), we tested the different relationships in our model using temporal separation of mediator and dependent variables. This enabled us to draw stronger implications regarding potential causal relationships.

Fourth, as some employees who participated at T1 did not complete the survey at T2 we followed Goodman and Blum (1996) to assess the presence and effects of non-random sampling. We the study's focal variables did not significantly predict participant drop-out status; some evidence indicated that participants who did not respond at T2 were slightly less likely to have UK citizenship status. However, the strength of relationships between predictors and T1 depression was not substantively different in the full sample compared to the sample of respondents at T2. Ultimately the analyses suggest that participant drop out characteristics did not substantively impact the validity of findings.

Lastly, data was collected in the context of Brexit, which has specific implications for the UK labor force and restricts our ability to directly generalize to other contexts; we explicitly recognize this limitation. However, the UK is not alone in having its government tighten freedom of movement and employment for migrant populations. Our study could therefore inform research conducted in other countries confronted with inward migration where

governments propose restricting such movement. It would be interesting for future research to build on our findings by including countries facing similar challenges.

6 | CONCLUSION

When countries propose macro level policy changes that have broad socio-economic implications for their workforce, this may affect some groups more than others, especially when these changes may impact migrants' legitimacy and freedom to work in the country. This study showed that the nature of employees' jobs (particularly their job-skill level, determining how vulnerable they are to job loss), and their citizenship status are associated with their depressive states, and subsequently work engagement, and turnover intentions, in a context where jobs may be threatened by changes proposed by government policy. As such, EU citizens in low-skilled jobs experienced substantial strain, which related to negative work-related well-being and poorer work outcomes over a prolonged period, possibly affecting organizational performance and viability.

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CONFLICT OF INTEREST

The author declares that there is no conflict of interest that could be perceived as prejudicing the impartiality of the research reported.

DATA AVAILABILITY STATEMENT

Data available upon request from corresponding author.

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ENDNOTE

¹ To simplify, in the following sections we refer to EU citizens without UK citizenship as EU citizens.

REFERENCES

- Acock, A. C. (2014). *A gentle introduction to Stata* (4th ed.). Stata Press.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223. <https://doi.org/10.1108/13620430810870476>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Bartolomucci, A., & Leopardi, R. (2009). Stress and depression: Preclinical research and clinical implications. *PLoS One*, 4(1), 4265. <https://doi.org/10.1371/journal.pone.0004265>
- Chatrakul Na Ayudhya, U., Prouska, R., & Beauregard, T. A. (2019). The impact of global economic crisis and austerity on quality of working life and work-life balance: A capabilities perspective. *European Management Review*, 16(4), 847–886. <https://doi.org/10.1111/emre.12128>

