Mental Models of Monetary Incentives

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Extended Abstract

Previous research highlights that monetary incentives can influence employee effort through a variety of different channels (Gneezy, Meier and Rey-Biel, 2011; DellaVigna and Pope, 2018), leading to heterogeneous effects (e.g., Ellingsen and Johannesson, 2008; Ariely, Bracha and Meier, 2009; Armouti-Hansen et al., 2024) that can also backfire (e.g., Falk and Kosfeld, 2006; Sliwka, 2007; Cassar and Meier, 2021). However, little is known about how managers understand these complex incentive mechanisms, even though managers' beliefs about how incentives work are key for the adoption of incentive schemes (Hoffman and Stanton, 2025).

In this paper, I shed light on the mental models of monetary incentives, i.e., the subjective understanding of how and why monetary incentives and employee effort are related, in two different samples, current employees from the USA (incl. employees that report having managerial responsibilities) and prospective top managers. Current employees are recruited via Prolific, an online research platform often used in economic research, while prospective top managers are current MBA students at one of the world's leading business schools. I focus on three questions: what are the different mental

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models that employees and prospective top managers hold, where do the mental models come from, and how are they related to adoption behavior.

I measure mental models using a principal-agent vignette and elicit the principal's belief about the agent's effort response to different types of contracts (i.e., the principal's belief about the local first-order condition of the agent). In particular, I study how employees and prospective top managers think about a potential conflict of interest between principal and agent, the role of gift exchange (i.e., increasing fixed pay), and the effect of both a tiny and potentially negligible bonus share (to study potential crowding-out effects), and a substantial bonus share (to study classical incentive effects). Additionally, I elicit respondents' reasoning using qualitative data to shed light on the perceived underlying mechanisms. Besides the measurement of mental models, respondents also participate in an incentivized contract choice task based on Falk and Kosfeld (2006) to study whether mental models predict managerial behavior in a lab-in-the-field setting. Finally, I collect rich data on respondents' background, education, and work experience to address the question on the origins of mental models.

Results from the currently ongoing data collection show that mental models of incentives are highly heterogeneous. On the one hand, some employees and prospective top managers hold mental models in line with classical principal-agent theory, believing that an agent needs to be incentivized with a performance-based bonus (even if it is tiny) to induce effort. Others believe in a behavioral-type model, i.e., that agents react positively to higher unconditional incentives. An analysis of the qualitative reasoning data reveals different mechanisms that can be mapped to previous theoretical and empirical work on incentives. Moreover, preliminary results suggest that mental models are related to respondents' background and work experience. For example, employees and prospective top managers with more management experience are less likely to hold behavioral-type mental models.

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