

The Ties That Bind Us: Social Networks and Productivity in the Factory*

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Abstract

We use high frequency worker level productivity data from garment manufacturing units in India to study the effects of caste-based social networks on individual and group productivity when workers are complements in the production function but wages are paid at the individual level. Using exogenous variation in production line composition for almost 35,000 worker-days, we find that a 1 percentage point increase in the share of own caste workers in the line increases daily individual productivity by at least 9 percentage points. The lowest performing worker increases her effort by more than 12 percentage points when the production line has a more homogeneous caste composition. Production externalities, that impose financial costs due to worker's poor performance on co-workers within her social network, can explain our findings. Our results suggest that even in the absence of explicit group-based financial incentives, social networks can be leveraged to improve both worker and group productivity.

KEYWORDS: caste, social networks, labor productivity, assembly lines, India

JEL CLASSIFICATION: Y40, Z13, J15, J24

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