- Conway, N., Kiefer, T., Hartley, J., & Briner, R. B. (2014). Doing more with less? Employee reactions to psychological contract breach via target similarity or spillover during public sector organisational change. *British Journal of Management*, 25(4), 737–754. <https://doi.org/10.1111/1467-8551.12041>
- Datta, D. K., Guthrie, J. P., Basuil, D., & Pandey, A. (2010). Causes and effects of employee downsizing: A review and synthesis. *Journal of Management*, 36(1), 281–348. <https://doi.org/10.1177/0149206309346735>
- Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 147–163). Psychology Press.
- De Witte, H. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work & Organizational Psychology*, 8(2), 155–177. <https://doi.org/10.1080/135943299398302>
- Frasquilho, D., Matos, M. G., Salonna, F., Guerreiro, D., Storti, C. C., Gaspar, T., & Caldas-de-Almeida, J. M. (2016). Mental health outcomes in times of economic recession: A systematic literature review. *BMC Public Health*, 115, 1–40. <https://doi.org/10.1186/s12889-016-2720-y>
- Frese, M. (1985). Stress at work and psychosomatic complaints: A causal interpretation. *Journal of Applied Psychology*, 70(2), 314–328. <https://doi.org/10.1037/0021-9010.70.2.314>
- Goodman, J. S., & Blum, T. C. (1996). Assessing the non-random sampling effects of subject attrition in longitudinal research. *Journal of Management*, 22(4), 627–652. <https://doi.org/10.1177/014920639602200405>
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, 9(3), 438–448. <https://doi.org/10.5465/amr.1984.4279673>
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Addison-Wesley.
- Halbesleben, J. R., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93–106. <https://doi.org/10.1037/0021-9010.92.1.93>
- Halbesleben, J. R., & Wheeler, A. R. (2011). I owe you one: Coworker reciprocity as a moderator of the day-level exhaustion-performance relationship. *Journal of Organizational Behavior*, 32(4), 608–626. <https://doi.org/10.1002/job.748>
- Halbesleben, J. R., & Wheeler, A. R. (2015). To invest or not? The role of coworker support and trust in daily reciprocal gain spirals of helping behavior. *Journal of Management*, 41(6), 1628–1650. <https://doi.org/10.1177/0149206312455246>
- Hallberg, D. (2011). Economic fluctuations and retirement of older employees. *Labour*, 25(3), 287–307. <https://doi.org/10.1111/j.1467-9914.2011.00522.x>
- Hammen, C. L. (2005). Stress and depression. *Annual Review of Clinical Psychology*, 1, 293–319. <https://doi.org/10.1146/annurev.clinpsy.1.102803.143938>
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524. <https://doi.org/10.1037/0003-066x.44.3.513>
- Hobfoll, S. E., Halbesleben, J., Neveu, J.-P., & Westman, M. (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual Review of Organizational Psychology and Organizational Behavior*, 5(1), 103–128. <https://doi.org/10.1146/annurev-orgpsych-032117-104640>
- Home Office. (2020). EU settlement scheme statistics, February 2020. Experimental statistics. Retrieved from <https://www.gov.uk/government/statistics/eu-settlement-scheme-statistics-february-2020>
- Jiang, L., Xu, X., & Wang, H. J. (2020). A resources-demands approach to sources of job insecurity: A multilevel meta-analytic investigation. *Journal of Occupational Health Psychology*, 26(2), 108–126. <https://doi.org/10.1037/ocp0000267>
- Kahn, W. A. (1992). To be fully there: Psychological presence at work. *Human Relations*, 45(4), 321–349. <https://doi.org/10.1177/001872679204500402>
- Kanten, S., & Sadullah, O. (2012). An empirical research on relationship quality of work life and work engagement. *Procedia-Social and Behavioral Sciences*, 62, 360–366. <https://doi.org/10.1016/j.sbspro.2012.09.057>
- Kartseva, M. A., & Kuznetsova, P. O. (2020). The economic consequences of the COVID-19 pandemic: Which groups will suffer more in terms of loss of employment and income? *Population and Economics*, 4(2), 26–33. <https://doi.org/10.3897/popecon.4.e53194>
- Kessler, R. C., Turner, J. B., & House, R. H. (1988). Effects of unemployment on health in a community survey: Main, mediating, and modifying effects. *Journal of Social Issues*, 44(4), 69–86. <https://doi.org/10.1111/j.1540-4560.1988.tb02092.x>
- Korunka, C., Kubicek, B., Schaufeli, W., & Hoonakker, P. L. T. (2009). Burnout and work engagement: Do age, gender, or occupation level matter? Testing the robustness of the job demands resources model. *Positive Psychology*, 4(3), 243–255. <https://doi.org/10.1080/17439760902879976>
- Lee, J. Y., Rocco, T. S., & Shuck, B. (2020). What is a resource: Toward a taxonomy of resources for employee engagement. *Human Resource Development Review*, 19(1), 5–38. <https://doi.org/10.1177/1534484319853100>
- Lord Ashcroft, P. (2016). How the United Kingdom voted on Thursday... and why. Retrieved from <https://lordashcrofthpolls.com/2016/06/how-the-united-kingdom-voted-and-why/>

