Management by Algorithms reduces Prosocial Behavior

Advances in technology and artificial intelligence increasingly enable organizations to use algorithms to perform management tasks such as to direct, evaluate, and discipline human employees. This development allows organizations to automate significant parts of the management processes that were previously performed by human managers. The phenomenon of algorithmic management is rising in several important economic domains, and its implications for workers require the special attention of policymakers and academics. The psychological and behavioral consequences of this phenomenon, however, remain unclear. In this research, we investigate this question by focusing on one of the fundamental dimensions of human behavior: prosocial behavior. Across five pre-registered studies, including field and laboratory experiments, we find that the use of algorithmic (vs. human) management reduces prosocial behavior (e.g., the tendency to help other workers). We further demonstrate that the negative effect (i) occurs because the use of algorithms to manage workers leads to greater objectification of others, (ii) also occurs when algorithms perform tasks together with human managers, and (iii) depends on the type of management task algorithms perform. These findings suggest that the use of algorithms to manage workers has unique consequences on individuals' behavior at the workplace, which should be taken into account by firms and policymakers (e.g., by appropriately organizing and regulating work and working conditions).