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When confronted with the myth that extrinsic rewards crowd out intrinsic motivation, reference academic research, motivational theory, and empirical evidence to set the record straight.

In a recent interview with an industry veteran about motivating the remote workforce, we got to talking about the widespread assumption that extrinsic rewards ‘crowd out’ natural motivation among workers. This question has grown more important recently as organizations struggle with post-pandemic retention challenges and explore means of engaging their new legions of at-home workers.

Reward and incentives professionals don’t buy the crowding out theory mainly because they regularly observe the opposite effect – that rewards and incentives work. Regrettably though, the accepted wisdom among teachers, managers, employees and even parents stems from flawed but popular works by Alfie Kohn in the 1970s,ⁱ and misinterpretations of bestselling books since, including Dan Pink’s 2009 Drive.ⁱⁱ

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The popular claim that rewards undermine intrinsic rewards to such an extent that rewards fail is not consistent with research... negative effects of rewards on intrinsic motivation can occur and can be manufactured in laboratory conditions, but they are not the norm in the real world.

- Ledford, Gerhart, Fang, 2013

The *conventional* wisdom can make life for rewards professionals difficult as they must overcome resistance to their tool sets and may grapple with other peoples’ perception that their work is futile. Armed with knowledge, research and empirical evidence that reveals the *true* wisdom, however, reward professionals can easily defend their tradecraft and their career choices. Let’s start with the past four decades of peer-reviewed, published academic research.

What the Academic Research Says

A 40-year meta-analysis of major related research conducted in 2014 resulted in the conclusion that: “Not only do both intrinsic and extrinsic motives matter, they interact with one another. It is always beneficial to help people find their tasks intrinsically rewarding, extrinsic incentives can and will also play a role.”ⁱⁱⁱ

A 2012 study looked at professional-level workers across six industries in Taiwan to directly test the question of whether extrinsic rewards crowd out intrinsic motivation. It is important to note that the hundreds of subjects studied in these field experiments were white-collar workers engaged in a range of tasks – some routine, some interesting, and some creative. The researchers found no negative impact from the use of extrinsic rewards on natural motivation, indeed they found a significant positive impact on intrinsic motivation and performance. The authors learned that employees perceived extrinsic rewards as solid, undeniable evidence of their personal competence (when achieved) and that the contingent incentives give them control over realizing higher pay.^{iv}

A year later, another meta-analysis of the previous 30 years of high quality, peer reviewed academic research resulted in a 2013 paper called *Negative Effects of Extrinsic Rewards on Intrinsic Motivation: More Smoke Than Fire*. **The authors found that every major academic review of rewards research in the past 30 years has confirmed that extrinsic rewards significantly increase performance.**^v

Theories of Human Motivation

Self-Determination Theory (SDT) finds that under the right conditions, extrinsic rewards enhance intrinsic motivation.^{vi} SDT, introduced by Edward Deci & Richard Ryan in the 1970s, emphasizes autonomy and mastery along with relatedness. It has held its place among the foremost human motivation theories since.^{vii} Deci and Ryan emphasize the careful design and use of extrinsic rewards in driving intrinsic motivation. According to IRF surveys of almost 2,000 respondents in 2022, the motivating elements of SDT – autonomy, mastery (i.e., competence), and relatedness (i.e., social connectedness) – may be even more vital among today’s workers than they were before the pandemic.^{viii}

Likewise, **General Interest Theory (GIT)**, first posited in 1999 by Eisenberger, Pierce and Cameron, recognizes the importance of context in the use of extrinsic rewards and their impact on intrinsic motivation.^{ix} GIT states that where extrinsic rewards feel controlling, they may prove detrimental to intrinsic motivation, particularly in interesting and creative tasks. Where extrinsic rewards are perceived as informational, supportive, and enhance feelings of self-determination and competence, however, they boost intrinsic motivation. The authors of GIT stress that extrinsic rewards may not motivate due only – or even mostly -- to their monetary value, but due to their “symbolic value.” Where they signal achievement, task importance and competence, they cause recipients to “feel intrinsic motivation.”^x