- Luthans, F., & Youssef-Morgan, C. M. (2017). Psychological capital: An evidence-based positive approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 4(1), 339–366. <https://doi.org/10.1146/annurev-orgpsych-032516-113324>
- Migration Watch UK. (2019). Population by country of birth. Retrieved from <https://www.migrationwatchuk.org/statistics-population-country-birth>
- Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (8th ed.). Muthén & Muthén.
- Nestler, E. J., Barrot, M., DiLeone, R. J., Eisch, A. J., Gold, S. J., & Monteggia, L. M. (2002). Neurobiology of depression. *Neuron*, 34(1), 13–25. [https://doi.org/10.1016/s0896-6273\(02\)00653-0](https://doi.org/10.1016/s0896-6273(02)00653-0)
- Office for National Statistics (2010). Standard occupational classifications 2010. Retrieved from <https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassification/soc/soc2010>
- Paul, K. I., & Moser, K. (2009). Unemployment impairs mental health: meta-analyses. *Journal of Vocational Behavior*, 74(3), 264–282. <https://doi.org/10.1016/j.jvb.2009.01.001>
- Peccei, R. (2013). Engagement at work: An evidence-based review. In S. Bach & M. R. Edwards (Eds.), *Managing human resources* (5th ed., pp. 336–363). Wiley.
- Porter, C. O. L. H., Outlaw, R., Gale, J., & Cho, T. (2019). The use of online panel data in management research: A review and recommendations. *Journal of Management*, 45(1), 319–344. <https://doi.org/10.1177/0149206318811569>
- Preacher, K. J., & Kelley, K. (2011). Effect size measures for mediation models: Quantitative strategies for communicating indirect effects. *Psychological Methods*, 16(2), 93–115. <https://doi.org/10.1037/a0022658>
- Price, J. L., & Mueller, C. W. (1986). *Handbook of organizational measurement*. Pittman.
- Price, R. H., Choi, J. N., & Vinokur, A. D. (2002). Links in the chain of adversity following job loss: How financial strain and loss of personal control lead to depression, impaired functioning, and poor health. *Journal of Occupational Health Psychology*, 7(4), 302–312. <https://doi.org/10.1037/1076-8998.7.4.302>
- Prouska, R., & Psychogios, A. (2016). Do not say a word! Conceptualizing employee silence in a long-term crisis context. *International Journal of Human Resource Management*, 29(5), 885–914. <https://doi.org/10.1080/09585192.2016.1212913>
- Psychogios, A., & Prouska, R. (2019). *Managing people in small and medium enterprises in turbulent contexts*. Routledge.
- Publications Office of the European Union. (2014). European vacancy and recruitment report 2014. Retrieved from <https://op.europa.eu/en/publication-detail/-/publication/4dd66948-a82f-46d3-93b1-57f5a5b6029c>
- Rubenstein, A. L., Eberly, M. B., Lee, T. W., & Mitchell, T. R. (2018). Surveying the forest: A meta-analysis, moderator investigation, and future-oriented discussion of the antecedents of voluntary employee turnover. *Personnel Psychology*, 71(1), 23–65. <https://doi.org/10.1111/peps.12226>
- Rzepnikowska, A. (2019). Racism and xenophobia experienced by Polish migrants in the UK before and after the Brexit vote. *Journal of Ethnic and Migration Studies*, 45(1), 61–77. <https://doi.org/10.1080/1369183x.2018.1451308>
- Schaufeli, W., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement. *Journal of Organizational Behavior*, 25(3), 293–315. <https://doi.org/10.1002/job.248>
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (10–24). Psychology Press.
- Schwepker, C. H. (2001). Ethical climate's relationship to job satisfaction, organizational commitment, and turnover intention in the salesforce. *Journal of Business Research*, 54(1), 39–52. [https://doi.org/10.1016/s0148-2963\(00\)00125-9](https://doi.org/10.1016/s0148-2963(00)00125-9)
- Shepperd, J. A., Waters, E. A., Weinstein, N. D., & Klein, W. M. P. (2015). A primer on unrealistic optimism. *Current Directions in Psychological Science*, 24(3), 232–237. <https://doi.org/10.1177/0963721414568341>
- Shoss, M. K. (2017). Job insecurity: An integrative review and agenda for future research. *Journal of Management*, 43(6), 1911–1939. <https://doi.org/10.1177/0149206317691574>
- Singh, P., & Loncar, N. (2010). Pay satisfaction, job satisfaction and turnover intentions. *Industrial Relations*, 65(3), 470–490. <https://doi.org/10.7202/044892ar>
- Small Business Prices. (2019). Brexit job loss index: 420,348 jobs lost as of 24 September 2019. Retrieved from <https://smallbusinessprices.co.uk/brexit-index/>
- Stride, C. B., Gardner, S., Catley, N., & Thomas, F. (2015). Mplus code for mediation, moderation, and moderated mediation models. Retrieved from <http://www.offbeat.group.shef.ac.uk/FIO/mplusmedmod.htm>
- Sverke, M., Hellgren, J., & Naswall, K. (2002). No security: A meta-analysis and review of job insecurity and its consequences. *Journal of Occupational Health Psychology*, 7(3), 242–264. <https://doi.org/10.1037/1076-8998.7.3.242>
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of inter-group conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of inter-group relations* (pp. 33–47). Brooks/Cole.
- Teague, P., & Roche, W. K. (2013). Recessionary bundles: HR practices in the Irish economic crisis. *Human Resource Management Journal*, 24(2), 176–192. <https://doi.org/10.1111/1748-8583.12019>
- Theorell, T., Hammarström, A., Aronsson, G., Traskman Bendz, L., Grape, T., Hogstedt, C., Marteinsdottir, I., Skoog, I., & Hall, C. (2015). A systematic review including meta-analysis of work environment and depressive symptoms. *BMC Public Health*, 15(1), 738. <https://doi.org/10.1186/s12889-015-1954-4>

