Research on the Influence of Perception Algorithm Control on Job Performance of Gig Workers

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Abstract

In recent years, the gig economy has been booming and growing, and the traditional binary employment relationship between enterprises and employees has been broken, replaced by the "gig platform-gig worker-customer" tripartite dynamic interaction. Each platform uses algorithmic technology to control the labor process of gig workers. At present, how to interact and collaborate between algorithmic control and gig workers has become a hot research topic at home and abroad. Gig workers perceive that there are differences in the dimension and degree of algorithmic control, which will have an impact on workers' mental state and behavior at work, and then affect their work performance. It is necessary to explore the ways that gig workers perceive algorithmic control to affect their work performance. Based on the job demand-resource theory, this paper builds a theoretical model of perception algorithm control and job performance. By introducing job burnout as the mediating variable and service atmosphere as the moderating variable, it explores the influence mechanism of perception algorithm control of gig workers on their job performance. First of all, this paper sorts out and summarizes the relevant researches on the four variables. Secondly, based on the existing research results, reasonable assumptions are made. Finally, SPSS and AMOS were used to analyze and process 430 questionnaire survey data from takeout riders and online car drivers to test the rationality of the model and the establishment of the hypothesis. The results show that: First of all, the two dimensions of normative guidance and behavioral constraint in perceptual algorithm control can positively affect job performance. Tracking evaluation dimension negatively affects job performance. Secondly, job burnout plays a mediating role between the three dimensions of perception algorithm control and job performance of gig workers. Finally, as a boundary condition, service atmosphere positively regulates the relationship between normative guidance, behavioral constraints and job burnout, and negatively regulates the relationship between tracking evaluation and job burnout. The results provide guidance and suggestions for online labor platform to reduce job burnout and improve job performance. It expands the research of perceptual algorithm control, and has enlightening significance to the management practice of platform enterprise.

Keywords

Gig Workers, Perceptual Algorithm Control, Job Performance, Job Burnout