Git recommends the use of specific performance goals incentivized by contingent incentives but cautions that these rewards appeal to some more than others. They suggest that employees will self-sort. Those who believe they will achieve high performance standards -- who relish feelings of high competence, and seek more control over their rewards -- will tend to gravitate to firms that offer performance contingent incentives. Those who don't will tend to avoid such firms. Leaders should consider which type of employee might best help them achieve their desired outcomes.^{xi}

Experience and Observation

Research and theories provide consistent support for the use of extrinsic rewards, but the most important evidence is empirical – do extrinsic rewards enhance or harm intrinsic motivation where it counts: on-the-job? To answer this question, consider the most obvious evidence first. Virtually every organization offers benefits and at least some praise and recognition (forms of extrinsic motivation), and about 90% of US firms offer tangible cash and/or non-cash extrinsic rewards.^{xii} It is safe to surmise that they do so for a reason.

In their groundbreaking book, *The Why Axis*, University of California and University of Chicago behavioral economists, Uri Gneezy and John List, stress the imperative of empirical research involving field tests rather than relying solely on theory or research based on lab experiments. Gneezy and List have repeatedly found that incentives – even outright bribes in some cases – do not necessarily erode natural motivations.^{xiii} Incentives and disincentives, they point out, are at the root of all activity, sometimes they're subtle and intrinsic, other times they're blunt. **The key is to experiment with what works to get rewards and incentives right.**

To learn why people do things, say List and Gneezy, you have to watch them – ideally unobserved. **Before you set about trying to change people's behaviors, learn what really motivates them so that you can offer the right incentives.** Gneezy and List's experiments in the disadvantaged Chicago Heights neighborhood include paying students to stay in school. These experiments directly and unabashedly replace what should be an intrinsic motivation to learn with a clear bribe. Yet when previously underperforming economically and socially disadvantaged kids were offered \$20 if they did better on a standardized test than in previous attempts, their scores improved roughly to the level of kids in wealthy neighborhoods, despite having no additional preparation time.

In other experiments conducted by List and Gneezy, teachers in low-income Chicago districts received checks at the start of the year for \$4,000 on the condition that they would have to return the money if their students didn't achieve significantly higher test scores at the end of the year. Again, the results were good enough to close the gap with kids from high-income neighborhoods. These extrinsic rewards even work with parents. Children in poor neighborhoods whose parents were paid immediate rewards to attend school meetings and help them with homework saw significant gains. Importantly, in each case – parents, students, and teachers – improvements persisted after the extrinsic rewards were removed.^{xiv}

Gneezy and List have conducted similar field experiments directed at wellness. In paying people who didn't previously exercise to visit the gym several times over the space of one month, they found that most of their subjects continued to visit the gym long after the incentive was removed.^{xv} This has obvious implications for workplace wellness programs, but the bigger takeaway, again, is that extrinsic rewards – including even the most blatant cash bribes – can spark behavior change and intrinsic motivation, forming habits that persist after the incentive is removed. Gneezy and List caution that such crude extrinsic rewards should only be applied where all else fails, but their work further demonstrates that well-considered extrinsic rewards can increase intrinsic motivation; even in the least likely conditions.

Academic Research, Theory and Real-Life Experience Destroy the Myth of ‘Crowding Out’

The sum of the theoretical, academic, and empirical evidence supports the long-held wisdom of experienced reward professionals: reward design demands careful design to avoid the appearance of coercion and control, and to tap feelings of self-determination – including autonomy, control, competence, and achievement. These rewards combined with informational (non-controlling) praise and recognition are incredibly effective for motivation – extrinsic or intrinsic.

No reward or reward type works equally for everyone. But where the purpose of an extrinsic, conditional reward – whether cash or non-cash – is made crystal clear, high-performing employees won't likely interpret it as coercive and controlling, they will more likely embrace it as a challenge within their control; a competence-affirming signal and symbol that boosts their natural, intrinsic motivation to perform.

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