- Turner, R. J., Lloyd, D. A., & Roszell, P. (1999). Personal resources and the social distribution of depression. *American Journal of Community Psychology*, 27(5), 643–672. <https://doi.org/10.1023/a:1022189904602>
- Van de Vyver, J., Leite, A. C., Abrams, D., & Palmer, S. B. (2018). Brexit or bremain? A person and social analysis of voting decisions in the EU referendum. *Journal of Community & Applied Social Psychology*, 28(2), 65–79. <https://doi.org/10.1002/casp.2341>
- Walter, S. L., Seibert, S. E., Goering, D., & O'Boyle, E. H. (2019). A tale of two sample sources: Do results from online panel data and conventional data converge? *Journal of Business and Psychology*, 34(4), 425–452. <https://doi.org/10.1007/s10869-018-9552-y>
- Wanberg, C. R. (2012). The individual experience of unemployment. *Annual Review of Psychology*, 63(1), 369–396. <https://doi.org/10.1146/annurev-psych-120710-100500>
- Wang, L. L., Watts, A. S., Anderson, R. A., & Little, T. D. (2013). Common fallacies in quantitative research methodology. In T. D. Little (Ed.), *Oxford library of psychology. The Oxford handbook of quantitative methods: Statistical analysis* (pp. 718–758). Oxford University Press.
- Warr, P. B. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63(3), 193–210. <https://doi.org/10.1111/j.2044-8325.1990.tb00521.x>
- Watlington, E., Shockley, R., Guglielmino, P., & Felsher, R. (2010). The high cost of leaving: An analysis of the cost of teacher turnover. *Journal of Education Finance*, 36(1), 22–37. <https://doi.org/10.1353/jef.0.0028>
- Wieczerkowski, W., & Prado, T. M. (1993). Spiral of disappointment: Decline in achievement among gifted adolescents. *European Journal for High Ability*, 4(2), 126–141. <https://doi.org/10.1080/0937445930040202>
- Wolbers, M. (2000). The effects of level of education on mobility between employment and unemployment in The Netherlands. *European Sociological Review*, 16(2), 185–200. <https://doi.org/10.1093/esr/16.2.185>

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